relies in part on induction, which produces theories that may be tested against the evidence. This is confirmed by Stock (2004, p. 5), who writes, “in the natural order of treatment inductive logic precedes deductive, since it is induction which supplies us with the general truths, from which we reason down in our deductive inferences.”

Because of the reliance on physical evidence and the reconstruction of the behavior involved in the criminal event, many inductive generalizations will be employed. Wound patterns and victimology are two such examples in which inductions may be used to form the basis of a later deduction. The type of knife used, its width, the length of the blade, and other characteristics of edged weapons have typically been determined through a study of known weapons and their features. However, the application of this knowledge to the particular features of a set of wounds present on a victim’s body involves the deductive application of this knowledge. Petherick (2003, p. 186) presents another example of the application of the reasoning:

> If a prostitute is murdered, a principally inductive approach suggests that because of her profession she was at high risk of victimisation. However, a more in depth deductive approach may determine that she had a small select clientele, was naturally cautious, had taken self defense training, and worked only in established premises. All of these factors work to reduce her risk.

There are no direct criticisms of BEA in the literature, though there is some minor discussion of deductive approaches in general. Most seem to be quite confused by the application of the reasoning (Canter, 2004; Godwin, 1999), whereas others provide some cursory discussion of it but seem unsure of how the overall process operates. Holmes and Holmes (2002, p. 7) note that “much care is taken from the examination of forensic reports, victimology, and so forth and the report will take much longer to develop using only this approach.” These authors seem largely unaware of the finer points of logic, such as induction being a component of and important to the overall process of deduction. Readers are also left with the distinct impression that the thoroughness of the approach (and the subsequent time involved) is pejorative. A final deductively rendered opinion will rely on inductively derived knowledge, though Holmes and his colleague tend to treat both processes as being dichotomous and largely exclusive. This suggests a fundamental lack of overall knowledge of the processes involved in reasoning.

McGrath (2000) has however identified one critical observation of this method, and that is if the initial premises on which conclusions are based are wrong, then the subsequent conclusions will also be wrong. Given that one of the primary purposes of the EFA is to establish the veracity of the premises, this is not necessarily a problem as long as profilers are aware that it is incumbent on
them to establish the basic information on which their decisions are based. If the basis of the premises cannot be established, then this may limit the number of characteristics that can be offered (because deductive approaches will derive conclusions only on what has been unequivocally established). Beyond these observations, there has been little criticism of this approach.²

The following chart breaks down the background knowledge necessary to use a deductive approach to profiling.

<table>
<thead>
<tr>
<th><strong>Background</strong></th>
<th><strong>Requirement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Helpful</td>
</tr>
<tr>
<td>Law enforcement affiliation</td>
<td>Unnecessary</td>
</tr>
<tr>
<td>Psychology</td>
<td>Required</td>
</tr>
<tr>
<td>Investigative</td>
<td>Required</td>
</tr>
<tr>
<td>Forensic knowledge</td>
<td>Required</td>
</tr>
<tr>
<td>Analytical logic</td>
<td>Required</td>
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</tbody>
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**CRIMINAL PROFILING EDUCATION**

The issue of profiler education has not been touched upon in any significant way in the literature on profiling, with most discussions revolving around the theoretical paradigm offered by respective authors. That is, those psychologists engaged in the process argue for an educational experience including advanced study in psychology; law enforcement officers engaged in profiling (mostly the FBI and those they train) argue that law enforcement experience is a necessity; those who approach profiling from the perspective of physical evidence argue that a broad-based understanding of physical evidence, its relevance, and meaning is important. The following sections of this chapter will discuss the issues relevant to profiler education, what is required, and where to get it.

**Tertiary Education**

A tertiary education typically involves formal and structured classes in a variety of areas as dictated by the degree program students enroll in. Those taking psychology will be educated in aspects of human behavior and cognition, from introductory courses on the history of psychology through to abnormal psychology, the neuropsychological basis of behavior, and treatment and assessment. Those taking criminology or criminal justice programs will be exposed to the role, structure, and function of the police, courts, and prisons. Depending on the program, they may also get extensive training in the behavioral sciences in areas that have traditionally been the province of psychology (human behavior and psychological disorders, among others). For those taking accounting or business, students will be taught business administration, entrepreneurship, account and book-keeping, and other business-related activities.
The point is this: not all educational experiences are equal, and the degree of instruction one receives in any area related to profiling differs based on a variety of factors. This may be owing to the educational institution or degree program at a broad level, there being critical differences not only among the institutions, but also between two programs even of the same name. Consider the following example: Two universities in the same general location both offer Criminology and Criminal Justice degrees. One is housed within a social science faculty, and the other is located within a law school. In the first program, there is a degree of overlap between criminological offerings and psychological offerings, exposing students to a range of issues relating to human behavior and cognition. The students in this program will develop a healthy understanding of behavioral science and how this applies to the profiling endeavor. In the latter program, students are taught primarily by legal professionals and theoretical sociologists in such a way that they develop a healthy understanding of policy and procedure as it relates to the legal system. It should be clear that students in the first program would be better placed to consider a career in profiling than students in the second.

Staffing may also dictate the quality of a given program, with those staff undertaking research or casework in a given area perhaps being more equipped to provide a holistic education than those approaching any given topic from a purely theoretical point of view. The reason is that they will be better able to understand and subsequently explain the nuances of casework, evidence examination, and report writing.

Interested students should seek out a program that not only has a sufficient level of education in the behavioral sciences, but also one that is taught by staff who understand the theory of what they are teaching, why it is important, and how it applies.

With regards to specific areas of study, the following discrete areas of study are suggested:

- Criminology
- Psychology
- Forensic Science
- Law

The areas of criminology and psychology should be self-explanatory and have been covered elsewhere within the chapter. Forensic science is suggested because it will provide a fundamental understanding of the nature of physical evidence, its identification, limitations, benefits, and interpretation. Because profiling is based on an assessment of behavior, and the behavior is often determined through the lens of the physical evidence, students seeking work in the area would be left wanting in an education that did not encompass some
aspect of forensic science. Law, or at least some understanding of the criminal justice system, expert evidence, and procedure, will be required because profilers, whether private or government employed, are forensic examiners. As such, there is an expectation that they may have to provide evidence in a court of law before a trier of fact.

It should also be noted that the subject area under which one decides to study is not the only thing to think about when preparing for work in profiling. Similar to the issues of institutions and programs, all things are not created equal when it comes to studying criminal profiling. Unlike many courses in the criminology field, such as theories of crime courses which have an fairly predictable and consistent curriculum across teachers and universities, not all courses related to profiling are created equal. That is, depending on what school the profiling course is run from, and who teaches it, which aspects of profiling are important, which methods should be utilized, and which issues are most salient will differ. Students should seek out those courses that compare and contrast different methods; that study actual profiles and real cases; and that endorse the scientific method, analytical logic, and critical thinking.

As an adjunct to these forms of tertiary study, it is also suggested that profilers engage in short courses. However, there are a number of perils and pitfalls evident in such a practice, as outlined next.

**Bricks, Mortar, and the Socratic Method**

For those who are already working in the criminal justice system or outside it, there is often a desire to return to university to acquire a new or round out an existing education. It has been the authors’ experience over the years that there are a variety of reasons why students may return to university, including change of a career, promotion or advancement, interest, or simply to increase their knowledge base.

Aside from choosing the right university, program, and staff, students are further presented with a number of other options in terms of full-time or part-time degrees, on-campus, and external programs. Which option to take will be dictated largely by the requirements of the prospective student, availability and commitments to work and family, motivation, and financial means. However, students should not choose a university simply because it meets their time commitments or is affordable; doing so may mean that, in the grand scheme of things, the quality of the program is sacrificed for expedience of completion or because it doesn’t unduly stretch the purse strings. The net result is that they spend a given amount of time and energy on a program that means little if anything in terms of their vocational prospects or the quality of the information they receive and bring to bear at a later time.
For busy professionals, their choices may be limited to those programs that offer classes at night or via an external-only option where students are sent class materials, furnished with deadlines in which to submit their work, and contact their instructors through a variety of electronic means. Some distance programs also employ an on-campus option during the semester, often titled a "residential school," where students attend the university for lectures and tutorials and face time with teaching staff.

While this is true in some instances, it does not apply to all distance programs. Unfortunately, in today’s competitive educational market, some institutions have watered down their approach to education such that students are never seen, feedback on assessment is scarce, and they are not given the opportunity to engage in any meaningful way with their peers. The most significant aspect of this would be the lack of ability to engage in a question-and-answer environment so as to have the basis of their beliefs questioned, to highlight the flaws in thinking, and to shape their critical thinking skills. This is the province of the Socratic Method.

According to Goldberg (2007, p. 18):

The Socratic Method, which takes its name from the process Socrates used to ascertain philosophical truths, exposes the weakness of arguments through a process of relentless inquiry.

... While the Socratic Method forces students to think on their feet, it also replicates the tension of standing before a judge in court, knowing he or she can humble you at any moment. “The tension is a necessary part of the learning experience,” says University of Chicago law professor Richard Epstein, a proponent of the Socratic Method, who is thought to be one of its most skilled practitioners.

The Socratic Method is “an approach to knowledge building and problem solving based on discussion and debate” (Chisum and Turvey, 2007, p. 100). It is process oriented in that it seeks to identify weak assumptions in an argument and, through repeatedly interrogating these assumptions, arriving at a more valid conclusion or answer. It is what the first author refers to as “intellectual Darwinism”—a reference to Darwin’s theory of evolution whereby weak theories are systematically culled.

As a pedagogical tool, the Socratic Method involves interaction between two or more people where one (usually a lecturer or instructor) asks a question of another (a student or participant). The responses are then queried within a general or specific theoretical framework and any flaws identified. Further questions are then tailored to incorporate the new arguments, and the
process goes on. This step-wise procedure for the Socratic Method is identified by Pedersen (2006, p. 1) as it applies to legal reasoning:

Students study cases before class.

In class, the professor calls on a student, with no advance notice.

The student gives a recitation of the facts and the procedural history.

The professor questions the student, probing underlying legal issues, thus forcing the student to identify relevant facts, question assumptions, take a position and argue its defence.

Meanwhile the rest of the class remains attentive by answering the professor’s questions in their own mind.

The same process may be applied to the process of profiling and crime analysis in the following way regarding motive (the following is hypothetical, but follows general discussions that take place in both authors’ classes regarding Criminal Profiling and Behavioral Evidence Analysis):

Q: With regards to the case study, let’s discuss the motive or motives that are evident in the offender’s behavior.
A: I think that the motive for the crime was murder.

Q: But murder is a term that describes a behavior or penal classification. A motive is a physical or psychological need. So what would you suggest the motive would be?
A: (Another student) The motive might be profit, as the offender didn’t do anything sexual with the victim.

Q: So what evidence do we have that the motive was profit? What would you expect to find in a profit offense?
A: You would expect to see something stolen: money, jewelry, computers, or something of value. There is no evidence that anything has been stolen.

Q: So if nothing has been stolen, is it likely the motive was profit?
A: It might be possible that the offense was interrupted, and that the offender didn’t have the chance to actually take anything.

If an acceptable answer is reached, then a new question is developed and the process begins again. For a more detailed or complex problem, the process may take minutes or hours, or may even span multiple sessions.¹

It should be noted that the process follows along similar lines to the use of the scientific method as a form of inquiry, which is a “way to investigate how something works, or how something happened, through the development of hypotheses and subsequent attempts at falsification through testing and other
accepted means” (Petherick and Turvey, 2008b, p. 47). Furthermore, the process works in much the same way as dissecting a case for which a criminologist’s opinion has been sought. In this way, by utilizing the scientific method, we are essentially teaching students how to pull a case apart, put it back together, and infer conclusions from it.

With both authors working in the tertiary education environment, our recommendation to students is that they seek out a relevant education that will better equip them to understand the range of issues they will face in the analysis of crime and criminal behavior. They should seek out instructors who are actively working, researching, or publishing in the areas they teach; and they should seek this out in an actual institution, with staff who can mentor and challenge them, students with whom they can engage, and educational requirements that will provide them with the theory and practice that will enable them to become tomorrow’s practitioners.

**Short Courses: Perils and Pitfalls**

There is an inherent attraction in that which requires the least effort; anything that demands less of our time and attention is seen as being of greater significance regardless of that fact that whatever it is may be of lesser value. Because of this tendency toward the path of least resistance, short courses offer a significant attraction for many.

A short course is any truncated pathway to education or information that is offered in an intensive mode, often without the enforcement of educational standards or assessment. Before going any further, we need to point out that both authors are advocates of short courses, given the right context and framework.

Perhaps one of the best discussions of short courses comes from Chisum (2007, pp. 314–317). While this discussion relates specifically to short courses in bloodstain pattern analysis, the juxtaposition to general criminology should be easy to see:

In addition to reading the recommended publications, it is advised that anyone interested in crime reconstruction take a course in bloodstain analysis from a qualified forensic scientist. These courses can be useful for providing certain basic overviews of fundamental concepts. However, depending on the scientific background of the instructor, they may be lacking in certain crucial areas. A true scientist will find that a majority of the short bloodstain classes are lacking with regard to a discussion of accuracy, precision, and significant numbers. Appreciating these deficiencies is the difference between the technician’s pedantic understanding of bloodstains and the forensic scientist’s interpretive role in the reconstruction of the crime.
The preceding passage is useful and captures both the benefit and dangers of short courses; they are useful in providing overviews of certain basic concepts, but many such courses are not taught by qualified instructors, and they are by no means a holistic approach to education in any given domain.

But don’t get us wrong. Many authors in this volume run short courses in many different countries around the world, and these courses do have value. It is the authors’ opinion that short courses are useful for a variety of reasons, including the following:

- They provide an overview of certain fundamental concepts.
- They keep students and professionals abreast of new theories and techniques.
- They give potential students an insight into a discrete area so they can make informed choices about future streams of study.
- Short courses can be invaluable for teaching process-oriented tasks.
- Students and professionals can learn a variety of valuable skills through a case study approach that is not always practical in formal tertiary environments.

The main point is that a short course, while offering a number of benefits, should be considered only one small part of an overall educational approach; they should not be taken as a standalone. That is, taking one short course on profiling does not qualify a person to represent himself or herself as a profiler, or to actively profile ongoing cases; this would be considered dangerous, irresponsible, and dishonest.

CRIMINAL PROFILING AND THE CRIMINOLOGIST

The argument for the involvement of criminologists in profiling is relatively straightforward on its face. Criminologists are those who, by definition, are involved in the study of crime, so it would seem a natural extension of their other responsibilities. However, the reality is far from this clear. Some criminologists are involved only in research activities, an endeavor that may leave them ill equipped to understand the foibles of human behavior in a practical sense. Some criminologists are involved in other discrete areas, such as crime prevention, victimology, policy and procedure, or purely theoretical areas that will similarly leave them ill equipped in the evaluation of specific criminal acts. Recall from the first chapter, criminologists by their nature come from an array of similarly vast and diverse backgrounds including sociology, anthropology, psychology, psychiatry, law enforcement, or medicine, among others. Some will be able to lay legitimate claim to a stake in the profiling community; some would never even make the attempt; whereas others still will lack the acumen but jump on the bandwagon, so to speak, of an area
that is popular among the media, other professionals, and students. Given this, it is necessary to explore a more concrete foundation for education and background requirements for criminologists who want to “try their hand” at profiling.

The main suggestion we would offer for criminologists involved in profiling is to ensure that their knowledge is as well rounded and holistic as possible. Just because one is an “expert” in “crime” does not mean that one is an expert in all areas of crime, regardless of what he or she thinks. As such, the criminologist-profiler should make every effort to educate himself or herself in the areas of behavioral science, physical evidence, and the law.

Criminologists should have as detailed knowledge as possible in the different areas in which they will analyze evidence as profilers. This means acknowledging that different kinds of analysis require different experience, education, and training. It also means knowing their own limits and where their work stops and that of another should start. It means not going beyond their own qualifications and abilities, and knowing when to raise their hands for help. It means being cognitively aware enough to understand the limits of what they can—and can’t—do.

As suggested by the discussion on profiling inputs earlier, the range of material criminologists-profilers may be expected to deal with is considerable. From autopsy reports, to first response police reports, to crime reconstructions, to witness statements and crime scene photographs, criminologists-profilers need to know what they are looking at, what they are looking for, how to interpret it, and what it means within the global context of the crime. Lacking in any of these areas will result in nothing less than an incomplete examination of the facts, which will lead to a dangerously incomplete assessment and possible flawed conclusions.

So what does all this mean? The answer is simple, but lost on a few overzealous individuals who fail to appreciate what and where their limits are. This doesn’t mean that one has to be a forensic pathologist to read an autopsy report, but it does mean that one should know the difference between cause, mechanism, and manner of death. It doesn’t mean that one has to be a bloodstain pattern analyst, but it does mean one knows what an angle of impact is, the difference between high and low velocity spatter, and how the surface of an object will effect the bloodstain pattern. It doesn’t mean one has to be a forensic scientist, but it does mean one needs to understand the difference between a positive result, a negative result, and an inconclusive result.

So, based on this, criminologists-profilers should work with other professionals they know can be trusted and who produce valid work. They need to know enough of the language to ask educated questions and to understand what a
response means in both a theoretical sense and an applied one (that is, how the answer to their questions impacts their analysis and conclusions).

If nothing else, this highlights the multidisciplinary and often team-based approach that profilers should take. It also warns us that short course education is not enough and that every person has limits—even though we don’t often like to admit them.

**SUMMARY**

Criminologists may be well suited to the practice of criminal profiling, provided their education is complete in the sense that it has equipped them to understand the intricacies of offender behavior, including an assessment of the physical evidence that creates the record of it. They may be further suited to profiling because their training and education often involved instruction not only in social sciences, but also in law, so that they understand the limits of expert witnesses and reports. Furthermore, they may be suited to the task of profiling by virtue of the analytical processes they employ in other aspects of their work.

This chapter provided students and practicing criminologists with an overview of criminal profiling, the “inputs” and “outputs” of the process, the nature of logic and reasoning, and the major paradigms involved in profiling. These have included the inductive methods of criminal investigative analysis, investigative psychology, and diagnostic evaluations. The authors have also suggested a preferred theoretical/practical approach in Behavioral Evidence Analysis, a predominantly deductive method of profiling involving the detailed analysis and reconstruction of physical evidence, victimology, and crime analysis.

As criminologists, we have also been warned not to be carried away with our own abilities, but to know the limits of our own analysis and when to seek help. In this way, criminologists-profilers will be able to provide more accurate and forensically oriented assessments of crime and criminal behavior and to assist the police in their investigative decision processes and the trier of fact in their determinations of culpability.

**Review Questions**

1. Describe the goals of criminal profiling and how they differ between the investigative and trial phases.
2. What are profile inputs? Why are they crucial to any profiling effort?
3. Name and explain the two types of logic used to produce profiles.
4. T/F Deductive profiles are static