

Bombing and Psychopathy: An Integrative Review

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ABSTRACT: A review of the research on the motivations and behaviors of bombers is presented. The methodology consisted of a computer search of eight databases, book reviews, and telephonic interviews with local and federal law enforcement. The data were then compared to the substantial research on psychopathy. The authors conclude that a federally funded research effort is necessary, and should incorporate various structured interviews, history gathering, and psychological and physiological tests of incarcerated bombers, theoretically guided by the concordance between the known motivations and behavior of bombers and the concurrent and predictive validity of the construct, psychopathy.

KEYWORDS: forensic science, bombing, psychopathy, terrorism

Bombing is on the rise, the incidents of which have tripled in the United States in the last decade (1). A deadly and anonymous crime, bombs are indiscriminant, often killing or maiming civilian targets. While much attention is currently being paid to the act of bombing and its inherent technology, often surprisingly simple, little has been written about the motivations and behavior of the terrorist bomber. Our intent is to begin to rectify this situation.

Methods

In the present review article we compare the similarities and differences between the criminal behavior of bombing and the psychopathic personality. We chose the latter point for reference because of the substantial research that has been done on psychopathy in the past fifteen years, and recent studies that suggest psychopathy accounts for most of the explainable variance in the prediction of violent criminal behavior (2). These facts, and the planned, purposeful, and targeted nature of most bombing acts, make a strong relationship between the two a quite plausible hypothesis.

We first gathered information on bombers from a variety of sources that included computer databases, books and articles, and interviews. We searched Psychological Abstracts (1967–October, 1996), National Library of Medicine (1966–November, 1996), National Crime Justice Reference Service (1972–August, 1996), Dissertation Abstracts Online (1961–September, 1996), Sociological Abstracts (1963–August, 1996), Mental Health Abstracts (1969–August, 1996), Legal Resource Index (1980–September, 1996), and Criminal Justice Periodical Index (1975–August, 1996). We then searched for information on bombers in books that would not be in computer databases, which were few in number

and yielded largely anecdotal information concerning case histories of bombers. And third, we conducted informal telephone interviews with local bombing authorities (law enforcement) in southern California, and with agents of the Federal Bureau of Investigation in Quantico, Virginia. They provided further data about historical and contemporary terrorism and bombing. The results of our findings were then analyzed and compared to the extensive psychological and psychiatric research on psychopathy.

Result

Numerous definitions of bombing exist, yet they all contain similar elements. Dietz (3) offered this definition:

Bombings are incidents in which an explosive device is unlawfully detonated or an incendiary device is unlawfully ignited, including those in which detonation or ignition occurs prematurely as a device is prepared, transported, or placed. Explosive devices are constructed with explosive materials, such as dynamite; incendiary devices, such as Molotov cocktails, are constructed with flammable materials designed to have a burning effect (also known as “firebombs”). Other bomb-related crimes include the unlawful possession of explosive or incendiary devices, offenses involving hoax devices, and bomb threats (p. 485).

There are also numerous definitions of terrorism, but unlike the act of bombing, discerning the components of a terrorist act is far more difficult. One person’s terrorist is likely another person’s freedom fighter. The FBI defines terrorism as the “unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives” (4, p. ii).

The FBI publishes an annual report called the *Bomb Summary* (1) which includes findings of incidents involving explosive and incendiary devices within the U.S. The report has statistics which define the types and numbers of targets and victims of bombings. Additionally, it details information on recoveries of explosives and hoax bomb devices. From 1982–1994, the last year for which FBI statistics are currently available, data indicate that the incidents of terrorism in the U.S. have actually decreased (5). While terrorist incidents have declined, the number of incidents involving bombs rose significantly during the same period (5) (see Fig. 1). We believe this increase is due, in part, to the dramatic growth in technological resources, particularly the Internet, which now offer information to buy bomb making materials and construct bombs.

There is also an extensive library literature on the construction of bombs, ranging from books written for law enforcement (6), to handbooks on bomb construction for survivalists, paramilitary groups, and other politically radical factions. For example, *The*

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Bombing Incidents vs. Terrorist Incidents 1982-1994

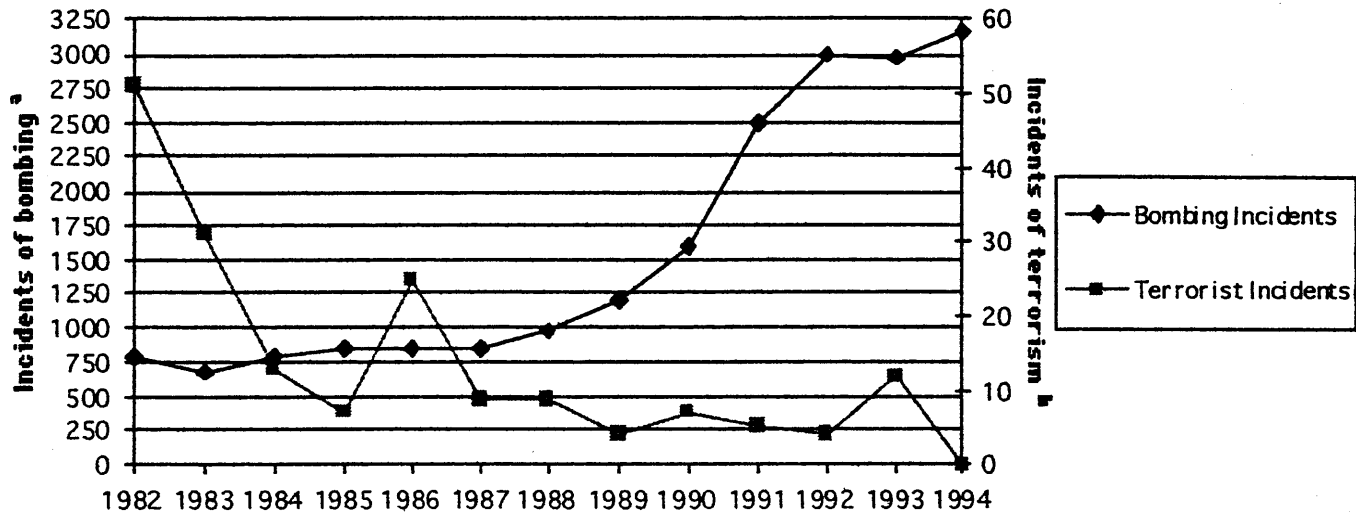


FIG. 1—Bombing and terrorist incidents in the United States, 1982–1994.

^a “Bombing incidents refer to actual and attempted detonations of explosive or incendiary devices in violation of State, local, or Federal law.”

Source: FBI Bomb Data Center. (1995). Bomb Summary. FBI Academy, Quantico, Virginia.

^b “A terrorist incident is a violent act, or an act dangerous to human life, in violation of the criminal laws of the United States or of any State, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.”

Source: United States Department of State. (1995). Patterns of Global Terrorism. (p. vi). Washington, DC.: Government Printing Office.

Anarchist Cookbook (7) and *Homemade C-4: A Recipe for Survival* (8) were both mentioned as resource material in recent trial testimony in *U.S. v. Timothy McVeigh* (9). Terrorists' capabilities are further enhanced by the relatively easy availability of weapons, explosives, detonators, boosters, oxidizers, and other technologically sophisticated, and simple, timing and triggering devices available in the commercial market, with few Federal regulations to trace or control them.

Demographics

The findings of the FBI indicate that there were 3163 bombing incidents reported in 1994. That figure represents, on average, nearly nine new cases each day. These bombings injured 308 persons and killed 31. Damage to properties was estimated at \$7.5 million. A year after this report, on April 19, 1995, a four thousand pound ANFO (ammonium nitrate and fuel oil) truck bomb blew up the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma, killing 168 people and wounding 518 (10). That incident alone killed over five times the number of people killed by all domestic bombs in 1994.

The *FBI Bomb Summary* further breaks down the bombing incidents by type of target. The four most frequent targets are residential properties (52%), commercial business and vehicles (11%), open areas (7%), and academic facilities (4%). While the frequency of bombing has increased since 1982, target selection has remained relatively stable over time (4).

The FBI also divides bombing incidents into geographical regions in the U.S.: Western, Southern, North Central, and Eastern. The Western region accounts for 32% of the total bombing incidents. In fact, California had more bombing incidents in 1994 than any other state. California and Arizona accounted for two thirds of the total bombing incidents in the Western Region (4).

Abortion clinic bombings are included in the FBI Bomb Data Summaries. Since 1982 there have been 169 arsons and bombings of abortion clinics in the U.S. (11).

Most known bombers are caucasian males (12). Females do bomb, but the incidents are rare and their targets are usually family members or close associates, consistent with other kinds of female violence (12). Most bombers are also single or reportedly involved in a marriage of convenience (12). There are no data available on the average age of bombers. Our examination of anecdotal data suggests that the age range is very broad, and varies from adolescence to individuals in their sixth decade of life (1,4,12,17,18). None of these data is useful for profiling unidentified subjects in bombing incidents, however, since most individuals who are violent are males, most males in the U.S. are caucasian, and most people who live in the U.S. are between the ages of 12 and 50.

Prior to the 1993 bombing of the World Trade Center in New York City, terrorist threats to U.S. civilians were seen as entirely foreign in origin. After the Oklahoma City bombing, it was predicted that militia groups who advocate or excuse domestic terrorism would be discredited or disappear. Instead, they appear to have grown in number and influence (13,14). White (15) identified seven domestic groups operating in the U.S. that use bombs as a method of terrorism: the Jewish Defense League (based in New York City); Macheteros (Puerto Rico and New England); Omega 7 (New Jersey, New York City); The Order (Idaho, Colorado, and northwestern U.S.); Puerto Rican Armed Forces of the Revolution (Puerto Rico, northeast coastal U.S.); United Freedom Front (northeastern U.S., Ohio, Virginia); and the Weather Underground (northeastern U.S.).

The increase of bombings in the U.S. begs the question of its appeal. What is it about bombing that makes it such an attractive form of terrorism for both individuals and groups? Poland (16) identified five reasons which account for this increase: (1) Bombings are the most effective way of attacking an “enemy.” They

are lethal, indiscriminant, and “cold-blooded.” (2) Explosive and bomb technology, including manuals, are readily available to terrorists at low costs. (3) One person with the required expertise can make bombs. (4) Improved timing devices reduce risk and allow terrorists to escape injury and detection. (5) Terrorists have learned that the bigger the explosion, and the greater the casualties, the more intense the coverage by the news media. To summarize, bombs are efficient, effective, and potentially lethal. One individual can create a bomb at low cost, with relatively low risk to himself, and draw immediate media attention to his act.

Bomber Typologies

The available research on bombers, meager as it is, does not support any one specific profile of individuals who commit these crimes. As one researcher wrote, “Priests and gangsters, police officers and criminals, bricklayers and psychologists, men and women of all trades and professions have been arrested for these crimes. The personalities of bombers are as varied as their explosive devices” (17, p. 38).

While the research does not generate a single typology, shared means and methods have been used to classify these individuals and their motives. Investigators often examine victimology, sophistication of explosives, motives for bombing, and geographical patterns relating to serial incidents.

Douglas (12) detailed his methodical approach to classify bombing attacks. He does not describe specific personality types, but instead delineates a process developed by him and his colleagues at the FBI Crime Lab in Quantico, Virginia, for gathering information on bombers and their crimes. By scrutinizing the crimes of an unknown bomber and applying known statistical factors—assessment of the target, crime scene indicators, type and construction of the bomb, and any element of staging—an individual profile can be inferred for the unidentified subject. While Douglas carefully details these elements of the criminal investigation involved in profiling a bomber, he does not cite any controlled empirical methods to assess the accuracy of his predictions.

One of the most significant contributors to the early study of bombers was the work of Brussel (18). In 1953 he used his knowledge of psychopathology to add a new dimension to criminal investigation: criminal profiling. The case was that of George Metesky, popularly known at the time as the “Mad Bomber.” Between 1940 and 1956, a time frame almost identical to the contemporary Unabomber case, Metesky planted 32 pipe bombs in New York City to avenge the Consolidated Edison Company’s failure to compensate him for an injury he received on the job. The company took Metesky off the payroll after repeated medical examinations failed to validate his claims of injury. In 1956 an inspector and two detectives paid a visit to Dr. James Brussel who, at the time, was the Assistant Commissioner of the New York State Department of Mental Hygiene. He was asked if he could draw any conclusions about the bomber’s personality from the details of the crime scenes or the style and content of the letters the bomber had written. After careful review, Brussel told the police to look for a heavy man, middle-aged, foreign born, Roman Catholic, single, and who lived with a brother or sister. He added, “When you find him, chances are he’ll be wearing a double-breasted suit—buttoned” (p. 69). In a relatively short time they identified the “Mad Bomber” as 53-year old George Metesky, who lived with his two sisters. When confronted at home by the police he was dressed in faded pajamas. Allowed to change before being transported to the police station, Metesky reappeared with his hair neatly combed,

shoes well shined, and wearing a pinstriped, double breasted suit—buttoned.

Brussel wrote, “by studying a man’s deeds, he could deduce what kind of man he might be” (18, p. 4), the central premise of contemporary criminal profiling (19). Brussel drew from his expertise on paranoia, and inferred a number of traits relating to the gender, age, height, weight, social habits, and lifestyle of the bomber.

In 1977 Macdonald applied these same basic principles, although with known subjects, in his book, *Bombers and Firesetters* (17). His research was based upon the study and interviews of more than 30 bombers and 100 arsonists. Again, Macdonald’s work exemplifies the difficulty in assembling any single profile for bombers since he needed six groups to describe the small sample of bombers he studied (although the largest sample studied to date): the compulsive bomber, the psychotic bomber, the sociopathic bomber, the political bomber, the Mafia bomber, and the military bomber. On average Macdonald could only have five subjects per group, a cell size which grossly limits the generalizability of his findings.

Although Macdonald’s classes are not mutually exclusive, raising further taxonomic problems, the political and compulsive bombers seem to capture the types currently most noted. Macdonald believed the motives of the political bomber are composed of a variety of factors. Foremost is his ideology and desire to bring attention to his cause. These motives could be ethnic or cultural identity, nationalism, or religion. While a criminal is typically motivated by greed for material objects, a political bomber is motivated by ideology. He has a genuine desire to change the existing political order for reasons he believes justify whatever means he chooses (17).

The compulsive bomber also appears with some frequency in the research. Macdonald believed the compulsive bomber was motivated by his need for excitement, gratified by the power, flames, or noise of the bomb. For other compulsive bombers Macdonald believed the excitement came from sexual or sadistic impulses. There is no evidence, however, that compulsive bombers account for more than a small fraction of bombers, and Macdonald’s work remains largely speculative.

In a similar vein, two classes of repetitive bombers have been hypothesized by Dietz (3). Like Macdonald’s compulsive bomber, Dietz identified a type of bomber “whose motives are based in delusions which, if true, would be grounds for animosity, a desire for revenge, or other motives found among nonpsychotic bombers” (p. 486). A second type of repetitive bomber is “obsessed with explosive devices, go(es) to great lengths to secure materials and technical information, demonstrate(s) an inordinate fascination with explosives, and occasionally report(s) sexual or other emotional arousal or gratification associated with explosions” (p. 486). Dietz’ two types of repetitive bombers are not mutually exclusive, nor are Macdonald’s political and compulsive bombers.

Dietz stated that an underlying obsessive-compulsive psychopathology is common to all those preoccupied with explosives, and we also found obsessive-compulsion apparent in the previous typologies of both Brussel and Macdonald. We believe, moreover, that obsessive-compulsive traits would not need to be psychopathological in a bomber, and would serve him well as a personality characteristic during the functional and structural assembling of any bomb. Haste could certainly make waste, and the devil would certainly dwell in the details when building a bomb.

Yet Dietz asserted, and we underscore, that obsession alone would not explain why some people construct and detonate bombs.

Underlying factors must be operative to convert this intense interest into unlawful action. Dietz theorized that there were four possible explanations: psychopathy, intoxication, life stressors, or intense emotional states (3).

Here is where the research on bombing and the study of the psychopathic personality converge. Psychopathy may be the character template that turns feelings of anger, thoughts of revenge, fantasies of greed, envious impulses toward destruction, or plans for political terrorism, into overt homicidal behavior in the bomber.

Converging Data with Psychopathy

Our review of bombers yields a paucity of data. From this limited knowledge base, however, some convergence with the psychopathy research is apparent, and prompts us to offer suggestions for further research.

There are a number of definitions of psychopathy. Meloy (20) clinically described psychopathy from a psychodynamic and psychobiological perspective as, “a deviant developmental disturbance characterized by an inordinate amount of instinctual aggression and the absence of an object relational capacity to bond” (p. 5). Hare (21) empirically defined psychopathy as “composed of two correlated factors, one reflecting the personality traits widely considered to be descriptive of the syndrome, and the other reflecting socially deviant behavior (p. 37).”

Hare largely depended on Cleckley (22) to construct the Psychopathy Checklist-Revised (PCL-R), a demonstrably reliable and valid measure of psychopathy. It is particularly useful in both clinical and research settings (21). The PCL-R is a 20-item structured interview which quantifies the degree of someone’s psychopathy—it is a unidimensional measure—and yields two factors. Factor 1 measures a callous and remorseless disregard for the rights and feelings of others (21), which has also been labeled “aggressive narcissism” (23). Factor 2, chronic antisocial behavior, reflects a “chronically unstable and antisocial lifestyle” (21, p. 38). The factors correlate about .50. Factor 1, aggressive narcissism, consists of eight items: (1) Glibness/superficial charm; (2) Grandiose sense of self-worth; (4) Pathological lying; (5) Conning/manipulative; (6) Lack of remorse or guilt; (7) Shallow affect; (8) Callous/lack of empathy; and (16) Failure to accept responsibility for own actions.

The aggressive narcissism of the psychopath is concordant with the “narcissism” frequently cited in the typologies of bombers (3,12,17,18). A grandiose sense of self worth, lack of remorse or guilt, and callousness, are all prerequisites for the successful bomber, particularly if the conscious motivation is political and the targets are civilians. Two contemporary examples will illustrate these three elements of aggressive narcissism, the central trait of psychopathy.

Theodore Kaczynski, the so-called Unabomber responsible for the deaths of three and the injury of 23 individuals in 16 bomb attacks in the US since 1978, wrote the following statement in his “manifesto,” published prior to his apprehension in 1996:

To make an impression on society with words is therefore almost impossible for most individuals and small groups. Take us (FC) for example. If we have never done anything violent and had submitted the present writings to a publisher, they probably would not have been accepted. If they had been accepted and published, they probably would not have attracted many readers, because it’s more fun to watch the entertainment put out by the media than to read a sober essay.

Even if these writings had many readers, most of those readers would soon have forgotten what they had read as their minds were flooded by the mass of material to which the media expose them. In order to get our message before the public with some chance of making a lasting impression, we’ve had to kill people (24, *Manifesto*, numbered paragraph 96).

Implicit in this remarkable rationalization is the pathologically narcissistic belief that he was entitled to kill people in order to be heard, since his ideas warranted such widespread dissemination and admiration: a desire for narcissistic mirroring of such intensity, and perhaps such rage, that homicide was justified. We note, however, his negative presumption that his ideas would otherwise be ignored.

This aggressive devaluation of others in the service of one’s own grandiosity must be actually done to others (in this case through bombing), a predictable behavior of the psychopath (20). This contrasts with the benign mode of narcissistic repair (25) that is usually accomplished through devaluation in repetitive fantasy or verbalizations in narcissistic individuals who are not psychopaths.

Timothy McVeigh, convicted of the mass destruction of the Murrah Building in Oklahoma City through the use of an explosive device, appeared to have two motivations for his bombing: to avenge the deaths of civilians at Waco, Texas two years earlier, which he attributed to the acts of the ATF; and to usher in the second American Revolution. These motivations were suggested in the testimony of his close friend, Michael Fortier:

He told me they picked that building because that was where the orders for the attack on Waco came from. He told me—he also told me that he was wanting to blow up a building to cause a general uprising in America hopefully that would knock some people off the fence into—and urge them into taking action against the federal government (testimony of M. Fortier, May 12, 1997, *U.S. v. McVeigh*).

A grandiose sense of self worth, lack of remorse, and callousness are evident in his implicit beliefs that he was entitled to seek revenge at such horrific cost to a civilian target, and that such an act would mobilize a revolution despite the enormous pain and suffering it would cause.

His need to aggressively devalue, without inhibition or empathy, was also suggested by the testimony of his sister, Jennifer McVeigh:

ATF, all you tyrannical motherfuckers will swing in the wind one day, for your treasonous actions against the Constitution and the United States . . . Die, you spineless, cowardice bastards! (writing found on computer, attributed to T. McVeigh, testimony of Jennifer McVeigh, May 6, 1997, *U.S. v. McVeigh*).

And a letter sent to a friend two months before the bombing:

My whole mindset has shifted from intellectual to animal . . . Rip the bastards heads off and shit down their necks! And I’ll show you how with a simple pocket knife . . . (testimony of Kevin Nicholas, May 8, 1997, *U.S. v. McVeigh*).

The trait aspects of psychopathy, measured by Factor 1, aggressive narcissism, also do not decrease with age, at least into the fifth decade of life (26). Factor 1 correlates with violent criminality,

whereas Factor 2, chronic antisocial behavior, may not (27). The latter items do correlate with nonviolent criminality, which does decrease in psychopaths, but not until the fifth decade of life. This enduring pattern of violent criminality may have both biogenic and psychogenic roots (28), and contrasts with an expected decline in violent behavior in the general population during the third decade of life (29). We have found a convergence with these data in the bombing literature case studies: repetitive bombers, if not caught, will continue to bomb into the fifth and sixth decades of life.

The second factor in psychopathy is chronic antisocial behavior (21), and reflects the more observable behavior of the disorder. This Factor 2 consists of nine items from the PCL-R: 3) Need for stimulation/proneness to boredom; 9) Parasitic lifestyle; 10) Poor behavioral controls; 12) Early behavior problems; 13) Lack of realistic, long term goals; 14) Impulsivity; 15) Irresponsibility; 18) Juvenile delinquency; and 19) Revocation of conditional release. (There are three other items on the PCL-R which load equally on both factors).

The psychopath's need for stimulation and proneness to boredom is directly related to a very robust finding in psychopathy research. Numerous studies have examined the psychophysiology of the psychopath (28). In a review of the available research on skin conductance through 1978, Hare concluded that psychopaths had reduced skin conductance responses to aversive events in conditioning and quasi-conditioning learning paradigms, and have longer recovery periods following aversive stimuli (30). This replicated finding appears to support the peripheral autonomic hyporeactivity hypothesis concerning psychopaths (31). While there has been some recent debate on the skin conductance findings in psychopaths, a review of the literature by Raine fifteen years later (28) concluded that sufficient evidence exists to support an underarousal theory of autonomic responsivity in so-called "habitual criminals". Research independent of Hare and his colleagues has likewise confirmed and broadened the hyporeactivity finding in psychopaths, and suggests that chronic cortical underarousal may biologically mark most habitual criminals, especially in the absence of social risk factors such as lower socio-economic status (28). Lowered skin conductance, slow wave (theta) EEG activity, and lower resting heart rate have been particularly robust predictors, when combined, of habitual criminality—and their absence appears to attenuate the risk of later adult criminality in delinquent adolescents (32,33).

While there have been no studies of bombers and their psychophysiology, there have been such studies conducted on bomb disposal experts. Field studies show that such experts have lower heart rates than soldier controls; and those decorated for their bravery and fearlessness have even lower heart rates than other bomb disposal experts (34). Low resting heart rates appear to facilitate stimulation-seeking behavior (35,36), and reduce hesitancy to act on such impulses (37,38). Such psychophysiological responses in an individual, or the lack thereof, would be important, if not crucial, during the dangerous "hands-on" construction and subsequent detonation of a bomb.

One contemporary bomber that we have studied had a diagnosed sinus bradycardia, a resting heart rate of 42 beats per minute, and was reported by his friends to be a reckless and fast driver. A case such as this illustrates a biosocial manifestation of cortical underarousal: autonomic hyporeactivity often correlates with, and predicts, behavioral sensation-seeking, and is a likely biological substrate for sustained criminality (28), perhaps including bombing. Nomothetic research is necessary, however, to test our tentative hypothesis.

Item 13 of the PCL-R addresses the psychopath's lack of realistic, long term goals. These individuals are excellent short term manipulators (20,39), but have great difficulty foreseeing the long term consequences of their actions, most apparent in their pre-offense planning and post-offense behavior. Neural imaging, neuropsychological, and biochemical studies of habitual criminals, murderers, and psychopaths have focused primarily on frontal lobe and left hemisphere dysfunction, and left frontal-temporal-limbic damage (28). Research at present is not conclusive, but research on psychopaths is increasingly focusing upon the function (not structure) of the orbito-frontal portion of the pre-frontal cortex. Executive functioning, such as long term planning, likely centered in the pre-frontal cortex, may also be impaired by the empirical finding that psychopaths have moderate and pervasive formal thought disorder (40). This is clinically evident in psychological measures of circumstantiality and tangentiality, which may serve narcissistic desires for self-aggrandizement. Psychopaths cannot see the entire forest because they prefer to climb only their tree.

Bombing is usually a planned, purposeful, and emotionless act, but anecdotal information on the pre-offense planning and post-offense behaviors of bombers supports our hypothesis that these individuals are unable to appreciate the long term consequences of their crimes. In 1993 a bomb in the parking garage of the World Trade Center in New York City resulted in the deaths of six individuals and injured more than a thousand. The bombing was linked to a group of Middle Eastern terrorists and marked the most serious foreign terrorist act committed on US soil. Mohammed Amin Salameh, one of the individuals convicted in the bombing conspiracy, tried on several occasions to obtain his \$400 "stolen vehicle" refund from the rental agency in the days after the bombing. In the midst of what was the largest federal fugitive hunt in the history of the US, Salameh was apprehended on his final attempt to recover the deposit. The FBI was able to break the case because they traced the VIN (vehicle identification number) found on the differential of the Ryder truck back to the agency from which it was leased.

It was this same identification process that the FBI used to quickly apprehend Timothy McVeigh. Again, tracing back the VIN found on the truck's differential near the bombsite, the FBI was able to identify the Ryder truck rental agency in Junction City, Kansas, from which McVeigh had rented the truck four days before the bombing. If he had learned from the bombers that had preceded him, a simple metal file might have been all that was necessary to delay his detection and facilitate his escape. Like Mohammed Salameh, Timothy McVeigh was focused on the short term objective—the bombing—and did not conceive of the risk of apprehension he was personally facing. Somewhat ironically, the psychopathic individual's sense of impunity—an aspect of his pathological narcissism—may be psychobiologically served by impairments in his ability to foresee the long term consequences of his acts. He tactically wins, but strategically loses.

One area of divergence in the data between bombers and psychopathy is avoidance. Hart and Hare (41) found that psychopathy was negatively correlated with ratings of avoidant personality disorder. It appears from the anecdotal data that most bombers are elusive by nature and do not come into direct contact with their perceived target. Bombing is the quintessential passive-aggressive act of violence, unlike the violence that is empirically associated with psychopaths (27).

Avoidant traits and passive-aggressive violence, however, may be a phenotypic expression of the psychopathic genotype that is most dramatically evident in bombers. Gabbard (42) discussed this

introversive type in the context of hypervigilant narcissism, and we think it may apply to certain bombers. Evidence presented at the trial of Timothy McVeigh suggested a quiet “loner” who was obsessed with weapons and excelled in their use, and whose superior IQ became increasingly preoccupied with retaliatory and grandiose fantasies concerning the deaths at Waco, the Patriot movement, and his special link to the American Revolution. These thoughts rationalized and justified his bombing, and consumed a large amount of his reading and writing time in the two years prior to the act; but he never actually joined a militia group, and appeared to convey his explicit plans to only three other people, two friends and a co-conspirator.

Another point of divergence between psychopathy and bombing is the degree to which the political bomber is committed to his belief system and the cause that motivates his behavior (measured by Item 15 of the PCL-R: Irresponsibility). Psychopaths are valueless individuals, and do not deeply internalize any belief system (20). The likelihood that they would risk their lives for a political cause is remote, and the more plausible hypothesis is that they would shift allegiances very rapidly, depending on the degree to which adherence to the belief gratified more hedonic interests, such as sensation-seeking, notoriety, or money. Our hypothesis is that the greater the degree of psychopathy in a bomber, the less likely he is to be genuinely motivated by political beliefs. In a similar sense, all terrorists are not psychopaths, but there are certainly psychopathic terrorists.

Current and Future Research

None of the investigative procedures and typologies we have mentioned have been empirically tested. In 1992 a partnership with the FBI/ATF and the arson/bombing investigation services (a subunit of the National Center for the Analysis of Violent Crime), began a study of the behavioral characteristics of bombers (personal communication, T. Huff, FBI Academy, July, 1997). The goals of this collaboration were to conduct a three year research project, interviewing up to 100 individuals convicted of bombings or offenses related to explosive devices. The first step of the project was to identify potential subjects. Secondly, various federal, state, and local criminal justice agencies were to be contacted to obtain historical information on bombers in their files. The criteria for selection of subjects to be interviewed were: 1) a known extensive involvement in the criminal misuse of explosives; 2) conviction for at least one felony bombing; 3) no pending judicial process including appeals. The interviews were designed to concentrate on how and why escalation of violence occurs, pre and post offensive actions taken, common links between childhood and adulthood, how targets are selected, and what possible crime prevention strategies are effective from the bomber’s point of view. This research would have been the most comprehensive empirical study of bombers and their motives to date, but the project was postponed due to a lack of available funds and time to conduct such a large scale study. Similar research has been conducted by the FBI on sexual homicide (19) and serial rape (43), and by the US Secret Service on assassination (44).

Summary and Conclusions

Extant research on the motivations and personalities of bombers is anecdotal, descriptive, and conjectural. There are four existing descriptions of various bombers—developed by Brussel, Macdonald, Dietz, and Douglas in published order—but the methods used

to describe bombers vary, types within the existing descriptions may overlap (such as Macdonald’s “sociopathic” and “political” types), grossly reducing discriminant validity, and none of the descriptions have been subjected to any tests of reliability or validity, other than the personal experience of the investigator. In short, the entire body of research on bombers rests on expert authority, not science: a not uncommon finding in forensic psychological research.

We would make the following recommendations: 1) The FBI/ATF and NCAVC study that we have mentioned be immediately funded, particularly in light of the increase in domestic bombings in the US during the past decade, the recent terrorist bombings in New York City, probably the Atlanta Olympics bombing, and Oklahoma City which killed a total of 175 people.

2) Methodologies incorporate structured interviews, history gathering independent of the subject, psychological and neuropsychological tests, and physiological measures, such as skin conductance, resting heart rate, and EEG. All such measures are portable, and can easily accommodate safety requirements in maximum security settings.

3) Personality measures be utilized, including the MMPI-2, MCMI-III, PCL-R, and Rorschach. All these measures have made recent and substantial contributions to our understanding of antisocial behavior in general and psychopathy in particular (45).

4) Researchers, clinicians, and forensic investigators alike, should consider psychopathy a genotype that may be phenotypically expressed, in kind and degree, in bombers. Psychopathy as a taxon has already been shown to account for a large proportion of explainable variance in recent studies designed to predict future violent crime (46). With this in mind, any criminal case involving an individual accused of bombing should consider psychopathy as a motivational aspect of the crime: whether it be clinically explored by the defense or raised as a generic motivational probability by the prosecution through appropriately retained experts.

5) We would be remiss if we did not mention that our review has some application to the selection and employment of bomb disposal technicians and experts. The extant findings suggest that such experts should be individuals with obsessive-compulsive personality traits, high levels of sensation-seeking, no measurable psychopathy, and low levels of autonomic arousal, particularly in fear inducing or threatening situations. All these characteristics are readily measurable with available psychological and physiological tests, if employment selection regulations would allow them.

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