✓ PSYCHOLOGICAL CHARACTERISTICS OF FIRESETTERS

by Bernard Levin Center for Fire Research National Bureau of Standards Washington, DC

Reprinted from Fire Journal, Vol. 70, No. 2, 36-40, March 1976.

53989

NOTE: This paper is a contribution of the National Bureau of Standards and is not subject to copyright. 

# Psychological Characteristics of Firesetters

BERNARD LEVIN Center for Fire Research National Bureau of Standards

What type of person deliberately sets destructive fires? To most of us, the hideousness of the act suggests that the firesetter has a behavior or personality disorder that would cause or permit him to set the fire. In this article, we shall discuss briefly some of the psychological characteristics of malicious firesetters based largely on data and conclusions found in the technical fiterature.

Unfortunately, our knowledge about the psychopathology of firesetters is limited to those arsonists who are caught or give themselves up. In short, we know the most about the least successful arsonists.

A wide variety of medical, criminological, and fire publications have dealt with the psychopathology of firesetting over a long period of time. There were, for instance, at least 130 articles on the subject published before 1890.<sup>3</sup> However, no recent comprehensive publication reviews, summarizes, criticizes, or synthesizes the available technical information. Although there

This article is a contribution of the National Bureau of Standards. Not subject to copyright.

<sup>1</sup>N. D. C. Lewis and H. Yarnell, *Pathological Firescitting* (*Pyromania*), Nervous and Mental Disease Monographs (New York, N.Y.: Coolidge Foundations, 1951), p. 8.



FIRE JOURNAL - MARCH 1976

36 .

are apparently a number of motives for arson, most articles tend to deal with only one or two motives and/or a narrow age range. The conclusions in most of these articles are based on the authors' own theoretical orientations, their experiences with small numbers of firesetters, and only a partial knowledge of the literaaire. Contradictory conclusions in different articles are, therefore, quite common. The only study covering a wide range of motives for firesetting and including a large number of cases (over 1,300) is the study by Lewis and Yarnell published in 1951. Much of the data and many of the conclusions in this article are based on that study.<sup>2</sup>

# TYPES OF FIRESETTERS

While any system for classifying behavior is arbitrary and somewhat inconsistent, it will be useful for us to classify arsonists into three major groups: arson-forprofit firesetters, solitary firesetters, and group firesetters.

#### Arson-for-Profit Firesetting

<sup>2</sup> Ibid.

Arson-for-profit is probably the most rapidly increasing form of firesetting, although there was a surge of group firesetting during the civil disturbance riots of a few years ago. People who set these fires include: the husinessman who sets fire to his own business to collect insurance; the businessman who hires a paid arconist for the same reason; the paid arsonist who sets fire for a fee; the affluent housewife who sets a smokey fire to collect money for redecorating; the welfare recipient who sets fire to his own apartment to collect relocation expenses; and the criminal who sets a fire to destroy evidence.

There is little in the psychology literature about any of these types of people. However, we do know that arson-for-profit is a rational act and, therefore, that the climination of the potential profit should prevent the attempt. Even though it is not clear to what extent punishment or the threat of punishment is a deterrent to arson-for-profit, we should assume that it is a deterrent to some extent. It follows, then, that success in decreasing this type of arson should be possible through elimination of the profit motive and through intensive and coordinated programs to catch these criminals and to uncover their misdeeds.

Since decisions to attempt arson-for-profit are based, in part, on the arsonists' perceived chances of getting caught and not receiving the desired profit, it is important that the potential arsonists become aware of successful programs to apprehend them or to deprive them of their desired profit. Catching the culprit is only one-third of the job; depriving him of his profit, and punishing him, comes second; and publicizing the sucsets of the apprehension programs is the final third.

## Solitary Firesetting

Most malicious fires are set by individuals in secret. We will arbitrarily define solitary firesetters as those who set fires in secret. (This excludes all firesetting with a profit motive — we classify these in the arson-for-profit category.) It is the solitary firesetter about whom we know the most. There are many subcategories for this classification. Some of the more common ones will be briefly described here.

Many fires are set for revenge or spite. In many cases the damage is out of proportion to the offending action, but the firesetter either does not care and/or he does not realize the tremendous destruction that his actions can cause. The reasons why he might not realize the potential destruction include low intelligence, senility, intoxication, and psychological disorders.

Some fires are set by "pyromaniacs" whose only motive is to obtain some sort of sensual satisfaction from the fire and the associated events. Some of them simply want to see a fire. These are often mental defectives who do not realize the potential harm of their actions. In this respect they are similar to the young child experimenting with matches. People with such low intelligence are eager for attention and are likely to confess to anything that makes them seem important, so that care must be exercised in accepting their confessions.

Other types of solitary firesetters include the watchman who wants to be a hero, the teenager who sets the fire in order to help the firefighters, the housewife who wants to keep her husband home nights, the psychotic firesetter, and the sexual deviate who utilizes firesetting for sexual gratification.



#### Group Firesettings

There are three major classes of fires that are normally set by groups or by individuals in the presence of peers: vandalism fires, riot fires, and political fires. These firesetters have not been studied in depth, but we do know that the presence of others encourages this particular criminal behavior in contrast to most circumstances where the presence of others inhibits the firesetting.

*Political frees* are premeditated and set to dramatize an issue, embarrass authorities or political opponents, or intimidate or extort for political reasons.<sup>73</sup>

Many fires are set by adolescent vandals. Moll believes that excitement, rather than destruction, is the basic motive.<sup>4</sup> Vandalism fires are often set by pairs or groups of boys or in the presence of others from a peergroup. The presence of the group encourages the act. Occasionally the fires are set by a pair of boys, one with a very dominant role in the friendship and one with a very submissive role. The relationship is similar to that found in homosexual pairs.<sup>5</sup>

*Riot fires* are set during outbursts of group violence when there is tension and social unrest. Whether the rioting is spontaneous or fostered by extremists, once it starts, the rules of mob behavior apply. However, the individual members of the mob have a choice of actions: some loot, some attack police, and some set fires.<sup>#</sup>

<sup>1</sup> R. W. Conant, "Rioting, Insurrection and Civil Disobediruce" in R. Hartogs, *Violence: Conses and Solutions* (New York, N.Y.: Dell, 1970), pp. 105–115.

#### FIRE JOURNAL - MARCH 1976

37

<sup>&</sup>lt;sup>3</sup> K. D. Moll, Asson, Vandalism and Violence: Law Enforcement Problems Affecting Fire Departments (Washington, D.C.: United States Department of Justice, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, 1974), p. 11.

<sup>\*</sup> Ibid., p. 13.

<sup>&</sup>lt;sup>a</sup> C. R. Shaw, The Psychiatric Disorders of Childhood (Englewood Chilfs, N.J.: Prentice-Hall, Inc., 1966), p. 301.

There is very little information as to why they select one particular mode over another.

# PSYCHOPATHIC PERSONALITY

Most arsonists as well as other felons can be characterized as psychopaths, or as having psychopathic personalities. The major characteristics of psychopaths are: (1) psychopaths often appear normal and can lead reasonably normal lives; (2) they appear to lack feelings of concern for other people, especially for the physical harm caused by their acts, including their firesetting; (3) they often do not respond to punishment; that is, the fear and expectation of punishment does not appear to discourage their unacceptable behavior and actual punishment is often not effective in discouraging future antisocial actions.

However, the possible ineffectiveness of punishment should not discourage intensive efforts to apprehend arsonists. Whether punishment or other forms of psychotherapy are to be attempted, nothing useful can be done until the culprit is in custody. Also, while in custody, the firesetter is removed from the tensions and frustrations that led to his firesetting. In addition, some pyromaniacs stop their firesetting as soon as they are caught, whether or not they are jailed, punished, or treated; for them, firesetting is like an appeal for attention, with the arrest satisfying the need.

Many people who set arson-for-profit fires are to some extent psychopaths; they do not have sufficient concern for the potential harm to others caused by their firesetting. On the other hand, their firesetting is a somewhat rational act as opposed to a completely impulsive act. Therefore, despite the general tendency for psychopaths not to respond to punishment, one should assume that the potential for punishment has some deterrent effect for arson-for-profit firesetters until there is evidence to the contrary.

## CHILDREN AND FIRE

Most people are fascinated by fire. This fascination starts at an early age and manifests itself in young children playing with matches. While people may not outgrow their basic fascination with fire, normal children learn that playing with matches is not acceptable behavior and discontinue it by the age of five or six. A few children continue to play with matches or delibcrately set destructive fires, and their chronic firesetting is the observable symptom of a psychological disturbance. Treating such disturbances is usually a difficult and time-consuming process. However, there have been some dramatic successes in stopping this type of firesetting by dealing directly with the child's fascination by and interest in fire.

One psychologist reported two separate cases where seven-year-old boys of average intelligence exhibited a number of behavioral problems at home, the must serious being firesetting.7 The psychologist felt that he must stop the firesetting quickly, before the children set serious or fatal fires. He decided that it would be quicker to attack their interest in fire first, rather than their deeper-seated psychological problems. Once the firesetting had stopped, he could then try to resolve the total problem. His approach was to give each child an opportunity to strike matches one-by-one for an hour a day until they no longer wanted to strike the matches. In both cases, after several sessions the child asked to stop the "game" and the child stopped setting fires at home. as well. The psychologist kept in contact with the families for about half a year, and the firesetting did not reoccur during that time. The psychologist called his method "stimulus satiation"; a layman might say that the boys got tired of playing with fire and matches. In any event, we can assume that his method did decrease their fascination by and interest in fire.

Another therapist used a different approach to eliminate firesetting behavior in another seven-year-old boy.8 He did not deal with the child directly, but had the parents work with their child. There was a poor relationship between the child and his parents; we do not know to what extent the bad relationship caused the firesetting and to what extent the firesetting caused the had relationship, but we can be sure that each was reinforcing the other. The boy was asked to bring to the father any packages of matches that he found around the house. The father rewarded the child (i.e., he gave him money) for bringing him the matches. The father deliberately left one package containing no matches so that when his son found it, he would have no reason to keep the empty package rather than bring it to the father. This helped ensure that the desired behavior was started and immediately rewarded. Once he began, the boy brought all the matches that he found to his father. In addition, on several occasions the boy was given the opportunity to strike 20 matches, but he was given a penny for every match that he chose not to strike. By the third time, he chose not to strike any matches. The psychologist called his method "positive reinforcement and the threat of punishment-by-loss"; a layman might say that the child developed improved habits through rewards. An important factor was the improved family relationship: the father rewarded the

<sup>&</sup>lt;sup>7</sup> R. S. Welsh, "The Use of Stimulus Satiation in the Elimination of Javenile Fire-setting Behavior" in A. M. Graziano, *Behartor Therapy With Children* (Chicago, III.: Aldine Publishing Co., 1971), pp. 253–289.

<sup>Co., 1971), pp. 253–289.
\* C. J. Holland, "Elimination by the Parents of Fire-setting Helsivior in a Seven-Year-Old Boy," Behavior Research and Therapy (Vol. 7, 1969), pp. 135–137.</sup> 

child for bringing him the matches instead of punishing the child for setting fires, and the child's behavior in general became more acceptable to the parents.

The three cases mentioned above were all male. This is consistent with current statistic, about arsonists; 90 percent of those arrested for arson are male.º However, in nineteenth-century Europe, arson was often considered a female crime, with fires largely set by girls entering puberty. These girls were usually housemaids living away from their families under harsh or frustrating circumstances. There is some evidence they were often below average in intelligence.10 Of course, today we do not ordinarily send our young girls away from home to be housemaids, so this type of arson is no longer a major problem. However, we do find that twentieth-century firesetters often share some of the same characteristics or problems as those unfortunate ninetcenth-century housemaids. Many firesetters are below average in intelligence or their intellectual functioning is impaired by alcohol, psychiatric disorders, stress, or senility. They often come from broken homes and have lived under harsh or frustrating circumstances.

# REVENCE

Many malicious fires are set for a combination of reasons. Fires set to dramatize a political issue may also be set by individuals looking for excitement. Revenge is a secondary motive for many fires set by pyromaniaes -for example, for the man who believed that he had been mistreated by "big business." Some researchers believe that revenge is a contributing motive for most malicious firesetting.11

# · CHARACTERISTICS OF ARSONISTS

The purposeful setting of a destructive fire is not considered "normal" behavior; it is usually the action of a disturbed person. (It is debatable whether the setting of arson-for-profit fires is "normal" behavior, from a psychiatric viewpoint.) At the same time, all arson is a crime. As we compare arsonists with other criminals in jail, we find that arsonists, other criminals, and maladjusted individuals tend to have come from broken or disruptive homes and to have lived under harsh or frustrating circumstances. This raises the questions: How do firesetters differ from other felous? How do firesetters diller from other psychoneurotics? What

"Lewis and Yarnell, op. cit., pp. 11-12.

makes some felons choose arson as their crime? What makes some psychoneurotics set fires? We do not have definitive answers to these questions, but we do have some relevant information.

First of all, a large percentage of firesetters have committed other crimes, as well. Lewis and Yarnell found that one-half of the firesetters they studied "have been in trouble with the authorities for one or many other types of anti-social activity, ranging from petty stealing to manslaughter."<sup>12</sup> In addition, an important type of arson is that perpetrated by criminals to destroy evidence that would show that another crime has been committed or that could help establish guilt for that crime. These can sometimes be calamitous fires, such as the Port Chester, New York, discotheque fire in 1974, which resulted in 24 deaths.

Some investigators found firesetters to have low basic intelligence, while others found them to have adequate basic intelligence but poor school achievement. For example, Lewis and Yarnell found that 48 percent of their cases could be classified as morons or imbeciles and only 17 percent could be classified as having average or better intelligence.13 (Only 3 percent of the population is classified as morons or imbeciles.) Although Nurcombe did not find a correlation with "intellectual deficiency," he did find frequent severe scholastic retardation. In addition, Vandersall and Wiener found significant school failure that "could not always be related to the results of I.Q. testing."14 While the available data may be influenced by the tendency for the more intelligent firesetters to avoid arrest, it does seemlikely that both conclusions are true: that is, malicious firesetters tend to have below average intelligence and poor school achievement.

A common stereotype regarding the pyromaniae is that he or she is a disturbed sexual deviate. Lewis and Yarnell found only a few firesetters who specifically utilized fresetting for sexual gratification. While some of the others were sexually inadequate, they were also generally inadequate and unable to cope. Most pyromaniaes reported that they were not conscious of sexual feelings during the firesetting act. They did admit to "unbearable tension, uncontrollable urge for gratification, the exaltation at the time the fires are set and the engines begin to arrive, followed by complete relief and sleep," which might symbolically represent a sexual experience. "It is true that most of them admit to some sort of thwarting in their sexual desires just preceding

<sup>\*</sup>C. M. Kelley, Uniform Crime Reports For The United States, 1974 (Washington, D.C.: United States Department of Justice, Federal Bureau of Investigation, 1975), p. 189.

<sup>&</sup>quot;L. H. Cold, "Psychiatric Profile of the Firesetter," Journal el Forensie Sciences (Vol. 7, 1962), pp. 404-417.

<sup>&</sup>quot; Lewis and Yarnell, op. cit., p. 41.

<sup>&</sup>quot; Ibid., p. 38.

<sup>&</sup>quot;B. Nurcombe, "Children Who Set Fires," The Medical Journal of Australia (April 18, 1964), pp. 579-584, and T. A. Vandersall and J. M. Wiener, "Children Who Set Fires," Ar-chiess of General Psychiatry (Vol. 22, January 1970), pp. 63-71.

the firesetting, but to them the act is not a substitute for sexual gratification." It is a means whereby they relieve the accumulated rage induced by frustration "related to an overall inability to deal with their social and physical as well as sexual inferiority."<sup>15</sup>

Other studies of solitary male firesetters have also found them to be maladjusted individuals. Sexual and social inadequacies were commonly found. Inciardi noted the similarity of adult firesetters to hoboes — i.e., they had "no marital tics, problem-drinking, irregular work habits, and a nomadic way of life."<sup>16</sup> The Lewis and Yarnell conclusion that many of the firesetters were generally inadequate and unable to cope is consistent with the finding of other studies performed before and after the publication of their report.

There also appears to be some relationship between intelligence and the motive of the firesetter. Those who set fires merely to see the flame appear to be the dullest. Lewis and Yarnell estimate their I.Q. averages about 50, a level that usually requires institutionalization or strong family support and close supervision.<sup>17</sup>

Most violent crimes cannot be committed in secret. They require contact or a confrontation with the victim. Arson, on the other hand, can be initiated privately. Therefore, one would expect arsonists to be physically weaker or less courageous than other criminals. Even the group firesetter does not confront his victims, and his weakness is demonstrated by his need for group support. It has been noted that a significant percentage of arsonists have physical disabilities or are not good in sports, but we do not have comparable information on other felons.<sup>18</sup> Other criminals consider arsonists to be cowards.

# Bedwetting

No discussion of the psychological characteristics of arsonists would be complete without mention of the large percentage of arsonists who had childhood enuresis; that is, they were bedwetters as children. Psychoanalysts noticed this relationship many years ago and developed hypotheses about "phallic-urethal" fixations that are too complex to describe here properly.<sup>10</sup> However, engresis is common among disturbed children of all types, and the question has been raised as to whether pyromaniaes and other firesetters are more likely to have been childhood bedwetters than were other types

- "Lewis and Yarnell, op. cit., p. 130.
- "T. A. Vandersall and J. M. Wiener, op. cit.
- \*1. Kanfman, L. W. Heims and D. E. Reiser, "A Be-evaluation of the Psychodynamics of Firesettine," American Journal of Orthopsychiatry (Vol. 31, 1961), pp. 123-136.

40 • FIRE JOURNAL - MARCH 1978

of destructive adults and adolescents. Based on a study of 65 children with enuresis, Gerard noticed that the boys in the group were passive, self-deprecatory, and retiring. They avoided rough games for fear of injury, and did poorly in school work.<sup>29</sup> These are frequently characteristics found in firesetters, especially the cowardly behavior and the low level of intellectual functioning.

ļ

Macht and Mack presented case histories of four adolescent firesetters whose ages ranged from 16 to 18,21 All four came from broken or disrupted homes and experienced unusual stresses at the time of their firesetting. One had been recently adopted after living in a number of foster homes; another had a father who went to sea and a mother who became depressed and withdrawn with intractable vomiting; a third barely knew his father, who was very sick; and the last was sent to an orphanage from the age of 6 until he was 13, when he went to live with his father and started visiting his mother on weekends. All four boys set fires only when they were separated from their fathers. Each of the fathers had some significant involvement with fire which the firesetters knew about. Macht and Mack concluded that through the fathers' association with fire, through some of their own experiences with fire, and in one case, through friendship with neighborhood fire fighters, "fire had come to have a special and pleasuraable meaning in the lives of these patients. . . . In an important sense the firesetting represents a call from the overburdened adolescent to the absent father in order to bring him to the rescue. . . . The activity in connection with fire served to reestablish a lost relationship with the father." These conclusions of Macht and Mack are speculative. The important point is that all four of these adolescents were unable to cope with a difficult situation, and it does appear that their choice of firesetting as their deviant behavior was not a random choice.

Firesetting is not normal behavior for adolescents or adults. Questions that should be answered are: 1) Is firesetting the only antisocial manifestation of the psychiatric abnormality; and, 2) Is the firesetting likely to continue? (In this discussion, we do not include the arson-for-profit firesetter.) The first question has already been answered in this report: a majority of malicious firesetters has had previous trouble with the authorities.

Most children and adolescents are likely to stop their firesetting as time passes. Lewis and Yarnell found that

<sup>&</sup>quot;Lewis and Yarnell, op. cit., p. 118.

<sup>&</sup>quot;Inciardi, "The Adult Firesetter: A Typology," Criminology (Vol. 8, 1970), pp. 145-155.

<sup>▶</sup> II. Bakwin and R. M. Bakwin, Behavior Disorders in Children, Second Edition (Philadelphia, Pa.: W. B. Saunders Co., 1960), p. 369.

<sup>&</sup>quot; L. B. Macht and J. E. Mack, "The Firesetter Syndrome," Psychiatry (Vol. 31, 1968), pp. 277-288.

• the adolescent usually "makes but one dramatic extended series of fires, though it should be noted that this impulse is going to persist for the entire time that the emotional problem is present, which for some may be a matter of years."<sup>22</sup> Unfortunately, for some children, the firesetting continues for years. In a number of these cases, the behavior of the arsonists deteriorates over a period of time. They cannot cope with life in general, and eventually they cannot even cope with prison life; they eventually are committed to psychiatric hospitals for custodial care.

# SUMMARY AND CONCLUSIONS

• Our knowledge of the psychology of the arsonist is limited, and the conclusions of experts are often contradictory. Nevertheless, there is general agreement on some aspects of the problem.

We know very little about the person who sets fires for profit: both the paid arsonist and the person who hopes to receive the financial gain. We know that their behavior is rational and that the elimination of the potential profit should prevent the attempt. It is less clear whether increased punishment would be a powerful deterrent. Many of these arsonists undoubtedly have psychopathic personalities, and punishment is not likely to be a strong deterrent for such people.

Many who commit criminal acts, including firesetting, come from broken or disrupted homes and have lived under harsh or frustrating circumstances. There are no clear-cut differences between those who set

<sup>29</sup> Lewis and Yarnell, op. cit., p. 345.

malicious fires and those who do not; the similarities are more striking than the differences. There is some tendency for the firesetters to be young, to have low intelligence, to have been bedwetters as children, to have a stronger than average interest in fire, and to have physical deformities. However, these are not reliable indicators; only a minority have been bedwetters or have physical deformities, and some firesetters are old and senile. The desire for revenge against a person, an institution, or society in general, is likely to be a contributing factor when not the major motive for firesetting. The crime can be committed in secret and does not require confrontiation with the victims, so it is often the act of the physically weak and the coward. It can be either an impulsive act or a carefully planned effort. After their initial firesetting experience, or after a dramatic extended series of fires, some individuals permanently stop setting fires. However, the behavior pattern is established and if an emotional upset reoccurs, the firesetting may be repeated, even after 20 or more years.

All of the above conclusions are based on studies of accused and convicted firesetters. Most of the information comes from studies completed over 25 years ago. There is a great need for up-to-date information regarding the firesetters of the 1970s. There is also need for information on those who set fires for profit. In addition, we can only speculate on the characteristics of those who never get caught. Perhaps the increased interest in arson highlighted in this issue of FINE JOURNAL will result in a reaswed interest in the problem among psychologists and psychiatrists and a new surge of technical articles on the psychology of the arsonist.

The Deadly Deficiency and a Suggested Remedy (continued from page 14)

teachers said that they could count on being able to see the exit lights, since they are always lighted even when the rest of the lights go out. They were obviously unaware of the danger that smoke may completely obscure the lights, or that, as a result of exposure to irritant gases, our eyes may be so full of tears that we cannot see.

Teachers can only teach what they know themselves. We plan to continue the new survey across the country, so that we will have solid data with which to go to the educators. Next spring, if we can get adequate funding, we plan to hold a joint conference of firesafety experts and educators to enlist their help in developing better firesafety curricula and teachers' manuals. The end product will be better and more readily accepted if educators, as well as fire experts, have a hand in its development.

The illustrations in this article are taken from Fuesafety Stickers for Children, for sale from the NFPA (No. C-117).

FIRE JOURNAL - MARCH 1076

• 41