

Pre-employment Identification of Potential Firefighter Arsonists

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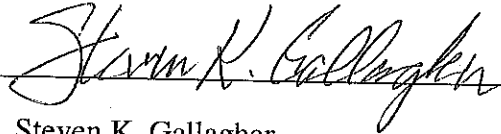
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CERTIFICATION STATEMENT

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ABSTRACT

Arson has long been an issue for many communities across the United States. It was seldom considered, however that the perpetrator could in some cases be a fellow firefighter.

Through action and historical research, this document examines the data surrounding the phenomenon of firefighters setting fires to assess potential methods or mechanisms to identify these persons prior to employment.

There are three questions addressed in this document:

1. Is there a set of characteristics common among the firefighters setting fires?
2. Is there a point in their careers when they are more likely to begin setting fires?
3. How could these persons have been identified prior to their employment?

The results indicate that while pre-employment identification of persons with this predilection is possible, their exclusion from employment is at best difficult. The research indicates that several actions can be taken that can lead to a reduction in the risk of this behavior by a fire department's membership.

TABLE OF CONTENTS

CERTIFICATION STATEMENT	2
ABSTRACT.....	3
TABLE OF CONTENTS.....	3
INTRODUCTION	4
Statement of the Problem.....	4
Purpose of the Study	5
Research Questions.....	5
BACKGROUND AND SIGNIFICANCE.....	6
LITERATURE REVIEW	9
PROCEDURES.....	23
Definition of Terms.....	25
Limitations of the Study.....	25
RESULTS	27
DISCUSSION	39
RECOMMENDATIONS	45
REFERENCES	51
APPENDIX 1 – FIREFIGHTER ARSONIST PROFILES	53
APPENDIX 2 – SURVEY INSTRUMENTS.....	56
APPENDIX 3 – SOUTH CAROLINA FIREFIGHTER REGISTRATION LAW/FORMS	64
APPENDIX 3 – SOUTH CAROLINA FIREFIGHTER REGISTRATION LAW/FORMS	65

INTRODUCTION

Statement of the Problem

A casual observation while reading news articles on the emergency services trade website Firehouse.com gives rise to what seems to be an increase in the number of reported arson cases where firefighters are the suspects or the perpetrators. With the cases spread over the entire United States, nothing has been seen to invalidate the assumption that the potential exists in Ohio generally, and the Chillicothe Fire Department recruitment area specifically. A search of the Associated Press [AP] wire service revealed 91 articles covering 144 firefighters who set 362 fires over an approximate 2 year period. It is assumed that many similar cases were confined to the local news services and were never reported to a national news source. These cases were therefore undiscovered in this search.

Chillicothe Fire Department does not have a process in place that would identify future employees as possible arsonists during the hiring process. Such a procedure is needed where those with a predilection for this aberrant behavior in setting fires can be identified and excluded from candidacy for employment where possible. Alternatively, appropriate interventions could be instituted should these persons remain unrecognized by any pre-employment screening instituted. As an unintended benefit to this research, data developed would also serve as an investigative tool to weigh the possibility of firefighter involvement during any fire investigation allowing an investigator to follow the appropriate investigative avenues at a much earlier stage of case development

Although the Chillicothe Fire Department has not had an incident of a firefighter setting fires, there have been several applicants identified through background checks that revealed questionable behavior as an adolescent. Some of them exhibited this behavior while they were

members of other local departments within the Chillicothe Fire Department's recruitment area.

Purpose of the Study

The purpose of this combined action/historical research was to examine the depth of the firefighter arsonist issue in the fire service in general, and the State of Ohio specifically. Out of this data, a procedure is to be developed that would assist department and city officials in the identification and evaluation of this potential behavior in a candidate prior to their employment.

There is a substantial amount of money invested in each employee for training. Just as importantly, other employees of the department accept these recruits into a unique culture where their very lives are entrusted one another. Discovery that one of their own was setting fires would create complicated loyalty issues leading to divisiveness and serious morale issues. This issue was examined in an attempt to develop a proactive rather than reactive response.

The results will be presented to the Administrative Officers of the Fire Department and the City of Chillicothe, where if implemented, the recommendations will result in an employee candidate less likely to be involved in illegal fire setting.

Research Questions

The following questions will be answered by this historical research:

1. Is there a set of characteristics common among the firefighters setting fires?
2. Is there a point in their careers when firefighters are more likely to begin setting fires?
3. How could these persons have been identified prior to their employment?

BACKGROUND AND SIGNIFICANCE

The Chillicothe Fire Department is a full time career fire department 49 people strong. The department provides full fire services including suppression, investigation, hazardous materials, fire prevention, and code enforcement programs as well as Emergency Medical Services for a city of approximately 23,000 people. Chillicothe is located in predominately rural Southern Ohio in Ross County.

It has long been the goal of the administrative staff of the Chillicothe Fire Department to identify the best possible firefighter candidates from what is generally a large pool of candidates. One of the primary goals in the selection process is the exclusion of individuals that may be attempting entry into the fire service for improper reasons. If properly developed, a program to exclude these people from employment will prevent the potential liability, embarrassment, and loss of community trust and support caused by an individual whose only reasons for joining may be dishonorable, illegal, or both. That same exclusion would apply to those that may have had a history of actually setting fires, but nothing documented that might be discovered by conducting a standard background check.

Potential recruits are required under Ohio law to undergo and pass a physical examination prior to employment with any fire department in Ohio, but there is nothing currently legislated that requires these candidates undergo a psychological evaluation as part of that physical. Another interesting point is that while permitted under current Ohio law, nothing requires any sort of background check be done. The City of Chillicothe gives a psychological evaluation, but it involves very general issues, and fails to look for any potential firesetting behavior. Many smaller departments do not give a psychological evaluation of any kind, and these people may be being missed in this phase of their evaluation process.

Although no written documentation was located, personal knowledge of this author provides there are known cases in the Chillicothe area where firefighters have been involved in criminal firesetting activity and been offered the opportunity to resign and recommended to leave the area to avoid prosecution. This was generally done to avoid the stigma the department would receive due to one of its members setting fires, effectively compromising the department's community standing and hence, their fund raising capabilities.

The problem in this situation is self-propagating as the individual is then free to go to another department unfamiliar with the individual's history, and be employed in the same or similar capacity he/she held when they were previously setting fires potentially continuing their activities unabated.

The risk to other firefighters, fire departments, and the community in general created by this activity is no less dangerous than the risks generated by fires from any other cause. In the case of firefighter arson, there are the added components such as negative publicity and resultant loss of community support, and possible liability issues as well (Aurnhammer, 2002).

An examination of cases where the individuals were discovered and arrested gives alarm that the problem is one of national significance and scale, but has the most direct impact on the local level. Two of the largest wildfires in US history (USFA, 2003) were set by firefighters. At least one case (CBS News, 2003) saw an Ohio firehouse destroyed by a fire set by a firefighter. Another in Pennsylvania saw firefighters burn their own firehouse in an insurance fraud scheme (Pittsburgh Tribune-Review, 2004). All of these incidents were in different parts of the country and are exemplar that this is neither only a regional nor local problem. It is a problem that must be dealt with on a local level, and in a manner that would foster interagency cooperation if it is to be resolved.

In addition to impacting the Chillicothe Fire Department, there is potentially a positive impact on the Ohio Fire Service in general, as any procedures developed for the assessment of firefighter candidates would be available for utilization by virtually any fire department. This would at best prevent any further incidents of this crime, and at minimum diminish the chances that these persons will be allowed entry to the fire service. If no other benefit, this may raise an awareness of the issue, and make it known that the potential exists that certain firefighters can and often do set fires.

LITERATURE REVIEW

Huff (1994) identified and examined 25 cases of arson that involved firefighters. The cases were discovered randomly by polling fire investigators in attendance at arson training seminars, and these same investigators provided the data. These cases were spread over seven states and one Canadian province. These areas were unidentified in the report. Of those cases, some involved multiple fires and multiple persons involved. Of the 25 cases identified, 16 involved lone offenders, while the other nine involved multiple offenders responsible for 182 fires. These cases indicated there were predictable motives for these fires.

These arsonists often had spotty employment records including frequent job changes with high rates of absenteeism and tardiness. They may also have a poor academic record and behavior problems documented in school records. Other things that may be discovered by conducting a thorough background check include frequent vehicle code violations, violations relating to alcohol abuse, charges of petty theft, or other frequent misdemeanors such as trespassing.

Huff also discovered that the group offenders had their own identifiable characteristics in addition to those previously identified for the lone offenders. The ages ranged from 16 to 35 with the average age a little younger at 19 years old. There was always one dominant person in the group that was identified by the remainder as the leader. There was occasionally one other person identified as a co-leader who was also a dominant personality.

The group offenders were found to be better organized than their lone counterparts. Planning was indicated on the part of the group offenders in their target selection, and the fact that they often brought a flammable liquid to the scene. All had middle class upbringing and no prior criminal records. Many of the group offenders were still in school.

This study identified several overall potential indicators. Investigators that provided the data on these 25 cases reviewed reported similar thoughts and feelings expressed by fire department personnel during the course of the arson problem.

An important issue reported was that there had been many nuisance fires set before serious investigation was conducted into the matter. It was felt that the problem could have been avoided had there been an aggressive investigation. It was suggested that an aggressive policy of investigating all fires may have deterred the arsonist entirely.

Fire department personnel also perceived these arsonists as initially being beyond suspicion. That evolved into some degree of suspicion that was quickly dismissed as unlikely. That eventually gave way to genuine suspicion. The suspicion was closely held by the individuals and not discussed with peers in case they were wrong. This particular attitude was felt justified out of fear of personal consequences if those suspicions were in error. One issue that was also worth noting was that suspicions held by rank-and-file firefighters were never reported to management. There were no reasons for this failure reported.

There were some issues regarding the departments' chief officers disclosed by Huff's research. There was reluctance by the fire chiefs to report any suspicions they had regarding a firefighter's involvement in any fires to law enforcement. This was identified as primarily due to the fear their suspicions would be made public by law enforcement officials, and that public disclosure would bring shame upon the department even if the suspicions were incorrect. There was also some concern that any investigation would disclose what could be perceived as negligent hiring practices on the part of the department's administration.

The chiefs were also aware of the potential adverse publicity, the issues with the media, the post-arrest investigations, and the subsequent judicial proceedings. After these issues were

resolved, the efforts at face saving, healing, and restoring confidence within the department and public would follow

The United State Fire Administration [USFA] (2003) issued a special report on the subject of firefighter arson that frequently references Huff's report. The statistics contained in this document show that while the National Interagency Fire Center [NIFC], the National Fire Incident Reporting System [NFIRS], and the Uniform Crime Report [UCR] all report crimes of arson, none track the sub-group of incendiary fires set by firefighters. Such a database would be challenging to develop because it could only be populated after criminal proceedings occurred and a verdict of guilty or confession was obtained.

This report identified six primary motives. Those included excitement, vandalism, revenge, crime concealment, profit, and extremist/terrorist, and some cases where there mixed motives from this list as well.

USFA reports that the majority of documented cases of firefighter arson have occurred in volunteer departments. It relates that however, to the fact that the number of volunteer firefighters is far greater than career firefighters. Incidents occurred in departments such as volunteer, career, part-paid, paid-on-call, and even in the Forest Service.

Two of the largest wildfires in the history of the United States were set in 2002 by two part-time Forest Service employees. One of those fires ultimately cost the State of Arizona and the US Forest Service \$10 million to control. The second fire was set in Colorado by a firefighter who hoped he would be called to fight the fire to earn \$8.00 an hour. Suppression costs for this fire were in excess of \$15 million.

Many of the South Carolina cases examined in this report involved several firefighters from a single department. The group behavior, also addressed by Huff, is very similar to group

behavior observed in adolescents. This suggests that insecurity and lack of maturity are significant in the psychology of firefighter arsonists. It was also reported that novice (or junior) firefighters are disproportionately represented in the overall numbers of firefighters that set fires. The actual numbers were not provided.

There were several areas recognized as impacted by firefighter arsonists. Public trust, injury and death of responding firefighters, decline in financial support of the involved department, replacement of lost or damaged equipment, and difficult recruitment are just a few of those areas. The fire chief may see questions as to why he or she was unaware of a problem with one of the department's employees.

USFA (1997) is a document prepared to examine the general arson problem that exists in the United States. This document includes a section that addresses the inadequate screening of volunteers as a contributing factor to the issue of firefighter related arson.

It also cites a unique case that brings light to a potential related situation that has previously been unexplored. It involved the mother of a volunteer firefighter that set a series of fires in her son's district in an attempt to give her son the opportunity to excel. It is believed that this sort of activity is limited at best, but until this case had never been considered in literature as a possibility.

Arbuckle (2001) examined the same subject within the New Zealand fire service, and found many of the same issues that Huff and USFA had identified. A profile was developed to screen all potential volunteers. This profile was used to develop a screening process that employed a multifaceted approach to screening potential volunteers. This screening process was built around three main elements – an application form, a Police background check, and a structured interview format for the chief or senior brigade members.

It was reported that over an 18 month period from 1998 to 1999, there were 13 firefighters convicted of arson. The number of fires these 13 individuals set was not reported. In the year following the implementation of the cited screening procedures, there was one case of a firefighter being charged with arson. He was accepted prior to the implementation of the screening process.

Arbuckle identified that in spite of the apparent success of the screening, resistance remains to the use of this tool. Reasons include excessive confidence by fire chiefs in their own judgment, shortages of prospective members that leave chiefs with few alternatives, local preference in local knowledge versus application of a rigorous structured process.

Wambaugh (2002) wrote regarding only one case of firesetting by a firefighter, but it has been seen by many in the investigation industry as the quintessential case of firefighter arson. It was a case involving a fire investigator in Southern California who had held that position for a number of years. In addition to investigating fires, he was also a well known and respected instructor of fire investigators. This individual was convicted of setting 20 fires, one of which killed four people. Although only formally charged with those 20 fires, he was suspected of criminal involvement in more than 2000 fires. Listing the various issues surrounding this case reinforced that the previously developed profiles were quite valid when compared to this particular firefighter. Issues such as domestic instability and a strong desire to be accepted by his peers were well documented in this case.

Barker (1994) assessed and summarized much of the available psychiatric literature on "arson" in general terms. The arsonists reviewed in the literature had all been actually convicted of the crime, leaving one to question if the numbers reflected all arsonists, especially given the estimation of the NFPA that fewer than 5% of those arrested for arson were actually convicted.

One of the characteristics of the arsonists reviewed in the literature was youth. In the works reviewed, it was found that the mean ages cited from the cases reviewed ranged from 24 years to 28 years. Overall, the ages ranged from 15 to 73 years.

The ratio of male to female was also examined. A cursory examination of the literature suggested the general crime of arson had evolved from the young female domestic in the nineteenth century household to the high rate male offenders found today. The highest rate of female offenders in the entire study was 37%, and the lowest was 34%. There was also found what appeared to be an underestimation in these numbers, as reflected by a survey of female arsonists admitted in what was cited in this work without definition as "Special Hospitals". Of these female patients, it was learned that only 46% of them had ever been actually prosecuted.

The literature revealed that most of the prosecuted arson cases were against male arsonists. Even given the prevalence of female arsonists during certain socially historic periods, two-thirds of the prosecuted cases involve males.

Several issues/factors that would come under the category of *Characteristics of Arsonists* were examined as well. They, and the findings, are as follows:

- 1) parental deprivation –
 - a) arsonists were not found to vary drastically from other criminals in this respect.
- 2) work history –
 - a) job dissatisfaction, be it monotony of work, lack of recognition, disciplinary, or other resentment are common to arsonists.
- 3) sexual and marital history –
 - a) noted absence of rewarding heterosexual relationships

- b) poor marital adjustment and difficult heterosexual relationships are most prevalent in recidivistic arsonists
- c) the arsonists in one study showed only that 11% were married while another had a high rate of 40%
- 4) medical history –
 - a) while the old studies showed a potential correlation between epilepsy, menstruation, and arson, it was disproved in modern studies
- 5) criminal history –
 - a) prior criminal history is common
 - b) there is a glaring absence of any studies of the recidivism of arsonists specifically
- 6) alcohol abuse –
 - a) long recognized as a factor in arson based on its ability to effect a person's judgment
- 7) group arsonists
 - a) acts of arson by groups is twice as common between the ages of 13 and 20
 - b) property damage is often much greater

An important missing factor that the author noted prominently throughout the document was that not all arsonists are caught and prosecuted. As a result, the real numbers as listed in each category may be much higher.

Kocsis (2004) assessed the accuracy of modern profiling techniques. It was noted that criminal psychological profiling has been widely accepted, although little empirical data exists

regarding the accuracy of the technique, nor the skills that are necessary to accurately conduct profiling. The available literature regarding profiling is largely anecdotal.

Profiling has long been assumed to be most applicable to serial or recidivistic type crimes, these theories had never been tested empirically until the cited research. There had been some prior research regarding profiling of other serial crimes by the author, but this was the first focusing entirely on serial and recidivistic arson.

This particular study was made up of five groups. The groups were as follows:

- Police Detectives –
 - 13 persons (12 male; 1 female)
 - 29 to 50 years
 - all were active detectives working in an arson investigation unit, or experienced in arson investigation
- Fire Investigators –
 - 12 persons (all male)
 - 33 to 54 years
 - all were currently operational fire department officers attached to investigation units
 - although experienced arson investigators, none had experience as police investigators
- Professional profilers
 - 3 persons (all male)
 - 43 to 58 years old
 - all actively working as criminal profilers

- Science students
 - 21 persons (14 males; 7 females)
 - 18 to 39 years
 - Australian university sophomores working on Bachelor of Science in Chemistry
- Control group
 - 47 persons (16 males; 31 females)
 - 17 to 75 years
 - no experience in profiling
 - students at a local community college in Australia

It was demonstrated that science students performed comparatively well in simulated profiling experiments. They were the most accurate of the non-profiler groups. It was felt that this finding was demonstrative that logical and objective reasoning is an important skill for effective profiling.

Investigative experience had been held as a necessity for an effective profiler in previously held hypotheses, but was shown not necessarily valid in this document. One of the findings to emerge from this study was group differences in the type of information accurately predicted. No significant results were found on items concerning cognitive processes or offense behaviors, but the professional profilers much more accurately predicted physical features and features of the offender's social history and habits. Interestingly, this was inconsistent with findings of a similar study focusing specifically upon homicide.

Ritchie & Huff (1999) examined the hypothesis that persons with impulse control problems are more likely to set fires and commit other uncalculated crimes. Historically,

firesetting has been viewed as compulsive behavior and reflecting an obsession with fire. While pyromania has long been recognized as a legitimate psychiatric diagnosis, law enforcement has begun to question whether pyromania is a valid motive. This discrepancy was identified as typical of the law enforcement and psychiatric communities' resistance to share information.

Additional characteristics as recognized by Arbuckle are represented in Appendix 1, Table 1. The Federal Bureau of Investigation's [FBI] Behavior Analysis Unit [BAU] and the South Carolina Forestry Commission [SCFC] both developed their own set of characteristics. They are exhibited in Appendix 1, Table 2. Comparing these characteristics, it appears that there are minimal differences and all are on the same plane of observation.

Huff (2003) determined that in the cases he examined, he was able to identify three primary motives for these firefighters: excitement, profit, and revenge. Excitement was the predominant motive in 89% of the cases. Further, it was learned that it was particularly true for the groups of youthful firefighter arsonists. It was also the predominant motive for the firefighters who had acted alone when setting fires. The need to utilize their firefighter training and expectations of the thrill of firefighting often led to the need for these firefighters to set fires.

Another aspect of the excitement motive that was identified was the desire to be perceived as a hero for his (they were all male) firefighting activities. Many of these individuals had expressed a fantasy of being highly regarded by their peers, family, friends, and communities. Each of these individuals expressed these issues as some of the reasons for their firesetting.

Some of those citing excitement as a motive preferred to set their fires during public events such as parades, musters, training days, drills, or holidays to maximize the attention. All held important the feeling of power and excitement.

Profit was the second most identified motive. Some firefighters received overtime pay if held over past their regular shifts or were recalled to fight a fire. Wildland firefighters were often in this category. Many were part-time employees that were only paid if they were fighting a fire. Some volunteers would come under this category as they might receive pay for each call to which they respond.

Revenge was the least common of the three motives identified. One case involved a firefighter that set fire to his firehouse. Another case involved a group of demoralized firefighters set fires in retaliation to a grievance against the fire chief.

Huff also identified several “redflags” of firefighter related arson. An increase in nuisance fires within the fire departments jurisdiction was common to 38% of the 25 cases examined. Surrounding jurisdictions did not experience similar trends, indicating a serious potential for the person setting these fires to be department associated.

It was also discovered that many of the involved firefighters were fairly new members of the department. The average time with the department was 2.4 years for the 75 firefighter arsonists identified. Most group offenders appeared not to have the inclination to set any fires before joining the department.

The author also went on to identify some of the characteristics he identified in these firefighters. The lone offenders were all white males, as were 60% of the group offenders. The remaining 40% of the group offenders were all black. There were no cases involving female arsonists connected with the fire service. It’s important to reinforce that these numbers reflect statistics involving only the 25 cases identified in the cited document. All but two of the arsonists were between the ages of 18 and 30 with the average being 23. There were 2 exceptions that involved older men, with the oldest being 41 who set fires for profit.

These arsonists often had spotty employment records including frequent job changes with high rates of absenteeism and tardiness. Charges of petty theft and similar crimes may be found with a thorough background check. Other things that may be discovered include frequent vehicle code violations, violations relating to alcohol abuse, or other frequent misdemeanors such as trespassing. They may also have a poor academic record and behavior problems documented in school records.

The motivation for a firefighter to begin setting fires has long been an issue that has been debated at some length. The literature review reveals that the topic as it concerns the civilian population has been examined at some length. The primary motives behind criminal firesetting are excitement, vandalism, revenge, profit, extremist/terrorist, crime concealment. These motives would have firefighters in each category, but there are other primary motives considered particular to firefighters, as well. Data (USFA, 2003) indicates that the three primary motives are the need to be seen as a hero, to practice extinguishing fires or utilize their training, or to earn extra money.

Several researchers involved in this study (USFA, 2003) are of the belief that firefighter arsonists, much like civilian arsonists, experience a mental process known as RPM: the arsonist rationalizes the crime, projects blame, and minimizes the consequences. While it is anticipated that research will be conducted by the FBI to follow up on this hypothesis, contacts with that agency are unaware of anything being done on that specific topic at the time of this writing.

The excitement motivated arsonist would include those that are in search of thrills, attention, recognition, and rarely sexual gratification. Their ability to initiate the response of safety forces also gives the offender a sense of power or control over society. These firefighters often start the fires in order to participate in the firefighting activities. Those that discover the

fires can be considered to be seeking recognition as heroes. Many of these traits are consistent with firefighters new to the service.

Vandalism motivated arsonists often employ the use of an assistant (usually juveniles) for no other reason than “just for kicks”. Common targets are schools, school property, or any other educational facilities. This particular motive is primarily committed by civilian rather than firefighter arsonists. Information collected nationally, and from local sources would seem to confirm the above observations based on the number of fires set by firefighters with between one and five years of experience.

Revenge fires are set by the offender in response to any injustice, actual or perceived. The incident causing this action may have occurred months or even years before the fire was set. This category of motive has several subsets: (a) personal revenge, (b) societal retaliation, (c) institutional retaliation, and (d) group retaliation. Disgruntled firefighters may set fires in retaliation to an incident where they had perceived being victimized. There have been documented cases where firehouses were the targets in these instances.

Crime concealment by arson is the secondary criminal activity in this case. Attempts to cover up crimes such as murder or burglary have been made using fire. It has also been the vehicle used in attempts to destroy records of failing businesses. Auto theft is another crime where fire is often used in attempts at concealment.

Profit motivated arsonists expect some degree of profit from their firesetting usually for direct monetary gain, or to eliminate debt. These fires are often set to burn fast and big, causing as much damage in as short a period of time as possible. Insurance fraud, property liquidation, business dissolution, inventory destruction, or employment is commonly considered examples of the profit motive.

Extremist/terrorist motivated fires include those set in abortion clinics, animal laboratories, and furriers are examples of this group. There have also been cases of buildings under construction as targets protesting the advancement of structures into the urban/wildland interface.

Many in the fire investigation field indicate the motives for firefighters to set fires are mixed. Convicted firefighters have indicated they occasionally had more than one motive. Issues such as disenfranchisement from their fire department, along with alienation by society have been considered as part of the motive by the FBI. Even with the recognition of revenge as the primary motive, the second motive is most often an attempt to achieve a sense of power.

At first glance, arson for profit does not seem to be a likely motive for a firefighter, but things like increased overtime pay, covering gambling debts, and being a paid-on-call firefighter have all been noted as motives for firefighters. In 2002, a US Forest Service firefighter set a fire in hopes of earning \$8.00 per hour while fighting the fire. This fire eventually grew to become the largest wildfire in Arizona history (CBS News, 2002).

PROCEDURES

In order to evaluate the apparent increases in these cases as what appeared to national trends, the recognized national fire service and law enforcement organizations (i.e. Federal Bureau of Investigation, Bureau of Alcohol, Tobacco, and Firearms, and United States Fire Administration) were contacted regarding national statistics as they relate to firefighters charged in this crime. Data on this subject from those agencies is nonexistent as it relates to firefighters. Multiple queries to national non-governmental organizations such as the National Volunteer Fire Council [NVFC] were unanswered. There was a report from the organization found from 1994 that heavily referenced the work by Agent Huff nearly verbatim, but nothing was located since that time from them referencing this issue.

With the absence of organized collected data to assess possible trends of this issue, the Associated Press was checked for any news stories available. There were 91 cases discovered from a period covering 2.5 years. These 91 cases involved 362 separate fires and 144 firefighters.

Discovering the apparent lack of availability of accurate national data, the Fire Marshal in each state was sent a questionnaire to collect and assemble data that could indicate a national trend based on each state's experience. Few responses were received, with only 3 responses returned from all surveys mailed. Due to sample size, the responses provided little if any useable answers related to the questions asked, other than the respondents had experienced a number of cases. An official from one southern state indicated there were as many as 400 fires in their state that could be attributed to firefighters. However, no other data was available.

Ohio data was sought to assess the Ohio experience with this issue. While the Ohio Division of State Fire Marshal's Investigation Bureau agreed early in the formulation of this document to make data from these incidents available for examination, it was learned that there

was no mechanism to access and retrieve data from cases involving firefighters without going through every case file individually. This was simply because there was no data filed specific to this issue.

Finding that Ohio data was largely inaccessible, other options to locate data were utilized. As an alternative, each of the state's investigators was provided a survey with questions regarding these cases that they could identify from their files. All 17 investigators in the state were queried, with the response limited to just five investigators in the Southern Ohio region with one investigator from Northern Ohio.

As an additional potential data source, each of the 88 County Prosecutors in Ohio were mailed a survey to collect any data they may have possessed regarding cases they had prosecuted. The data from all of these sources was compared to the markers identified by Huff, et al to assess the overall accuracy against actual cases in general, and to Ohio cases specifically. The collected data was measured against the set of characteristics, or profile, identified in the reviewed literature to assess the accuracy of that profile against the Ohio experience.

During the examination of the available literature referencing this issue, the assessment practices of departments for firefighter candidates came into question as potentially contributory to the problem. Questionnaires were mailed to a random sample of Ohio fire departments from a list of departments provided by the Ohio Fire Marshal's Office. There were 360 surveys mailed, with 166 returned. These questionnaires were strictly related to firefighter candidate evaluation practices to determine if shortfalls existed that could be identified as contributory to this issue.

Surveys sent to all parties were treated as confidential.

Definition of Terms

Arson. “The willful and malicious burning of property” (United States Fire Administration [USFA], 2003, page 4).

Arsonist. A person who commits the crime of arson; includes firesetting in general.

DSFM. Division of State Fire Marshal (Ohio).

Firefighter. Any person, male or female, paid or unpaid, who engages in rescue, fire suppression, or related activities under the supervision of a fire chief or fire department.

Motive. “The inner drive or impulse that is the cause, reason, or incentive that induces or prompts a specific behavior.” (USFA. 2003, page 8).

Serial arson. “Three or more fires set with a cooling-off period between each” (Huff, T., 1994, page 3).

Limitations of the Study

Although statistics of all sorts and manner are maintained by a number of law enforcement agencies both on a national and state level, there is essentially no statistical data specifically tracking the number of cases of arson committed by firefighters, nor the associated sociological data. This makes it impossible to determine any trends in this activity with any degree of accuracy. Comparatively, the absence of accurate sociological data makes it impossible to measure against the existing profiles to assess their accuracy on that level.

With these factors in mind, many of the cases originally reviewed and examined outside of the existing literature in this research were largely discovered by word of mouth, and simply reviewing news accounts discovered in the Associated Press wire service and a Lexus Nexus search. Others were identified when they were included in the reference documents used to build this document. Although data collected in this manner is largely anecdotal, it was felt the

numbers were demonstrative of the potential trends. Interestingly, cases examined by the FBI were discovered by randomly asking investigators that happened to be attending various training programs about their experiences with fire investigation found to be involving firefighters.

It is felt that there are a far greater number of similar cases that never make the AP wire service, and are largely lost to the general anonymity of local news reporting, if reported at all. As news items, these cases are largely absent the detailed data necessary for assessment of the various characteristics identified and examined by this author. As many of the fires set by firefighters are often smaller or involving property without value, cases may exist that were never investigated to be included in any available data.

The Ohio specific statistics were brought to light with surveys that were submitted to Ohio County Prosecutors and the State Investigators from the Investigations Bureau of the Ohio Division of State Fire Marshal. Unfortunately, data is limited by the number of responses from each of those groups. While the Administrators of the Arson Bureau were quite cooperative and had agreed to make data available for this study, it was learned that records are not maintained in a manner that would permit collecting firefighter specific cases without physically pulling and examining each case file to even determine if a firefighter was involved.

RESULTS

Through action/historical research, it was found that very little information or data exists to truly assess the issue of firefighter arsonists.

Question #1 Is there a set of characteristics common among the firefighters setting fires?

Information gleaned from the literature review indicated that a set of characteristics, or profile, is not only possible, but has in fact been developed. However, there remains to be built, a database to follow the data sets from actual cases in order to better examine the validity of these profiles.

Question #2 Is there a point in their careers when firefighters are more likely to begin setting fires?

The limited data gathered from Ohio officials tends to confirm the age ranges spelled out in the discovered profiles. The accuracy of this assumption is rendered questionable by the limited data that was uncovered. This underscores the importance of a valid database to enable an accurate evaluation of specific questions such as this. The data used gives promise that this is possible.

Question #3 How could these persons have been identified prior to their employment?

The information developed indicates that a basic, solid pre-employment assessment using common tools such as application, structured interviews, criminal record checks, and psychological evaluations provide the foundation for any method used to identify these persons. Once again, the aforementioned database is central to increasing and maintaining the effectiveness of any methods employed.

Data from the surveys submitted to the Ohio Fire Marshal's Investigators, and the Ohio County Prosecutors was tabulated according to the agencies surveyed, and assessed against Huff's profile. Data received from the various US State Fire Marshals' Offices was very minimal and largely unusable. It was excluded with the exception of information regarding the number of cases identified. The other data was largely not tracked and was unavailable for review. This was the same circumstance experienced when Ohio officials were approached.

The data taken from the Ohio Fire Department surveys was focused on hiring procedures. The discussion of that data will focus how those procedures relate to the entry of arsonists into the fire service.

In the cases identified in the literature reviewed and the information from the news services, a majority of the firefighters found to be setting fires were in a capacity other than paid/career. Ohio experienced a similar statistical trend with a virtual all of those reported by both the County Prosecutors Offices and the State Fire Marshal's Investigators classified other than paid career. Of the cases reported by both groups, only one career firefighter was identified. The motive identified in that case was simple profit.

The first area questioned as a pertinent indicator was the individual's pay status. Respondents were asked to classify the firefighters identified as paid/career, volunteer, paid per call/part-time, or cadet. The results are reflected in Figures 1 and 2.

Interestingly, when data was grouped into career (paid) and volunteer/other, the data was overwhelmingly indicative of this being primarily an issue for other than career departments. The rate of incidence for the cases provided by the Prosecutor's group was 0% career and 100% for the remainder. The Ohio DSFM reflected approximately 4% for career versus 96%

volunteer/other in the data provided by that group. Ohio Prosecutors reflected 100% volunteer/other.

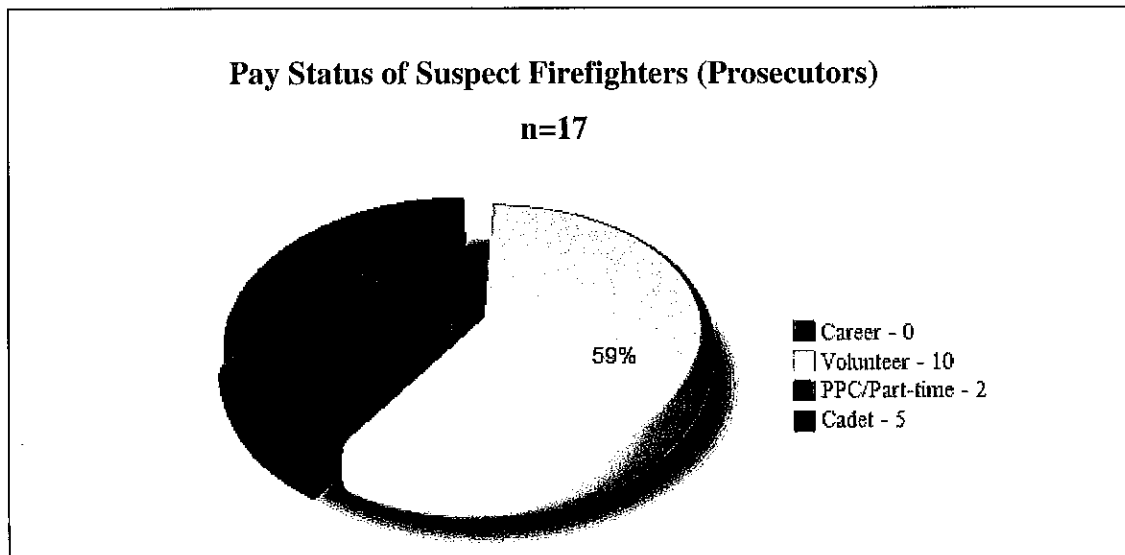


Figure 1.

Pay status of firefighters arrested for arson as reported by Ohio Prosecutors.

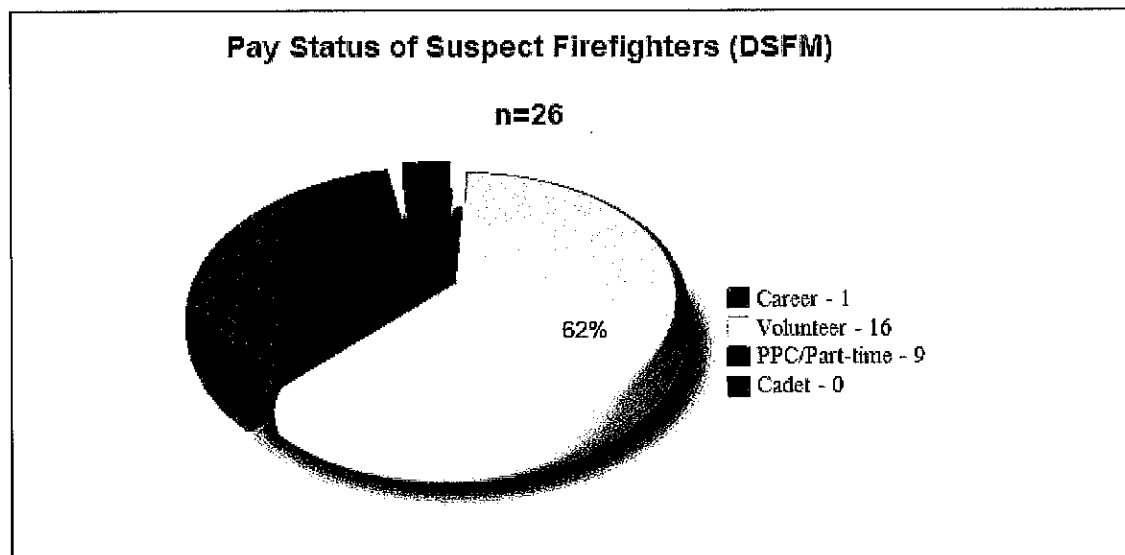


Figure 2.

Pay status of firefighters arrested for arson as reported by Ohio State Fire Marshal's Office Investigators.

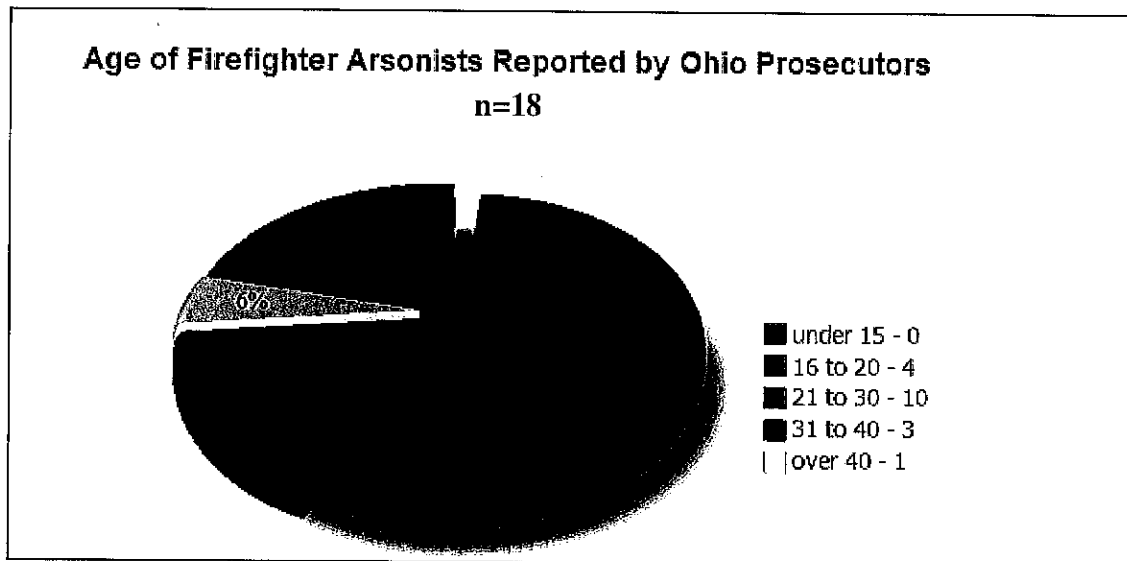


Figure 3.

Age of firefighters arrested for arson as reported by Ohio Prosecutor's Offices.

The age of the firefighters involved in this crime was consistently young. The data received from the Prosecutor's group reflected fully 78% of the firefighters were between the ages of 15 and 30, while the Ohio Fire Marshal's Investigator's data reflected 96% of their persons were between the same ages. The age data is reflected in Figure 3 and Figure 4.

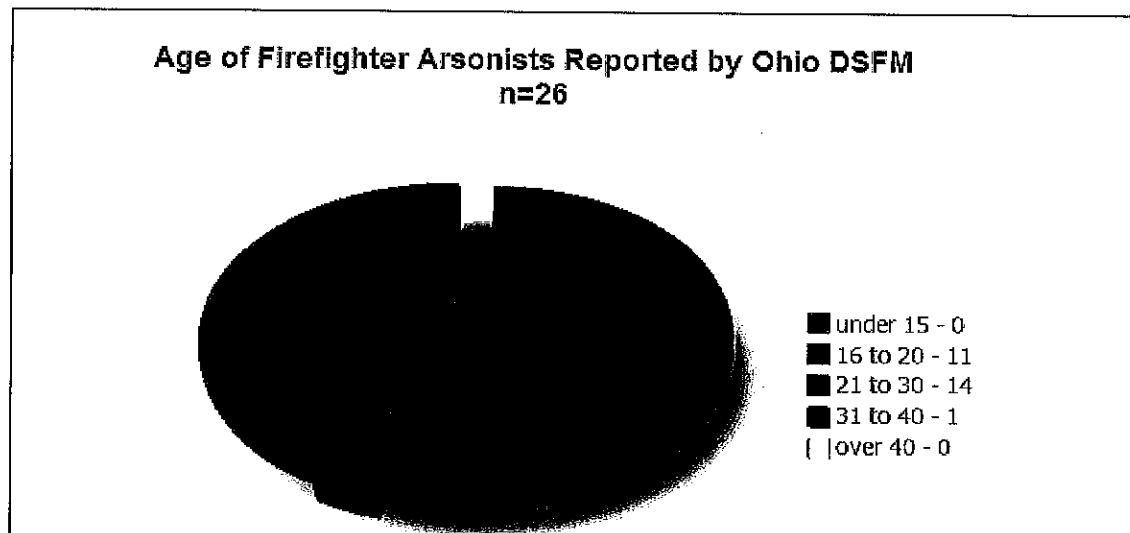


Figure 4.

Age of firefighters arrested for arson as reported by
Ohio State Fire Marshal's Office Investigators.

Identifying motive in these cases can often be a very valuable marker in the prediction of this crime. Just as the markers of pay status and age were highly concentrated within one specific criterion, the motive followed the same pattern of focus. The only data returned was from the Investigator's group.

As seen in Figure 5, excitement and the need to be seen as a hero were cited as motive in 92% of the cases.

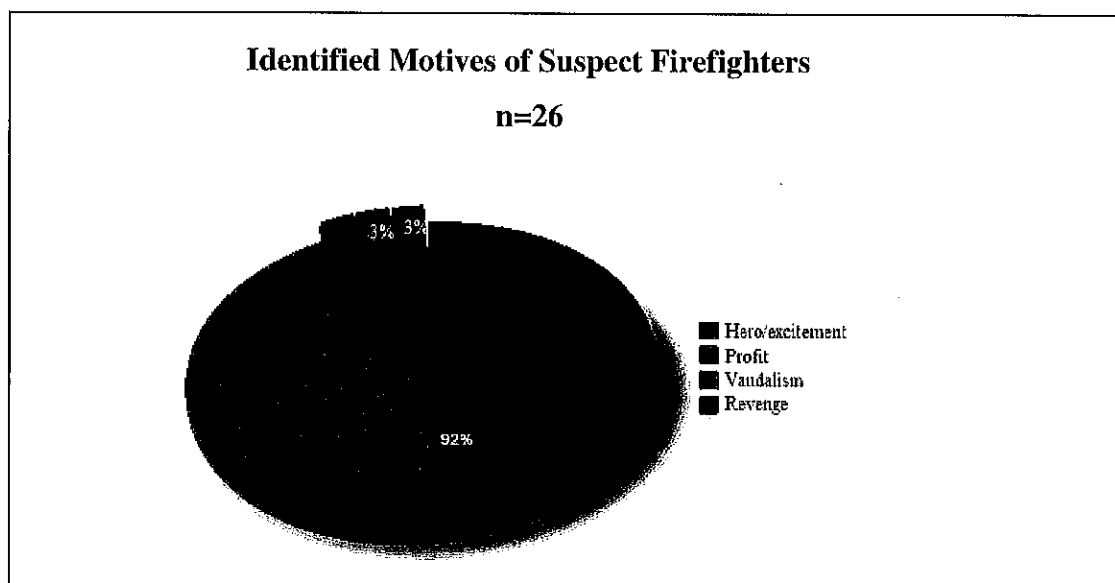


Figure 5.

Motives identified by Ohio Fire Marshal's Investigators.

Another question examined was identification of the objects burned. In several cases there were multiple objects set ablaze, so there were more objects identified than the number of cases submitted. The numbers are reflected in Figure 6.

Low value targets were the things most often set on fire by these persons. Things like brush/grass, unoccupied buildings, and outbuildings (barn, sheds, etc) were the most common things targeted.

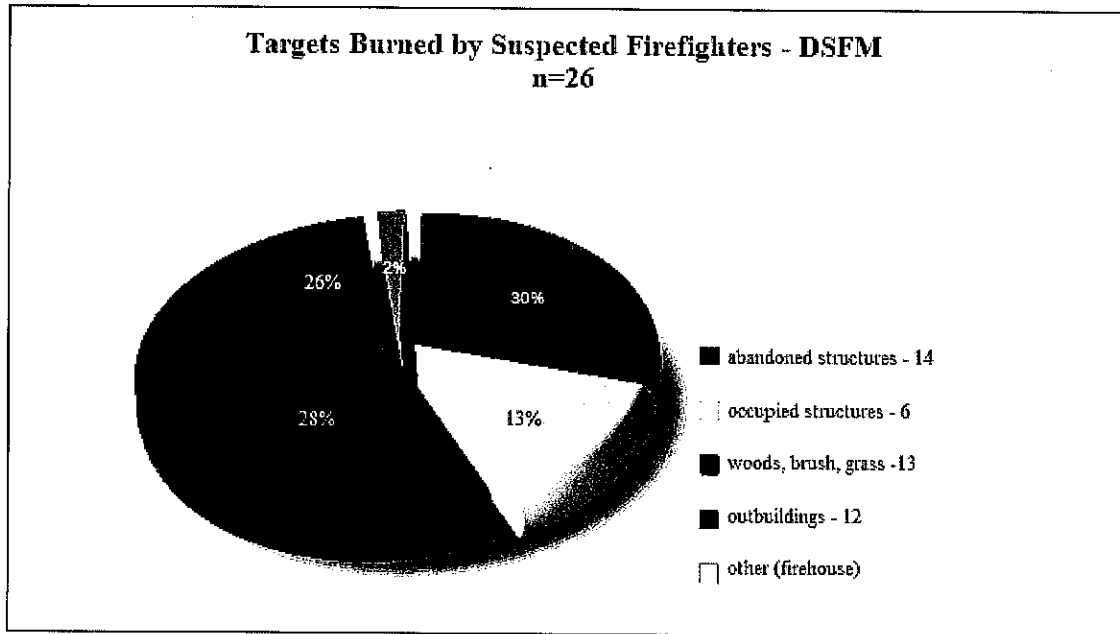


Figure 6.

The types of targets identified in firefighter related arson cases.

Along with the aforementioned factors examined, length of service or experience was also assessed. It was evident that if a firefighter was going to set fires, statistically, it would be between 1 and 5 years of experience by a high percentage as indicated in Figure 7.

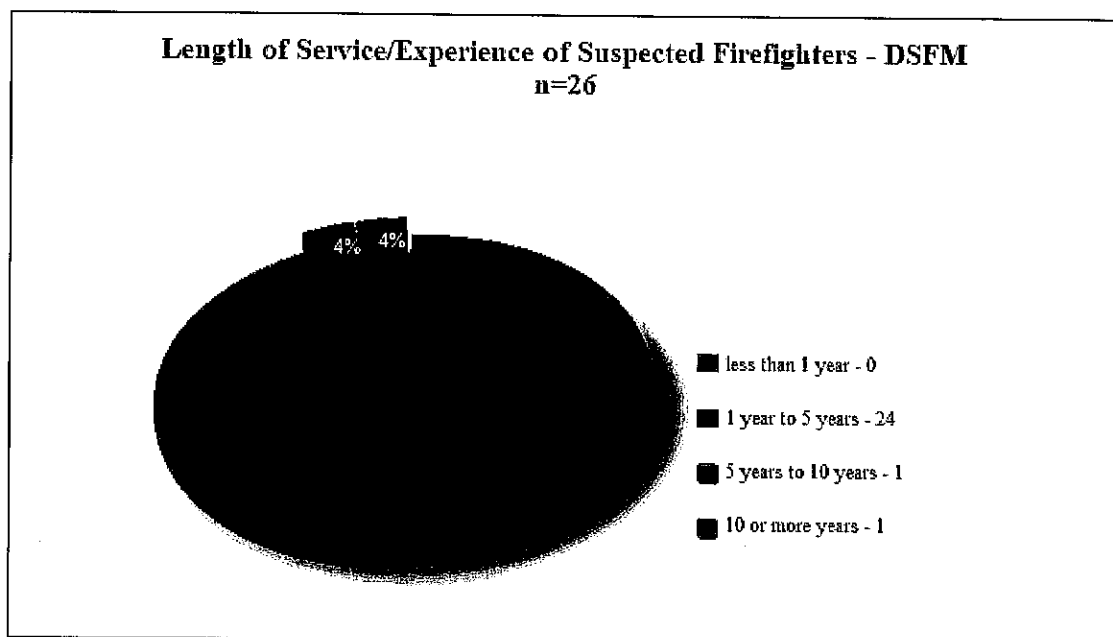


Figure 7.

Length of time and/or experience of suspect firefighters.

The above data is collectively measured against the applicable points in the profile developed by Huff in Appendix A, Table 3.

The pre-employment assessment practices of Ohio fire departments were evaluated by surveying a randomly selected sample of Ohio fire departments. The departments were classified by the respondents as career, volunteer, part time or paid per call, and other. There were 166 surveys returned from 360 sent.

Of the departments surveyed, there was a substantial difference based on the type of department (career, volunteer) in the number of agencies that used the traditional pre-employment assessment tools such as applications, interviews, and background checks. There were no volunteer agencies using psychiatric testing to assess their candidates. It is also noted that the volunteer departments are substantially higher in rate of incidence for firefighter arsonists. Figure 8 references the assessment tool usage as it relates to the type of department.

Note that 5% of the volunteer departments surveyed actually did nothing prior to appointment, and only required a member inquire about membership.

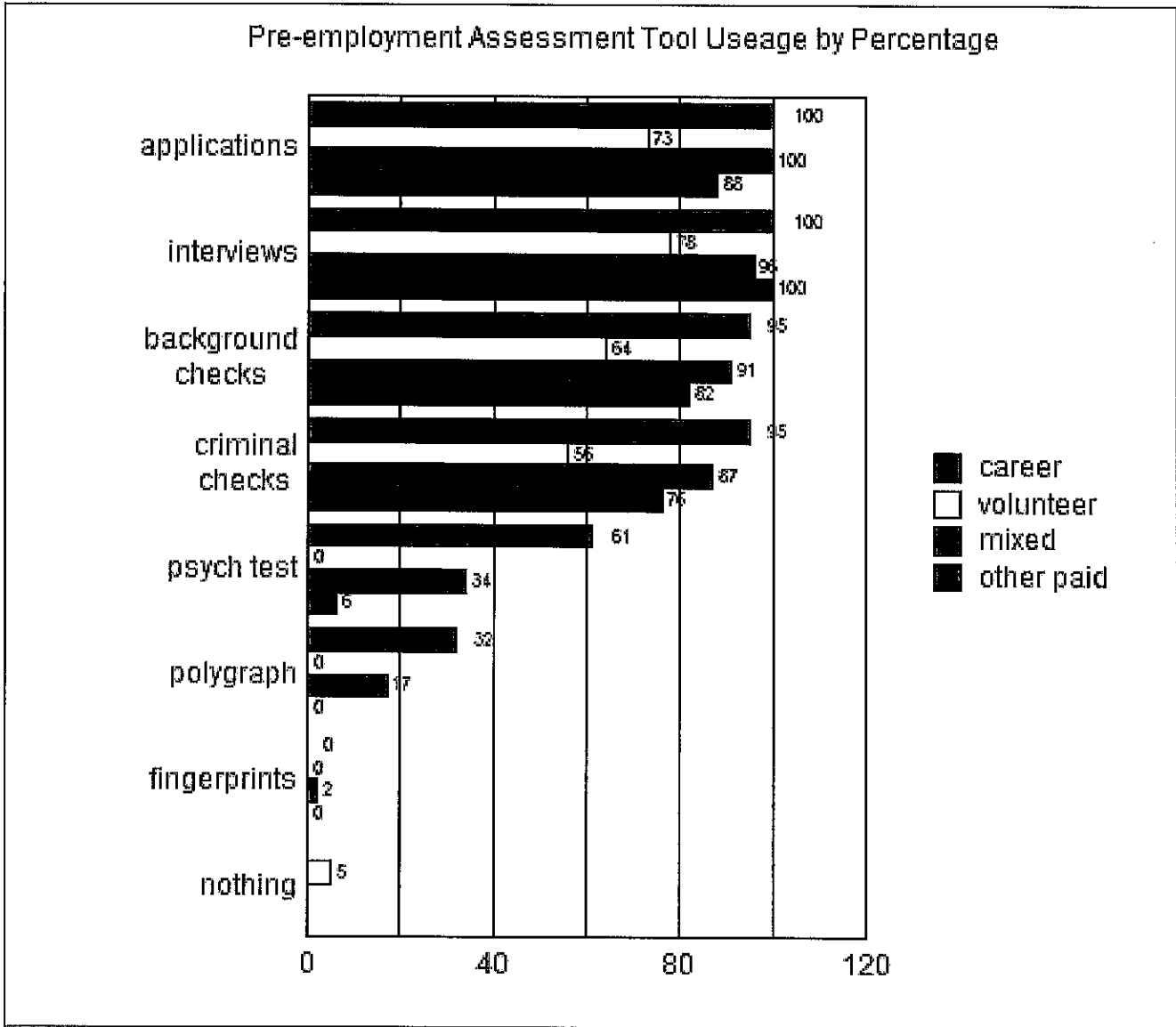


Figure 8.

Percentage of departments utilizing pre-employment assessment tools by type of department.

The following figures (Figure 9 through 12) demonstrate the disparity between the type of department and the tools used for pre-employment assessments of firefighter candidates.

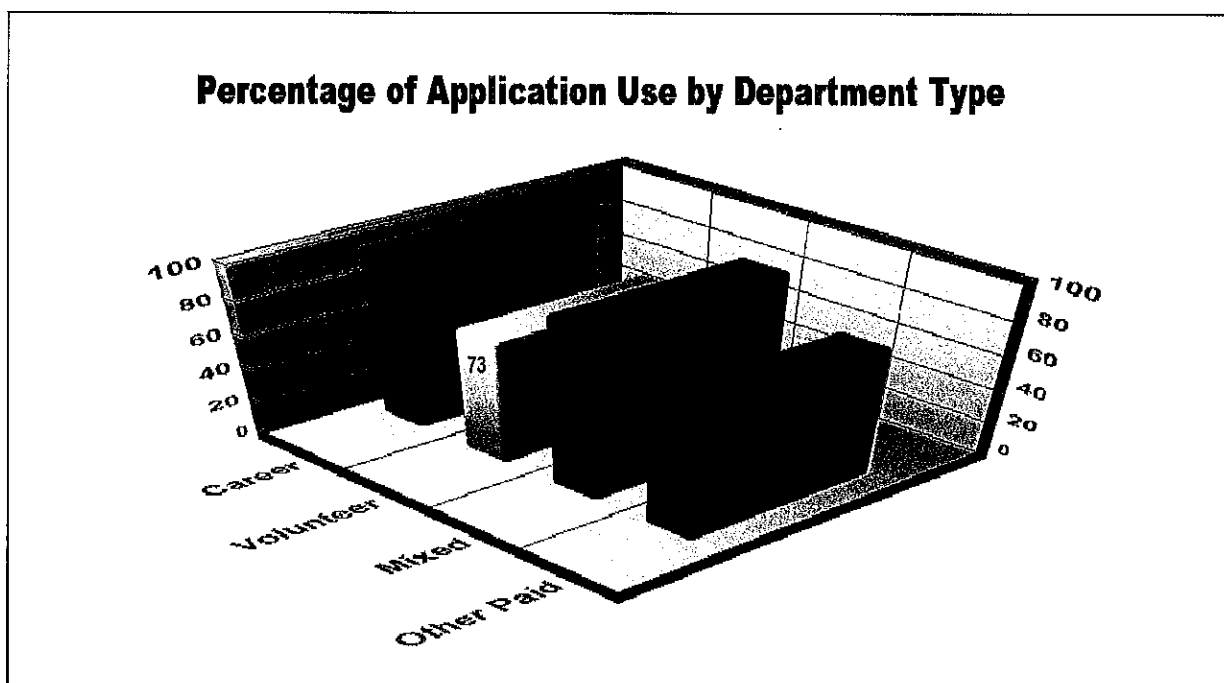


Figure 9.

The number of departments using application as a pre-employment assessment tool.

Although a simple application is probably one of the most common devices used for pre-employment evaluations, 27% of the volunteer and 22% of the “non-career” paid (denoted as other paid in Figure 9), do not utilize them.

Interviews were not used by 22% of the volunteer service, as indicated in Figure 10. The implementation of these two simple, common tools was a major part of the success of the program used to deal with the problem experienced in New Zealand (Aurbuckle, 2001).

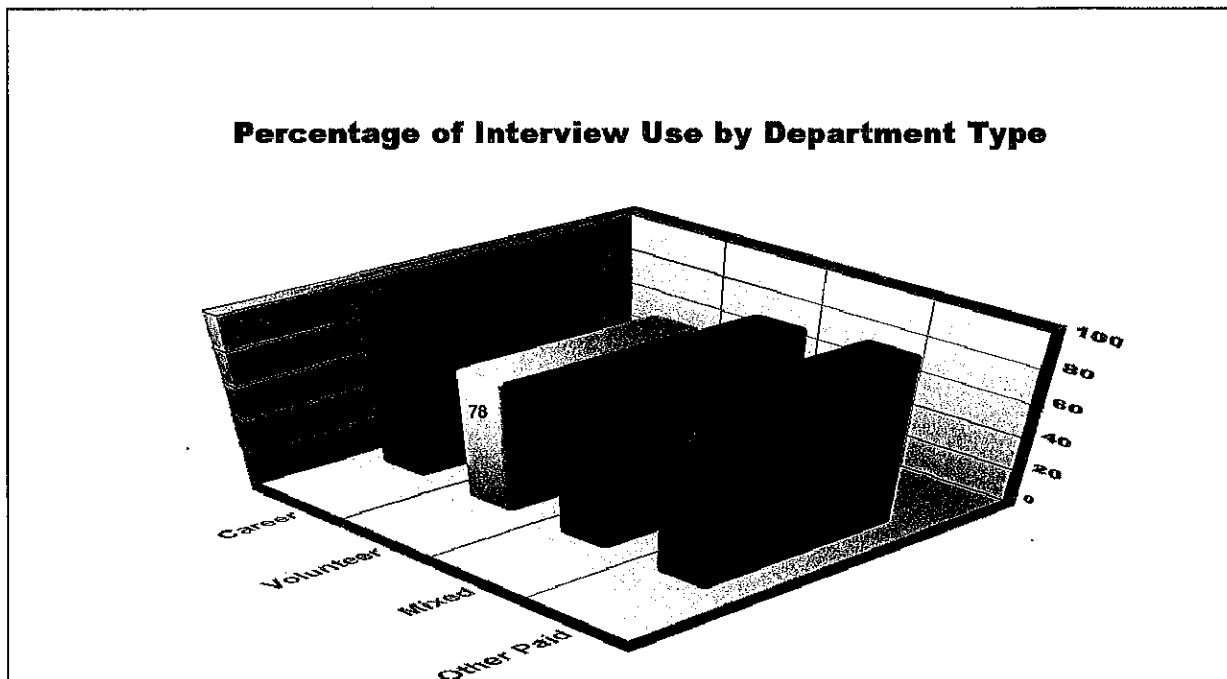


Figure 10.

The number of departments using interviews as a pre-employment assessment tool.

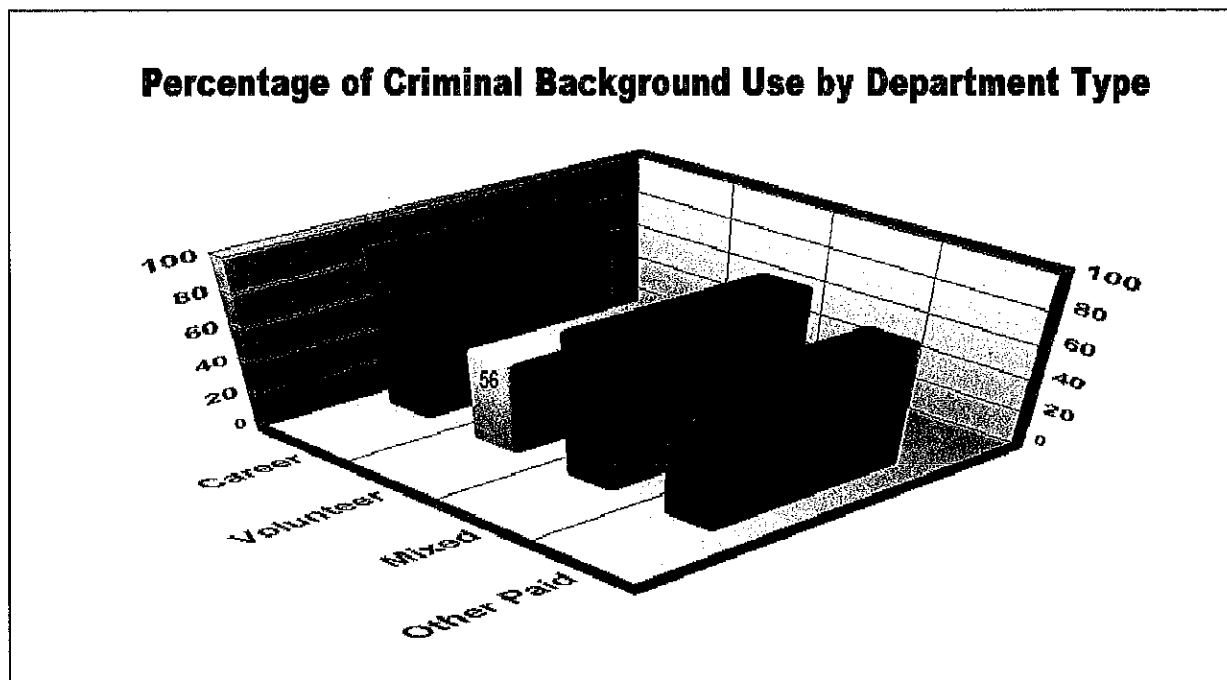


Figure 11.

The number of departments using criminal background checks as a pre-employment assessment tool.

There were a number of departments that chose to not do criminal background checks, as indicated in Figure 11. While 95% of the career departments utilize such checks, 44% of the volunteer departments do not. This would theoretically permit a known arsonist to enter a departments ranks unchallenged.

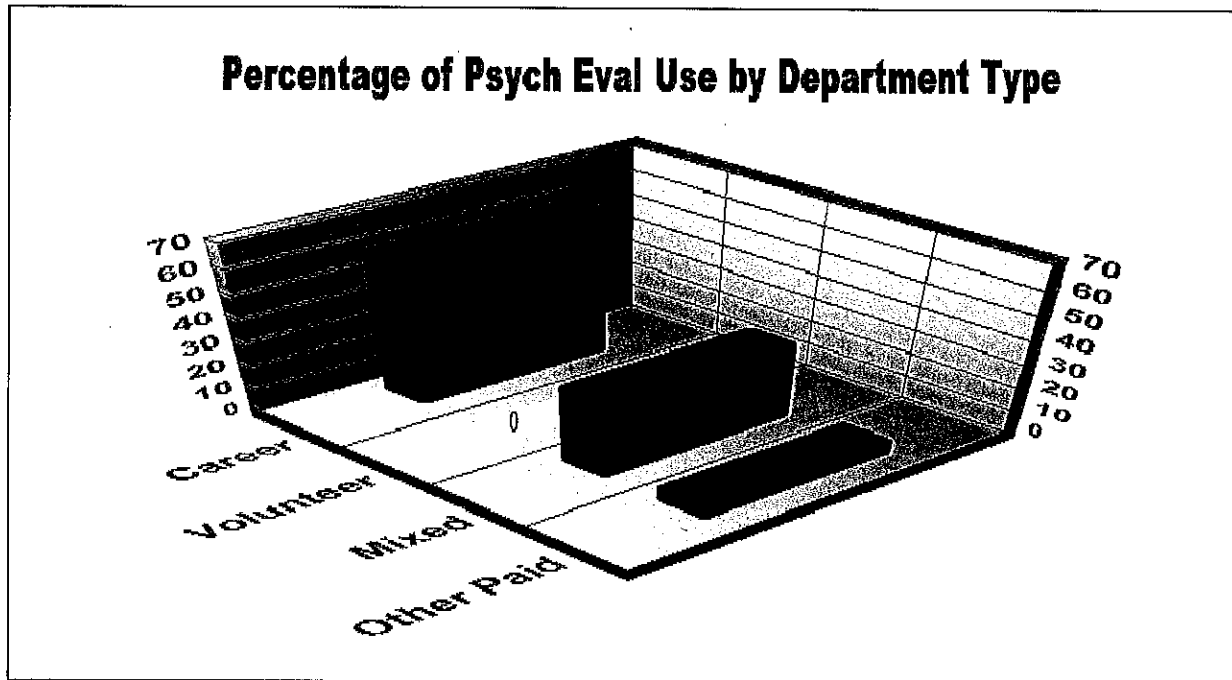


Figure 12.

The number of departments using psychiatric testing as a pre-employment assessment tool.

Psychological evaluations while controversial to some degree, 61% of the career departments employed such evaluations, and none of the volunteer agencies use them.

In order to better focus the statistics, the four types of departments were reclassified from four groups into two groups – career and volunteer/other. The data was then examined for any potential trends that may be reflected in the data received from the Ohio Fire Marshal's Office's Investigators.

An interesting point of data reported by the Ohio Investigators indicated that of the 26 cases they reported, 16 of the perpetrators had a criminal record at the time of commission. Of those 16 persons, 9 were charged with vandalism. It was reported in a direct conversation with one of these investigators that vandalism is sometimes charged in cases involving fire that do not meet the statutory requirements for monetary damages required to charge arson.

While this could be a significant issue for examination, there is no method available to track in what cases, if any, that this may have occurred.

There were 3 cases out of the 26 reported where fire department officials interfered to some degree with the investigation. While it was not a real problem for the investigation of the fires, it serves to confirm the assertion by the United States Fire Administration (USFA, 2003) that the potential exists for officials to ignore small inconsequential fires in order to protect their department and their members from the scrutiny and potential deleterious effect for all involved. As reported in that document, such issues can include a polarization of department members that support the accused, those that think the full force of the law should be brought to bear, and everyone in between.

Similar issues can arise within the community itself, resulting in a loss of the support, both moral and financial, needed for a department to be effective within the community.

One of the most striking findings from this research is that while there are several documents examining this issue, most utilize Huff (1994) as the primary source of documentation. With Huff's document resorting to anecdotal data as the prime data source, nothing has changed in the years since the publication of that document regarding data collection; no databases are available. Nor is there any indication of movement in that direction in the foreseeable future.

DISCUSSION

In 1994, FBI Agent Tim Huff conducted research into the issue of firefighter arson. During the course of that research, he discovered there is little information available on the topic. Eleven years later in 2005, the author of this document found that there has been essentially no change in that availability. Organized, accurate data remains largely nonexistent or otherwise unavailable.

It was clear by way of much of the documentation available that it was wholly possible to develop an accurate profile for civilian arsonists. The question remained, however whether any additional defining characteristics could be identified in the case of firefighter arsonists. Extrapolation of the data available on the civilian model, and consideration of certain criteria exclusive to cases that have involved firefighters, it's felt that an accurate profile for that specific group could be developed to use as a tool to identify these individuals prior to appointment, or as a tool used in the course of an investigation.

Information gathered from the literature indicates that none of the markers or indicators for latent fire setting tendencies were considered valid or accurate when assessed individually, but when clustered could be valuable when examining these cases from a psychological standpoint. Sociological issues such as a missing parent, intelligence, poor interpersonal skills, and difficult domestic relationships, can be very strong indicators to that penchant to fire setting as well, as indicated by Huff (2003) and Arbuckle (2001). With proper assessment these individuals can be profiled with a high probability of identification as having a predilection for criminally starting fires.

At this stage, the question arises if "lay persons" in the fire service are capable of accurately profiling these people as candidates, if they are given the necessary techniques to

conduct such examinations. Research data discovered and reviewed in the course of examining this topic (Kocsis, 2004 and Kocsis & Cooksey, 2002) would indicate that accurate profiling should be done by professional profilers to maintain the scientific credibility necessary to establish accuracy and therefore credibility.

The available data indicates that layman seem unable to eliminate bias from their assessments needed to accurately assess a person's potential for fire setting. Instruments are under development in Australia that would largely minimize if not eliminate the bias issues associated with lay evaluations and assessments, and at least theoretically enable assessments by persons other than professional profilers.

Conversation with an internationally recognized profiler Richard Kocsis, PhD, regarding data assembled in this research (personal communication, September 4, 2004) indicated that he agreed with the conclusion that accurate profiling of these individuals would be entirely possible given current techniques and the proper assessment criteria. He also stated that to develop such a method/technique it will involve considerable research and development of a proper assessment instrument. Assuming that a scientifically valid screening methodology is developed, he felt it will undoubtedly also require significant resources in its implementation (i.e. lengthy and specific interviews/evaluations by psychologists/psychiatrists).

Another conversation with Rebekah Doley, PhD, a Criminal Behavior Analyst and Consulting Psychologist in Australia (personal communication, September 11, 2004) who has spoken widely on this subject gave similar comments as Dr. Kocsis. However, she is currently working on two different assessment instruments that if proven accurate, would be valuable tools to combat this phenomenon. Unfortunately, they are not available for inclusion in this writing. She did however describe their purpose in some detail.

The Firefighter Selection and Screening Interview (FSSI) instrument was designed to detect several key areas of an individual's life and experiences that have been identified as characteristics of firefighter arsonists.

Another instrument under development by Dr. Doley is the Arson Screening and Prediction (ASP) assessment. This "test" covers a range of areas related to characteristics of the firefighter arsonist. It's composed of 40 questions and requires about 30 minutes to complete. Each question provides four responses, and the applicant is instructed to select the response that best describes their feelings about the question. The questionnaire can be administered, scored and interpreted by field level fire administrators which could prove extremely valuable for use in cash strapped departments.

While still untested and thus not yet validated, these instruments are tools that may prove to be valuable in dealing with this issue once available. In that vein, Dr. Doley cautions that neither instrument is meant to be the lone assessment devices to be used to exclude persons from the opportunity of serving as a firefighter, but tools to be implemented into existing hiring procedures to be used alongside applications and properly conducted pre-employment interviews.

Statistical data specific to this topic is essentially nonexistent both in Ohio and Nationally. The cases that were identified were largely discovered as a matter of luck. While there was a fair amount of information learned from the cases that were uncovered, much of the valuable sociological data is inaccessible and possibly lost.

Firefighter arson is a complex problem that must be understood and data validated in order to properly develop a valid and useful methodology to reduce the number of cases that

have occurred in recent years. The lack of tracking of these cases prohibits determination if this is a problem on the increase, or simply a result of better reporting.

Other states have developed procedures to deal with this issue. South Carolina has legislated (South Carolina Firefighters Employment and Registration Act, 2001) that all firefighters within that state register with the Fire Marshal's Office. If the firefighter separates service for any reason, the Fire Chief must report that separation to maintain an accurate database of firefighters. The Fire Chief must also certify in that registration that a background check has been done on the registrant. That person is ineligible for registration and appointment if the criminal background check discovers a conviction or "no contest" plea of a felony, arson, or an offense involving a controlled substance. That prohibition applies for a period of ten years, after which it is up to the fire chief or other employer to decide to appoint such person to perform firefighting duties. The law and associated forms are included in Appendix 3.

The Ohio Revised Code §737.221 provides for criminal background checks for firefighters. The law says that if a background check is done and a felony or arson charge is discovered, that person can not be appointed as a firefighter. There is nothing however, that requires a background check be done at all. The surveys sent to assess candidate assessment practices would indicate that many fire departments are unaware of the requirements spelled out in Ohio law. Of the respondents who reported that they did background checks, 32% indicated that it depended upon what the felony was, while four respondents said that it made no difference, they would still be appointed.

There are requisites allowing an individual to be appointed as a firefighter under the same law. It requires that the appointing authority establish rules, including rehabilitation standards that would permit the appointment of such persons.

The Ohio data indicated that firefighters will most often set fire after experiencing between one and five years in a department. Firefighting is a challenging job, and many firefighters do not experience the activity necessary to curb the drive to use the training they receive. This could be indicative of the need of a mentor program that would keep young, energetic, and anxious firefighters busy. This additional focus might also build a respect for their fellow firefighters that would overcome the need to set fire should a young firefighter have that preexisting propensity.

This author has a long history in the fire service, both paid and volunteer. An observation made over the years is that the fire service, while made up of many different agencies, it is primarily one common culture. Firefighters are a very tight knit group that often relies upon one another for their very survival. That reliance creates in many cases an unquestionable loyalty to the service and to each other. This loyalty leads them to tenaciously protect one another.

While trying to assemble the data to write this document, it appeared that the lack of data was as much by design as by chance. This conclusion is reached when looking at the experience of Agent Huff when he first wrote of this issue in 1994 and the period following. There have been other documents published that highly referenced Huff's work and experience. Despite the number of known cases since that initial research, many of the same obstacles Huff experienced were found as the research was conducted for this document 11 years later. There are still no data bases of even the most basic data from these cases, in spite of being recognized as problematic many years prior. This all but prohibits an accurate assessment.

While there can be some costs involved in this proactive posture, the costs of allowing this problem to continue unabated can be much greater. A recent court case out of the Third

District Court of Louisiana is exemplar of that very issue. The case is ongoing, so little information is available.

In *Trinity Universal Insurance Company v. Darryl James Lyons, Sr., et al*, the assertion is made that the fire department of the City of Westlake experienced one of their junior firefighters setting fires. In this particular fire, the assertion is made that the department suspected their recruit was setting fires previous to this, yet did nothing. The plaintiff's theory is that the department's had a duty to act on their suspicions, and report them to law enforcement. That inaction constituted a liability upon the city for all damages incurred.

While it is unknown if this assertion will meet with a finding against the city at appeal, the claim has been made, and may possibly be made in the future. The cost of defending a case such as this, even without merit could far exceed the costs associated with simply doing a thorough pre-employment assessment. Just as importantly, how does one calculate the costs as it may relate to the loss of public trust and support following a fire set by a firefighter?

The recommendations within this document as they apply to the Chillicothe Fire Department will generate little additional cost to the hiring process as it now stands, if any at all. It will simply involve a more structured approach to the assessment of candidates, and as such should be implemented quite easily.

RECOMMENDATIONS

Firefighter arson is a local problem for a fire department, but it necessitates a much broader intervention in order to effectively deal with the issue. This is an issue that can have a detrimental effect to the individual, the department, and the community as a whole. Few things can destroy the trust between all parties involved than the betrayal exhibited by the actions of these individuals.

There are three questions addressed in this research:

Is there a set of characteristics common among the firefighters setting fires?

Research previously conducted on this topic has developed what appear to be viable characteristics that can indicate a predilection for fire setting. The data collected in this research seems to validate that characteristic matrix.

Is there a point in their careers when they are more likely to begin setting fires?

Data collected in this research would indicate that the greatest risk is between 1 to 5 years of experience. It seems that in the period prior to the first year, recruits haven't developed the impatience with the need to prove themselves to their peers. It's in the following 4 years that have the highest risk.

How could these persons have been identified prior to their employment?

Assessment of the hiring practices of Ohio fire departments conducted by random sampling indicates that the candidate screening practices widely vary. Reviewing the characteristics matrix, it would appear that many of these cases could have been prevented by simply employing solid yet aggressive pre-employment investigation of all candidates.

In order to address the questions posed in this research, as well as establish a proactive stance in dealing with this issue, the following items are the recommendations arrived at through this research:

National/State

- Establish state and national databases to collect pertinent information regarding these crimes allowing future examination of the issue utilizing easily collected and accurate data. Huff's characteristic matrix would serve as an excellent model as a starting point to identify pertinent data points. This should include the sociological data that would otherwise be lost in case files. A system similar to the crime statistics databases maintained by the FBI would be a good starting model.
- Establish a system in Ohio registering firefighters similar to South Carolina's system. This would greatly assist officials in conducting background checks regarding an individual's experience and conduct with other departments.
- Require the use of this registration system in the pre-employment process for all firefighter positions regardless of type of department (career versus volunteer). This would provide not only confirmation of claims of previous experience, but it would also provide reasons for separation from service with other fire departments.
- Require a fire chief or designated fire official to provide accurate and factual information while legislatively providing immunity from any legal liability for providing that information to another fire chief or designee in the course of a pre-employment background check. This lack of immunity often results in little more

than a confirmation of employment from fire officials with the candidate's previous department(s), due to the official's fear of legal reprisal.

- Require criminal background checks to be done in all cases, and to be conducted by the Ohio Bureau of Criminal Identification and Investigation. This would enable an accurate and complete examination of an individual's record without compromising confidentiality. The costs for this background check would ideally be free, at least to the volunteer sector, as this was in almost every case, the reason for not conducting background examinations.
- Encourage some type of psychological examination to look for potential fire setting behaviors and/or impulse control disorders.
- Aggressively examine and test the assessment instruments being developed by Dr. Elizabeth Doley for validity. If found to be valid, rapid implementation of these instruments into the hiring process for all Ohio firefighters, regardless of pay status.
- Require the enforcement of the exclusion/termination requirements for firefighters that commit felonies in accordance with current Ohio law. Any firefighter found guilty of any degree of arson, or any crime involving fire should receive a lifetime ban from the fire service upon conviction. This ban should also be part of any plea agreement sentence when there is a plea reduction.
- Develop training for implementation of intradepartmental mentorship programs for new recruits/employees. Aggressively pursue the supervised development of recruits, providing guidance and making them feel accepted as part of the group.

This could reduce the need to demonstrate their firefighting skills and setting fires to do so.

- Add time to basic recruit classes for instruction regarding firefighter arson and the consequences of the act. Involve the Ohio Attorney General's Office with development of this portion of recruit training. Discuss the potential jail terms for firefighters committing crimes while in a position of public trust whether on duty or not.

Local:

- Examine the City of Chillicothe's employment application for any areas that can be developed or better defined to more effectively assess applicants, and gather necessary data to perform a more thorough general background check. Become better acquainted with the candidate's lives before they are offered a position.
- Develop a structured interview format that will encourage openness on the part of the applicant. Use open ended questions designed to elicit in depth answers to things like their past life experiences, job history, and similar issues.
- Utilize the Ohio Bureau of Criminal Identification and Investigation for all criminal background checks. This allows Federal databases to be checked. They are unavailable to non-law enforcement agencies as a matter of policy. This allows that criteria to be met while still permitting fire department access to pertinent information.
- Further define with professionals, the current psychological test to better detect those characteristics consistent with fire setting behavior and or impulse control

disorders. Better focus the assessment to identify the characteristic matrix identified by Huff and reinforced by this research.

- Follow up with the Doley instruments currently under development that would allow more affordable yet accurate candidate psycho-social assessments by fire department officers.
- Develop a mentorship program to allow the proper development of firefighters employed by the Chillicothe Fire Department. This ensures that recruits are developing their skills in a timely fashion while encouraging melding into the fire department culture.

The leadership of any fire department bears the responsibility of providing for public safety in its area of responsibility. The proposals proffered in this assessment are with that very goal in mind. A department can ill afford an individual that will willingly set fires when appointed to a position of public trust such as firefighter. The price of lost trust and support of the community when they are struck by these acts is far too great when more can be done to minimize these acts.

While available data indicates that the volunteer ranks are at greater risk for a firefighter arsonist, career departments are by no means exempt. Firefighter arson is certainly an issue of local significance, but an issue of national importance. Unfortunately, more tools are needed than are currently available to deal with this issue on the local level alone. Legitimate national and state level assessment and action is needed to provide local authorities the tools needed to effectively intervene with the entry of at risk persons into the fire service.

Implementing the recommendation in this document will not only better focus the hiring procedures of the Chillicothe Fire Department to further reduce the risk of a CFD firefighter

setting fires, but it also gives some degree of ownership with the active participation of firefighters and officers in the development of new recruits. On some level, every department fears the employment of an individual like John Orr as discussed by Wambaugh (2002).

Finally, this issue seems to be largely ignored by the fire service on a national level. This assumption is reinforced by the nearly absolute absence of pertinent data during this and similar research attempts. This research has demonstrated that outside of anecdotal data, there are no sources to assess the true depth of the problem. Development of data sources is the first step to realistically dealing with this issue in the long term.

Further examination of this phenomenon needs to be done. To ignore the issue does a great disservice to the public that trusts the fire service to do everything necessary to provide for their protection.

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APPENDIX 1 – FIREFIGHTER ARSONIST PROFILES

Table 1. *Identified common characteristics of firefighter arsonists*

<i>International Firefighter Arsonist Profile</i>	<i>New Zealand Firefighter Arsonist Profile (Arbuckle)</i>
Male	Male
Young (18-25)	Young (17-28)
Recent recruits	Recent recruits or transfers
Enthusiastic members	Regarded as extremely keen or committed
Few calls or declining call volume	Low or declining run volume
Receives pay for callouts	No financial incentive
Sets vegetation or nuisance fires	Primarily sets vegetation or rubbish fires
Lone offenders; rarely groups	Primarily lone offender; occasionally multiple offenders
Receive attention or status for attending fires	Frequently attends calls as a member; gains sense of excitement and public appreciation
Poor work history; domestic relationships	Predominately unemployed or in low skill occupation with unstable domestic history
Not screened prior to service entry	Little formal screening
Prior criminal convictions	Frequently had criminal convictions (theft, fraud, robbery)

Table 2. *Identified common characteristics of firefighter arsonists*

<i>Identified by SCFC</i>	<i>Identified by FBI's BAU</i>
White male	White male
Young (17-26)	Young (17-25)
Poor relationship with father; overprotective mother	Dysfunctional; one parent left home before 17. Cold, distant, hostile or aggressive relationship with natural father
If married, poor marital adjustment	Poor marital adjustment; if single, still living with parents
Lacking in social and interpersonal skills	Lack of stable interpersonal relationships
Poor occupational adjustment; menial low paying job	Poor occupational adjustment; laborer, skilled laborer, clerical jobs
Fascinated with fire service	Interested in the fire service in the context that it provides an arena for excitement, not for public service
Facing unusual stress (family, financial, or legal problems)	Alcoholism, childhood hyperactivity, homosexuality, depression, borderline personality disorder, and suicidal tendencies
Average to above-average intelligence; poor to fair academic performance	Mixed findings on intelligence, but arsonists have been found to have average to higher intelligence; poor academic performance

Table 3. *Identified common characteristics of firefighter arsonists*

<i>Identified by FBI's BAU</i>	<i>Ohio data</i>
White male	96%
Young (17-25)	96% (15 to 30)
Dysfunctional; one parent left home before 17. Cold, distant, hostile or aggressive relationship with natural father	data unavailable
Poor marital adjustment; if single, still living with parents	92% were single
Lack of stable interpersonal relationships	data unavailable
Poor occupational adjustment; laborer, skilled laborer, clerical jobs	data unavailable
Interested in the fire service in the context that it provides an arena for excitement, not for public service	data unavailable
Alcoholism, childhood hyperactivity, homosexuality, depression, borderline personality disorder, and suicidal tendencies	62% involved alcohol or drugs
Mixed findings on intelligence, but arsonists have been found to have average to higher intelligence; poor academic performance	data unavailable

APPENDIX 2 – SURVEY INSTRUMENTS**Table 4. *Ohio County Prosecutors***

Answers to the following questions will be utilized to assess and examine a potential issue with firefighters involved in setting fires. Your participation is important to an accurate assessment of the depth and scope of the issue. The returned data will be treated as confidential.

Thank you for participating.

- 1) Has your Office prosecuted any incendiary fires where the accused was a firefighter?
 - a) yes
 - b) no

- 2) If the answer to Question 1 was “Yes”, how many were there? _____

- 3) Of the number given in answer to Question 2, how many were:
 - _____ paid/career firefighter
 - _____ volunteer firefighter
 - _____ paid per call/part time firefighter
 - _____ cadet/trainee firefighter

- 4) Is your Office aware of any incendiary fires in your area, but outside your jurisdiction where a firefighter was a suspect?
 - a) yes
 - b) no

- 5) What were the ages of the firefighters involved?
 - a) Under 15
 - b) 15 to 20
 - c) 21 to 30
 - d) 31 to 40
 - e) over 40

- 6) What was the level of experience of these firefighters?
- a) less than 1 year
 - b) more than 1 year, but less than 5
 - c) more than 5 years, but less than 10
 - d) 10 or more
- 7) Did your Office pursue prosecution in all firefighter involved cases?
- a) yes
 - b) no
- 8) Has your Office had any fires where a firefighter was charged, but not prosecuted?
- a) yes
 - b) no
- 9) If the answer to Question 8 was "Yes", how many were there? _____
- 10) If the answer to Question 8 was "Yes", was resignation from the department offered in lieu of prosecution?
- a) yes
 - b) no
- 11) If the answer to Question 8 was Yes, why was he/she not prosecuted?
- a) insufficient evidence
 - b) professional courtesy
 - c) diversion program
 - d) prosecutorial discretion
 - e) other _____
- 12) What were the "targets" burned?
- a) abandoned structures
 - b) occupied structures
 - c) woods, grass, or brush
 - d) other (please specify) _____
-

Table 5. Ohio Fire Marshal's Office Investigators

This survey is designed to gather and identify potentially common characteristics among firefighter arsonists. Your participation is very important to an accurate collection of data that may be used to develop a mechanism useful in the pre-employment identification of individuals with a predilection to this behavior. Thank you for participating.

- 1) Have you investigated, or been involved with any cases of fire setting where the person setting the fire was a firefighter?
- a) Yes How many? _____
- b) No
- 2) Of the number listed in Question 1, how many were:

	Case 1	Case 2	Case 3	Case 4	Case 5
paid/career firefighter					
volunteer firefighter					
paid per call/part time firefighter					
cadet/trainee firefighter					

- 3) What was the age of the firefighter?

	Case 1	Case 2	Case 3	Case 4	Case 5
under 15					
15 to 20					
21 to 30					
31 to 40					
41 or over					

4) What was the motive identified?

	Case 1	Case 2	Case 3	Case 4	Case 5
excitement					
profit					
vandalism					
hero					
revenge					
Other (please specify)					

5) What was the gender of the firefighter?

	Case 1	Case 2	Case 3	Case 4	Case 5
male					
female					

6) What was the length of experience of the firefighter?

	Case 1	Case 2	Case 3	Case 4	Case 5
less than 1 year					
more than 1 year, but less than 5					
more than 5 years, but less than 10					
10 or more years					

7) What was burned in each case?

	Case 1	Case 2	Case 3	Case 4	Case 5
abandoned structures					
occupied structures					
woods, grass or brush					
outbuildings (barns, sheds, etc.)					

8) Did the firefighter's department cooperate fully in the investigation?

	Case 1	Case 2	Case 3	Case 4	Case 5
yes					
no					

9) Was there a prior criminal history?

	Case 1	Case 2	Case 3	Case 4	Case 5
yes					
no					

10) If the answer to Question 9 was yes, what were the crimes in that history?

Case 1: _____

Case 2: _____

Case 3: _____

Case 4: _____

Case 5: _____

11) To the best of your knowledge, in each case was the fire department aware of the record?

	Case 1	Case 2	Case 3	Case 4	Case 5
yes					
no					

12) To the best of your knowledge, were drugs or alcohol a factor in any of your cases?

	Case 1	Case 2	Case 3	Case 4	Case 5
yes					
no					

13) If known, what was the marital status of the suspect in each case?

	Case 1	Case 2	Case 3	Case 4	Case 5
married					
single					
separated					
divorced					
Other (please specify)					

14) Did the firefighter have a history of difficult interpersonal relationships?

	Case 1	Case 2	Case 3	Case 4	Case 5
yes					
no					
unknown					

15) If you should have any comments regarding other details you may feel pertinent, please list below:

Table 6. *Ohio Fire Department Survey Instrument*

Information from your department is needed to compile data regarding screening practices of firefighter candidates by Ohio fire departments. Your participation is important to an accurate assessment of those practices. Thank you for participating.

1. My department is structured as:
 - a. paid
 - b. volunteer
 - c. paid on call
 - d. part time
 - e. mixed

2. During the hiring process, we conduct the following assessments:
 - a. detailed written application
 - b. interviews
 - c. background checks
 - d. criminal record checks
 - e. psychological evaluation
 - f. other (please specify) _____

3. Are the applicants questioned on the application regarding past arrests and/or convictions?
 - a. yes
 - b. no
 - c. applications are not used

4. If interviews are utilized, is it a structured interview with the same questions asked of each candidate?
 - a. yes
 - b. no
 - c. no interview is conducted

5. Is the interview conducted by:
 - a. the Chief of the department
 - b. a group of officers
 - c. a group of firefighters
 - d. a mixed group of officers and firefighters
 - e. other (please specify) _____
6. Who conducts the background check?
 - a. Fire Chief
 - b. FD Staff Officer
 - c. Police Department
 - d. Private agency
 - e. other (please specify) _____
7. If the candidate has a history with another department, is that department routinely contacted regarding their experience with the candidate?
 - a. yes
 - b. no
 - c. only occasionally
8. Would a felony criminal history automatically exclude the candidate from consideration for a position with your department?
 - a. yes
 - b. no
 - c. it would depend on the charges
9. If done, how is the psychological assessment conducted?
 - a. testing administered by FD officials, then sent to mental health professional for assessing and evaluation.
 - b. company hired to administer, assessing, and evaluation.
 - c. local mental health professional or agency interviews candidate, then provides evaluation to FD or government officials
 - d. other (please specify) _____

10. Under what conditions would the psychological assessment be cause for elimination for consideration for a position (please be specific)? _____

11. Would a history of alcohol or drug abuse be cause for automatic elimination for consideration for a position?

- a. yes
- b. no

APPENDIX 3 – SOUTH CAROLINA FIREFIGHTER REGISTRATION LAW/FORMS

SOUTH CAROLINA CODE OF LAWS

CHAPTER 80.

EMPLOYMENT AND REGISTRATION OF FIREFIGHTERS

SECTION 40-80-10. Short title, definitions.

(A) This chapter may be cited as the “South Carolina Firefighters Employment and Registration Act”.

(B) For purposes of this chapter:

(1) “Employer” means any fire department or other entity which puts an individual or employee in service as a firefighter or assigns any person to work or to official duties as a firefighter whether or not the firefighter receives financial compensation.

(2) “Employment date” means the date the fire chief certifies the firefighter is trained and prepared to perform firefighting duties.

(3) “Fire chief” means the highest ranking officer or official in charge of a fire department, whether or not called by some other title.

(4) “Fire department” means any organization providing rescue, fire suppression, and related activities including any public or government sponsored organizations engaged in rescue, fire suppression, and related activities.

(5) “Firefighter” means any person, male or female, paid or unpaid, who engages in rescue, fire suppression, or related activities under the supervision of a fire chief or fire department.

(6) "Firefighting duties" means duties relating to rescue, fire suppression, public safety, and related activities as assigned by a fire chief.

SECTION 40-80-20. Criminal records check required for employment.

(A)(1) Prior to employment of any firefighter, paid or volunteer, the fire chief or other employer must ensure that each prospective firefighter undergoes a criminal records check conducted by a law enforcement agency.

(2) The cost of the criminal records check must not exceed eight dollars.

(3) A criminal records check is not required for a firefighter employed as of June 30, 2001, if the firefighter is employed with the same fire department that he was employed with on June 30, 2001. Upon separation from the fire department that he was employed with on June 30, 2001, a firefighter must comply with the provisions of Section 40-80-40.

(B)(1) After June 30, 2001, a person must not perform firefighting duties in South Carolina if the person has been convicted of, or pled guilty or nolo contendere to:

(a) a felony;

(b) arson or any other offense provided in Article 3, Chapter 11, Title 16; or

(c) an offense involving a controlled substance as provided for in Chapter 53, Title 44.

(2) The prohibition in item (1) of this subsection applies for a period of ten years after the conviction or plea of guilty or nolo contendere.

After the expiration of the ten-year period, it is within a fire chief's or other employer's discretion to determine whether or not to allow a person with a criminal record to perform firefighting duties.

SECTION 40-80-30. Registration, maintenance and availability of information.

(A) No later than sixty days after the start of his employment date as a paid or volunteer firefighter, each firefighter must be registered with the Office of the State Fire Marshal by his fire chief or other employer. The criminal background check required by Section 40-80-20 must be conducted before registration.

(B) The Office of the State Fire Marshal must maintain a file on each registered firefighter in this State, that includes all information required to be kept by this chapter, and must assign a firefighter identification number to each registered firefighter which corresponds with the firefighter's social security number.

(C) Upon request the information in the file of an individual firefighter may be released in its entirety to a potential employer as defined in this chapter and may be used as a basis for employment. The requesting department or employer must maintain this information in a confidential manner.

(D) Any registered firefighter may at any time request and obtain a copy of his or her file. The fee for a copy of a firefighter's file is five dollars payable to the Office of the State Fire Marshal.

SECTION 40-80-40. Background and registration requirements; federal employees excepted; firefighters serving more than one department; reinstatement.

(A) No person may be allowed to perform firefighting duties with a public fire department, organization, or employer of a county, municipality, special purpose district, or other political subdivision in this State on or after July 1, 2001, without first undergoing a

criminal background check as required by Section 40-80-20 and being recommended for registration pursuant to Section 40-80-50.

(B) A firefighter employed by the United States Government and working in the course and scope of his official duties as a federal employee is not required to be registered under this chapter.

(C) A firefighter who works for or serves more than one fire department must be registered by each department.

(D) A firefighter previously registered with the Office of the State Fire Marshal, but not actively engaged with a fire department or as a firefighter for a period of six months, must apply for registration and must submit a criminal records check as required by Section 40-80-20. Firefighters that are being reinstated to their last registered department within a period of not more than three years are exempted from the provisions contained in this section.

SECTION 40-80-50. Office of the State Fire Marshall; records and registration.

Upon recommendation of a fire chief or other employer, the Office of the State Fire Marshal must register each firefighter subject to the provisions of Sections 40-80-30 and 40-80-40. The Office of the State Fire Marshal must maintain as minimum information on each firefighter the complete name, the date of birth, the social security number, the South Carolina driver's license number, the employer, and the date of employment or membership. The Office of the State Fire Marshal must notify the chief of the employing fire department or other employer of the registration. This notification may be transmitted electronically or in written form. The fire chief must utilize forms as required and provided by the Office of the State Fire Marshal.

SECTION 40-80-60. Notification of separation or becoming inactive.

If a firefighter becomes separated from employment or membership or becomes inactive, the fire chief or other employer within sixty days must notify the Office of the State Fire Marshal of the firefighter's separation or inactive status. Notification of separation of a firefighter from employment must be on a form as provided by the Office of the State Fire Marshal.

SECTION 40-80-70. State of emergency exception.

Notwithstanding another provision of law, the provisions contained in this chapter do not apply to individuals engaged in firefighting duties during a declared state of emergency.

