

Managing Adaptive Behaviors

“Understanding and Dealing with Attention Deficit/Hyperactivity Disorder in the Fire Service”

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CERTIFICATION STATEMENT

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ABSTRACT

Attention Deficit Hyperactivity Disorder affects approximately 8 million adults in America. ADHD is a neurological condition that is characterized by impulsivity, distractibility and can present hyperactivity. It is a disability recognized under the Americans with Disabilities Act, therefore it requires appropriate attention.

Frequently, workers within the safety services such as firefighting and EMS workers demonstrate many of the classic ADHD features. The fast paced thrill and adrenaline rush that comes with the job tends to attract these individuals.

After decades of research involving ADHD and more than ten years where the research specifically involves firefighting, administrators are still not properly trained to handle ADHD employees.

The purpose of this research study is to take the initiative in understanding employees with ADHD. This will allow departments to take a proactive position on offering the best services for both employees and community members, helping to retain dedicated, experienced fire personnel. Recognizing that there are individuals affected by ADHD will allow administrators to manage employees with special needs. ADHD is recognized as a special need classified as OHI-Other Health Impaired by the American Psychiatric Association. Administrators could create purposeful professional development materials and practices. The information collected will allow for opportunities that ensure all individuals in the department fully meet their potential while meeting their individual learning styles. Addressing the variety of learning styles within the department will help to build a strong, confident and accomplished staff.

Through the vast amount of literature, online data and podcasts encountered throughout the research process, recommendations were made for effectively dealing with ADHD individuals in the fire service. Unfortunately, without being proactive and addressing the issue, departments may find themselves losing exceptional, dedicated and talented firefighters. “It is one of the most common problems in adults, leading to job failures, relationship breakups, loneliness and a tremendous sense of underachievement” (Amen, 2001, p.xv).

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INTRODUCTION

Statement of the Problem

The problem this research will address is the need to establish effective and significant professional development to substantially include all members of the fire department. Members afflicted with ADHD have difficulty focusing and keeping on task for lengthy periods of time. While the fast paced action required on the scene of an emergency is unproblematic for them and quite comfortable, the sustained attention needed to sit and watch videos is not beneficial. First and foremost, departments being knowledgeable and well educated about ADHD will provide a collaborative and highly effective staff.

The Union Township Fire Department has experienced first-hand involvement with individuals diagnosed with ADHD. These individuals are wonderful assets to the department. That being said, there are times when problems arise due to their ADHD. Failure to complete assigned tasks including hydrant and truck checks, fire inspections, maintaining and repairing fire apparatus and equipment, checking and replenishing squads, completing assigned training activities and other daily assignments. They require constant prompts and reminders to complete these tasks. This hampers the day to day operations of the department. It also adds additional work and responsibility load to others on the department. The inability to concentrate on these duties and finish the work can provide for dangerous situations.

Throughout the United States fire departments employ dedicated and gifted individuals committed to serving the members of the communities in which they are employed. Many of these departments include employees, whom, while extremely devoted to their work, find themselves easily distracted, impulsive, inattentive and overactive. Often these employees are

able to adapt and channel their energy in the appropriate manner, allowing them to complete the sometimes challenging and demanding jobs their career entails. They are able to react properly in emergency situations. They can handle what countless people would run away from. Other times they have difficulty completing simple individual tasks or assignments. This, in turn, can lead to them being labeled as whiners, lazy or stupid. Additional employees may find themselves unable to sit still or concentrate, being tagged as hyper or crazy. These employees may all suffer from Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD).

Approximately 8 million American adults suffer from ADD/ADHD. The inability to stay focused, to complete tasks at hand, disorganization and being easily distracted can all hamper or disrupt the day to day operations of a firefighter. This study will illustrate through the collection of surveys and research data, that there are in fact a significantly high number of firefighters with ADD/ADHD. With the guidance of existing ratings scales, a survey was developed and administered anonymously at five local area fire departments throughout southwestern Ohio.

During the last decade much research has been conducted concerning ADD/ADHD. Much of that research has been conducted around ADD/ADHD in the workforce. What was once thought of as a “problem” is now recognized as a disability that can be treated when properly identified and diagnosed. To classify all people living with ADD/ADHD in one category is inaccurate. There are several different classifications of this disability. A variety of characteristics can be acknowledged concerning this medical condition. The spectrum ranges from those with hyperactivity to those with depression and extreme exhaustion.

Purpose of the Study

The purpose of this research study is to recognize the diversity of learners within the fire service, in order to create purposeful professional development materials and practices. This data will allow for opportunities that ensure all individuals in the department to fully meet their potential while meeting their individual learning styles. Addressing the variety of learning styles within the department will help to build a strong, confident, accomplished and highly achieving staff.

The Union Township Firefighters that struggle with ADHD at the workplace would benefit from distinguishing the needs of all employees.

In safety services, it is essential to understand the men and women on the fire department. Lives are entrusted to fellow firefighters on a daily basis. Identifying and accepting that there are individuals on departments with ADHD is a positive step. It will open the door to make the proper adjustments in training, guidance and support. This will allow individuals with ADHD to successfully serve the communities in which they are employed, as well as, the safety and protection of all personnel. Once the condition has been identified, individuals can find the most productive measures to compensate their weaknesses and take advantage of their strengths.

Research Questions

The following questions will be answered by this historical, descriptive research paper:

1. What is Adult Attention Deficit/Hyperactivity Disorder?

2. What negative effects does Attention Deficit/Hyperactivity Disorder (ADHD) have in the day to day operations of the fire service?
3. How can personnel with Attention Deficit/Hyperactivity Disorder be utilized in a positive/productive manner throughout a fire department?
4. How can a fire department amend their current training and professional development procedures to certify that we are making the best of our time and employees by training to their styles and needs?

BACKGROUND AND SIGNIFICANCE

The potential impact this study could have on the Union Township Fire Department is constructive and optimistic. Taking a positive and proactive approach to exploring all possible means to provide the best services for the community is indispensable. By examining the results of this research, UTFD would be able to take steps to promote an encouraging and affirmative working environment conducive to the needs of all employees. By discovering personnel with ADHD the department will be able to adjust and adapt training and professional development to expand and enhance knowledge. UTFD will be able to focus on making ADHD work as a gift and not a disability. This will benefit firefighters, administration and the community members they serve.

Firefighting is a very vigorous job. Days can be filled with stress and anxiety. The physical and active requirements of the job are often an attraction for individuals who are less likely to sit behind a desk. Even the most veteran firefighters receive a rush of excitement with every fire call.

It is very important to understand and recognize that identifying a person with ADHD is a multi-step process. At this time, there is no single test that can be used to diagnose ADHD. It is a medical diagnosis that currently involves the data collected from rating scales, observations and interviews with medical or psychological personnel. Often, other medical conditions can present the same symptoms as ADHD. Therefore, it is necessary to seek appropriate medical attention.

Research and understanding of ADD/ADHD has drastically increased over the years. A quick google search on “ADHD in Adults” yields over 13 million results. Results like that show this is a real concern with genuine interest, investigation and examination. We know more about this disability now than we did fifty, twenty, ten or even two years ago. There are many different

ways to treat this condition to ensure a successful and productive life for those affected.

Education of ADHD will help provide understanding and acceptance. Knowledge and consideration will aid in the efficiency and attitude of employees. Happier, healthier, positive employees create a better working environment and thus increased productivity.

LITERATURE REVIEW

Searching for information, books and research regarding Attention-Deficit/Hyperactivity Disorder (ADHD) has significantly changed over the years. It is relevant to note that ADHD is the correct term used today for what was once referred to as ADD as well as other names. A topic that once contained minimal information now contains an abundance of material pertaining to the subject. There are a wealth of books, internet resources and research documents at the disposal of those interested.

It is important to use a consistent definition while conducting research of this nature to ensure accuracy. Information regarding ADHD goes back over one hundred years. Of course, with the changes in medical breakthroughs and technology much more is known today than in the early days of ADHD.

In the early days of this condition, children were labeled as a problem child, without morals, or scruples. Often they were thought of as bad seeds in need of severe discipline. They were considered lazy or stupid. Schools and parents frequently did not know how to handle children with ADHD. The children were not given the suitable care they needed and the teachers and parents did not have resources accessible to guide or assist them.

In 1902, Dr. G. F. Still, a turn-of-the-century researcher worked in a psychiatric hospital. He worked with hyperactive, impulsive and inattentive patients. Dr. Still believed that an organic problem and not a behavioral problem, was responsible for the symptoms of his patients. He labeled this, "A Defect in Moral Control". (Kelly and Ramundo, 2006, p.14) The American Psychiatric Association (APA) first responded to research regarding ADD/ADHD in its diagnostic manual (DSM-II) in 1968. This included a new label: Hyperkinetic Disorder of

Childhood. (Kelly and Ramundo, 2006, p.15) Throughout the years, the labels have changed and we now have the current label, ADHD.

As the years progress and our education and understanding of ADHD grows and changes, we begin to distinguish and explain more about this condition. A lot has changed over the years. Today, with the help of therapy and/or the proper medications, individuals with ADHD can lead a normal, healthy, productive life. A plethora of resources from books to lectures, workshops and classes are all available for family members, teachers and even for diagnosed individuals.

Some people might argue whether ADHD is an actual medical condition. Many might consider that it is simply an excuse, a way for people to get out of doing things. “An ADD diagnosis is an explanation, NOT an excuse.” It is not the fault of the individual. There is nothing a person can do to protect them from this condition. It is not something you catch; it is part of who you are. Individuals with ADHD must learn to live with it and make the most of the diagnosis. They must view it as a special ability, something they have that makes them unique. They need to direct it to make constructive decisions that lead them to their full potential.

(Nadeau, Ph.D, 1997, p. 10)

There has been much confusion and controversy surrounding the terms used to describe and define ADHD. Nadeau (1997), explains “ADD is a genuine neurobiological disorder, one that, if untreated can cause enormous difficulty and suffering in the lives of those who have it.” Identifying ADHD will help to eliminate some of the suffering and frustration in some individuals. (p. 9)

The American Psychiatric Association's Diagnostic and Statistical Manual-IV, Text Revision (DSM-IV-TR) is used by many health care professionals when suspecting and diagnosing ADHD. Using this diagnostic standard will help to guarantee that people are

appropriately diagnosed and treated for ADHD. Using a constant and consistent assessment throughout the country will help determine a standard for identification and treatment.

According to Amen (2001), Attention Deficit Disorder or Attention Deficit/Hyperactivity Disorder (ADD/ADHD) affects approximately 17 million people in the United States. It is believed that 8 million (1 in 20) adults have ADHD, yet 85% have never been formally diagnosed or treated. ADHD is a neurobiological condition described by inattention, impulsivity, and in some cases hyperactivity. ADD/ADHD is most commonly recognized as a disability that affects school age children. However, it is also one of the most prevalent problems involving adults. Unfortunately, it often goes undiagnosed or untreated in adults. The results of this disability in adults can lead to job failure, insecurity and a tremendous sense of underachievement (Amen, 2001).

Amen (2001) states that ADD/ADHD affects many areas of the brain, primarily the prefrontal cortex (the brain's controller of concentration, attention span, judgment, organization, planning, and impulse control), the anterior cingulate gyrus (the brain's gear shifter), the temporal lobes (where the brain houses memory and experience), the basal ganglia, (which produce the neurotransmitter dopamine that drives the prefrontal cortex), and the deep limbic system (the brain's mood control center) (p.87).

There are many misconceptions regarding ADD/ADHD. The largest belief is that all people afflicted with ADD/ADHD have the same characteristics and underlying symptoms. This is not the case. Amen (2001), reports there are six types of ADD/ADHD. “**Classic ADD** sufferers are inattentive, distractible, disorganized, hyperactive, restless, and impulsive. **Inattentive ADD** sufferers are inattentive, sluggish, slow moving, have low motivation, and are often described as space cadets, day dreamers, or couch potatoes. **Over Focused ADD** sufferers

have trouble shifting attention; frequently get stuck in loops of negative thoughts or behaviors; are obsessive; worry excessively; are inflexible; frequently demonstrate oppositional behaviors and are argumentative. **Temporal ADD** sufferers are inattentive, irritable; aggressive; have dark thoughts, mood instability, and are severely impulsive. **Limbic ADD** sufferers are inattentive, experience chronic low-grade depression, are negative, have low energy, and have frequent feelings of hopelessness and worthlessness. **Ring of Fire ADD** sufferers are inattentive, extremely distractible, angry, irritable, overly sensitive to the environment, hyperverbal, extremely oppositional, and experience cyclic moodiness” (Amen, 2001, p. xix-xx).

It is significantly beneficial to refer to The American Psychiatric Association's Diagnostic and Statistical Manual-IV, Text Revision (DSM-IV-TR) when looking for a precise definition for Attention-Deficit/ Hyperactivity Disorder. The DSM-IV contains specific criteria used to diagnose ADHD. “The essential feature of Attention-Deficit/ Hyperactivity Disorder is a persistent pattern of inattention and /or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development.” (American Psychiatric Association, 194, p. 78)

A useful resource to use as a reference when seeking information concerning ADHD is the American Psychiatric Association. The following excerpt was taken from the American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000:

I. Either A or B:

- A. Six or more of the following symptoms of inattention have been present for at least 6 months to a point that is inappropriate for developmental level:**

Inattention

1.
 1. Often does not give close attention to details or makes careless mistakes in schoolwork, work, or other activities.
 2. Often has trouble keeping attention on tasks or play activities.
 3. Often does not seem to listen when spoken to directly.
 4. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).
 5. Often has trouble organizing activities.
 6. Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework).
 7. Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools).
 8. Is often easily distracted.
 9. Is often forgetful in daily activities.

- B. Six or more of the following symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for developmental level:**

Hyperactivity

1.
 1. Often fidgets with hands or feet or squirms in seat when sitting still is expected.
 2. Often gets up from seat when remaining in seat is expected.
 3. Often excessively runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless).
 4. Often has trouble playing or doing leisure activities quietly.
 5. Is often "on the go" or often acts as if "driven by a motor".
 6. Often talks excessively.

1. Impulsivity

2.
 7. Often blurts out answers before questions have been finished.
 8. Often has trouble waiting one's turn.
 9. Often interrupts or intrudes on others (e.g., butts into conversations or games).

II. Some symptoms that cause impairment were present before age 7 years.

III. Some impairment from the symptoms is present in two or more settings (e.g. at school/work and at home).

IV. There must be clear evidence of clinically significant impairment in social, school, or work functioning.

V. The symptoms do not happen only during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder. The symptoms are not better accounted for by another mental disorder (e.g. Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

Based on these criteria, three types of ADHD are identified:

IA. ADHD, *Combined Type*: if both criteria IA and IB are met for the past 6 months

IB. ADHD, *Predominantly Inattentive Type*: if criterion IA is met but criterion IB is not met for the past six months

IC. ADHD, *Predominantly Hyperactive-Impulsive Type*: if Criterion IB is met but Criterion IA is not met for the past six months

Diagnosing ADHD is not a simple process. As can be seen from the above excerpt, it is a complicated and careful diagnosis. As noticed in the criteria used to identify ADHD, not all individuals demonstrate the same traits or symptoms. Refer to the six traits identified by Amen (2001) that are previously listed on pages 13-14 (p. xix-xx).

Once a diagnosis of ADHD has been made, it is necessary to begin treating the individual. Fortunately, those individuals diagnosed with ADHD currently have many resources at their disposal. The Americans with Disabilities Act (ADA), requires that children as well as adults be provided with services and accommodations to assist with their disabilities, including ADHD. Legal mandates have been passed to aid individuals with ADHD. With the passage of

these new mandates and laws, individuals with the disability are being encouraged to be diagnosed and receive care, whether in the form of medication or therapy.

Adults with ADHD face obstacles different than children. Growing up in a different time, they may remember the stereotypes and stigmatism surrounding ADHD in the past. They may find that it is less than easy to seek help. They may be concerned about allowing their employers to find out about their condition. Luckily for them, hundreds of books have been published dealing with (ADD) ADHD in the workforce. One excellent resource is a classic self-help book, *“You Mean I’m Not Lazy, Stupid or Crazy?!”* (Kelly and Ramundo, 2006) The title alone speaks volumes as to how individuals with ADHD feel. There is help out there for those wishing to accept it.

Many adults with ADHD tend to flock towards jobs or careers that are more active, hands on or risky. They need a career that they are interested in and that can sustain their focus and attention. “In the past, jobs more often involved active hands-on activity, which is more suitable for some people with ADD” (Nadeau, 1997, p.6-7).

Corman and Halloway (2006), introduces readers to real life stories of successful individuals living with ADHD. One of the individuals featured in the book is Karl V. Euler V, better known as Kipp. Kipp is a Boulder, Colorado police officer. Kipp discusses how he believes ADD helps him to be a good police officer and rescuer. “I’ll be driving down the street and you know, I’ve got the attention span of a gnat,” he says. “Something will catch my attention-something most people wouldn’t observe or hear. I’m constantly scanning. I think that’s a gift.” Kipp states that in school settings he found himself to be impulsive or distracted. However in emergency situations he feels he is laser sharp and focused. “The excitement of

dangerous, life-and-death decision making keeps Kipp's mind on target. His physical and mental speed, allow him to make critical decisions quickly-but not so quickly that he is jeopardizing people's lives. It's possible, he says, that because of ADD, he can size up the risk potential more quickly than others can" (Corman and Hallowell, 2006 p.40-41).

Police work and firefighting often carry the same adrenaline, excitement, stress and danger. Finding an avenue to channel the positive traits and characteristics of ADHD will be advantageous. "Identifying firefighters and EMT's who may have ADHD, and working with them to identify and eliminate negative behaviors, will take more time than simply writing them up for misbehavior or inconsistent work performance. But identification leads to education about treatments and behavior modification, and that, in turn, may lead to happier, healthier, more productive employees. It's the proverbial win-win situation." (Cohen and Bailer, 1999)

First and foremost it is essential that all people choose a career that suits them best. "Every one of us has interests and skills that are inherent. We don't learn them, and we don't outgrow them-we were born with them. Sometimes we have skills without the interest to back them up. There seems to be a societal belief that we must use all the skills with which we've been blessed. I can tell you, though: if you don't have an interest in something, you'll be miserable doing it, whether you're skilled or not" (Weiss, 1996, p156).

Finding the perfect job is easier for some than others. Adults with ADHD will flourish in the right career that focuses on their strengths and strengthens their weaknesses. Uncovering a career that you are passionate about is best for ADHD adults. "Passion energizes everyone, but it is especially important in keeping ADD adults committed and focused on their work. Their

interest in their jobs propels them through periods of lesser activity and excitement and keeps them motivated and concentrated” (Grossberg, 2005, p. 83).

Adults diagnosed with ADHD may find it beneficial to take steps to help them accomplish their goals within their workplace. Many would find that the book *Making ADD Work*, (Grossberg, 2005) provides much assistance in making ADHD work for you. While recognizing the disadvantages of ADHD, it also highlights the benefits. “This book breaks down the wealth of information from successful adults with ADD into three main areas.

- **Improving Your Work Skills:** How you can manage your life with ADD, get organized, stop procrastinating, boost your concentration, communicate effectively with co-workers and business contacts and capitalize on your strengths.
- **Finding the Right Career Path:** How you can find a happy, healthy workplace where your talents can shine.
- **Getting Help:** How you can improve your work life with help from coaches, professional organizations, career counselors and advocate for your rights and protection under the Americans with Disabilities Act (ADA).”

Weiss (1996) has created a list of 101 Tips for managing ADD. These quick tips are very useful. She also shares information on getting organized, communicating and interpersonal relationships on the job. Tips related specifically directed for Work are broken into several categories including “Work Tips, Tips for Outwardly Expressive ADD People, Tips for Inwardly Directed ADD People and Tips for Highly Structured Add People.” Included in these tips are “Give yourself plenty of room to roam, Let yourself be expressive, Make a trade with someone

to do the tasks that are difficult for you, Leave time to play, you need it.” There is also a section on Employment Tips. (pgs. 211-217)

When seeking to find information specific to fire fighters with ADHD, the task becomes a little more difficult. However, it is not absolute. “Lazy, Crazy or Stupid?” Is the title of an article that appeared in the August 1, 1999 Fire Chief Magazine. The article was written by Cohen and Bailer. The article states, “There's little data concerning ADHD in the fire/EMS community, which is particularly unfortunate since preliminary research indicates that this condition might be three times more common among firefighters than among the general populace.” Cohen wrote in 1997:

“In an initial study it's one thing to have these anecdotal reports; however, it's another thing to prove something scientifically. Quite simply, more research must be done. As part of a National Fire Academy Executive Fire Officer Applied Research Project, Cohen tried to determine if the rate of ADHD might be higher among fire service personnel than among the general population. As a control, 12 published ADHD works were reviewed by Cohen and a mean percentage was obtained. While not precise, Cohen found it was appropriate for beginning research.

One hundred and twenty-eight fire service personnel completed a 20-question survey based on the Hallowell and Ratey 20 Traits of Adult ADD. Both the responders and survey proctors were blinded to the subject matter; all were told this was an inventory of personality characteristics. Responders who identified 12 or more traits were considered to possibly meet the criteria for adhd given in the dsm-iv (“Diagnostic and Statistical Manual of Mental Disorders,” 4th ed., published by the American Psychiatric Association).

The literature revealed a mean of 5.6% for the adult population, while the fire service sample revealed that 18.5% of responders answered yes to 12 or more of the traits (one sample t-test, $p < 0.0001$.)

Over a decade ago, research showed this could be problematic for fire departments, yet appropriate ways to manage this condition in the fire service are still lacking. Departments have progressed, but have not shown an adequate amount of growth towards this issue.

“This lack of information spells potential trouble for fire departments. First, left untreated, affected individuals could compromise their job performance and personal safety. Second, departments may be losing good firefighters who, if properly assessed, could realize their full potential and become outstanding employees.” (Cohen and Bailer, 1999)

“There's a third reason, too. The intense, fast-paced world of the fire service is practically tailor-made for someone who craves, for example, constant change and adrenaline-producing situations. In turn, people with ADHD often naturally exhibit the personality characteristics - such as creativity, risk-taking and quick decision-making that are required of the best firefighters and EMT's. That "made for each other" theory is an interesting one, observes Lisa Weyandt, one of the nation's leading researchers in ADHD. It goes hand-in-hand with those seeking to explore the benefits of a neurological condition long seen as mostly problem-filled.” The article raises encouraging and constructive points related to fire personnel with ADHD. It goes on to state, “The fire service provides several avenues to put the disorder's positive characteristics to good use. Both firefighting and EMS work demand the ability to make rapid decisions, shift seamlessly from call to call, and monitor or perform activities on several fronts. They also require the courage to put oneself in stressful, even dangerous, situations and the physical and/or

intellectual strength needed to perform difficult tasks or intensive interaction with another person” (Cohen and Bailer, 1999).

For individuals with ADHD who have difficulty "staying on task" and managing their time effectively, a fire department's paramilitary structure provides a much-needed organizational framework and optimizes their chances of experiencing success. Structure is provided in many ways. Everyone dresses in much the same way. There are daily maintenance and operation checklists and protocols to adhere to. The ranked power structure is clearly defined and consistent. Rank-and-file firefighters get close, almost individualized supervision, enhancing the possibility that unproductive work habits will be noted, and corrected, quickly. (Cohen, 1999)

For a person who has difficulty following directions (as well as starting and completing long-term projects) frequent oversight helps keep him or her on track and performing effectively. Clearly defined, short-term goals presented by the call-by-call nature of the work present repeated opportunities for success. Unfortunately, any theories about whether public safety work attracts an inordinate number of adults with ADHD, and whether their symptoms can function to their (and the profession's) advantage, must remain, for now, conjecture.” (Cohen and Bailer, 1999) Over ten years ago the need to explore individuals in the fire service with ADHD was a thought in action, however today; we still struggle to find more information and strategies to help these individuals.

In June of 2009, a Podcast aired on Firehouse.com attempting to address fire personnel with ADHD. The Leaders Toolbox: Firefighters with Attention Deficit Disorder & Attention Deficit Hyperactivity Disorder was created with Dr. Richard B. Gassaway. Dr. Gassaway

interviews two psychologists, Drs. Gary Fischer and April Leaveck. Included in the interview are firefighter Neil Sjostrom and Fire Chief William Ball. April, Neil and William have all been diagnosed with ADHD. They each were able to reflect on their own experiences to share and guide others. Gary Fischer stated that it is important to identify ADHD in individuals in the fire service in order to help the firefighter be more productive and accepted. He mentioned the significance of not jumping to conclusions when working with individuals with ADHD. He also gives advice for supervisors of these individuals in the fire service. Asking about their problems, asking for input on what they feel is different for them and finally how they believe they will benefit, are all imperative. The individual with ADHD has the best insight as to how he/she can be most successful. Working with these individuals to strategize ways he/she can meet his/her full potential will benefit all.

April, Neil and William all contribute insight on how to assess individuals strengths and build upon them. They discuss the magnitude at which organization is required. Avoiding lengthy projects, trainings, lectures and meetings is beneficial. Providing strategies to help ADHD firefighters stay engaged is crucial. Allowing lots of notes, reminders, schedules and structure are all key. A detailed calendar and strong project management will afford individuals the ability to stay more focused. Also, providing professional assessments that offer the opportunity to demonstrate knowledge in manners other than writing are positive.

The podcast is very valuable for firefighters as well as administrators. Considering alternative management practices and policies is brought to light in this podcast.

Identifying ADHD is valuable at any age. In the book, Delivered From Distraction (Hallowell, 2005), there is a true story about a family dealing with ADHD. The story is called,

The Benevians: How This Diagnosis Can Change Your Life for the Better-at Any Age.

(Hallowell, 2005, p.69-84) The story discusses the benefits of identifying ADHD in family members regardless of their age. The book itself also includes many tips for adults dealing with ADHD.

Often individuals with ADHD are creative, driven, motivated and energetic, just to name a few traits. Focusing on all their assets will result in a happy, thriving employee. One that is productive, positive and valuable to all.

The focus of this research was to provide information that can be used to help identify ADHD individuals within the fire service and to help them have a successful career. Further investigation and probing into ADHD in the fire service would be of great assistance to all fire departments.

By focusing on ways to implement positive change, departments may choose to alter trainings and daily requirements. Eliminating much of the day to day written work and executing more technological standards for forms and notes will ease pressure on many employees while being efficient and accurate.

Advancing and utilizing 21st century skills, resources and technologies are industrious and progressive. Constantly evaluating ways to be more productive and practical as well as considering cost effective measures are always desirable actions. Taking a preemptive approach to all issues concerning employees is valuable.

Knowledge and information gained throughout the reading and reviewing of literature regarding ADHD was both informative and enlightening. Previous research and surveys

conducted by Cohen (1997, 1999) provided a framework and basis for this study. Using current technology proved to be an effective means in reaching a wide range of subjects for this research. In addition the updated data and material referenced from the last five to eight years was beneficial in demonstrating consistency.

PROCEDURES

Gathering information and building on existing knowledge, is significant in all careers. Using the basic research method as a model, this study investigated Attention Deficit Hyperactivity Disorder.

In addition to the vast amount of research that was reviewed have read, collected and examined regarding ADHD in adults, a survey was created (Appendix I). The survey was used to determine the possibility that there is a significantly higher amount of firefighters with this disorder. Cohen (1999) established through research that “the fire service sample revealed that 18.5% of responders answered yes to 12 or more of the traits” for ADHD. More recently, August 2011 a report of a study was released on the United States Department of Agriculture Forest Service Northern Research Station website. The site recognizes, “Three hundred and two wildland firefighters, representing a diverse array of resource types, were administered the Adult ADHD Self-Report Scale (ASRS v1.1). The results indicate that 19.54% of respondents had scores which suggested the presence of ADHD and its associated symptoms. These findings indicated a high level of ADHD within the wildland firefighters sampled. Nearly twenty percent (19.54%) of the 302 respondents who completed the ASRS v1.1 attained a score which met or exceeded the established clinically significant cutoff score. Therefore, nearly one-fifth of those surveyed displayed symptoms consistent with an ADHD diagnosis.” (Palmer, Gaskill, Domitrovich, McNamara, Knutson, Spear, 2011) In both previous surveys involving firefighters, the percentage of respondents ranged from 18.5-19.54% showing symptoms associated with ADHD. The fore mentioned results are consistent with the findings identified in this basic research project.

In conducting this research, the author developed a survey referencing the existing diagnostic surveys, the Connor’s Rating Scale, the Vanderbilt Rating Scale, the Adult ADHD Self-Report Scale and guidance from Psychologist Cathy Pelosi. The site *SurveyMonkey* was used to

administer the completely voluntary and anonymous survey to over 100 randomly selected firefighters throughout the southwestern Ohio counties of Hamilton and Clermont. A total of 84 surveys were returned. Opportunities were given to a variety of departments in an attempt to receive diverse and equal results. All results are from active fire personnel. Of the surveys received, 17.9% were fire chiefs, 6.0% were assistant chiefs, 13.1% were captains, 23.8% were lieutenants and 39.3% were firefighters. The results were from both male (95.2%) and female (4.8%) fire personnel.

Applying quantitative data analysis to assemble the information and display the numbers is an appropriate technique for this basic research project. Upon completing sufficient inquiry from multiple sources and effectively evaluating the data collected from the survey, all information was reviewed by psychologist Cathy Pelosi. Pelosi reviewed the responses of each survey. She sorted the surveys into two categories; “not likely ADHD” and highly likely ADHD”. Her personal and professional opinion based on her vast amount of knowledge and experience was instrumental in the developing the final conclusions of this study. An in-depth discussion with Pelosi, further review of the quantitative data and all literature and online resources allows for the deduction that a greater number of firefighters have ADHD than the general occupational population. Once again this is consistent with previous research regarding the same topic.

The high risk, action packed world of firefighting is perfect for attracting thriving individuals with ADHD. The excitement and demands of the job are desirable. Ideas and suggestions can be made to lead a full, successful and satisfying life with ADHD.

RESULTS

This research project was conducted primarily using descriptive research methodology; therefore a review of literature was conducted. Focusing on this type of research allows for increasing information and knowledge. It provides opportunities to understand phenomena and behaviors without expecting to treat or solve the problems. It acts as a guide for developing a plan of action to incorporate.

Upon reading and studying the literature and resources pertaining to ADHD in adults, surveys were administered and results were gathered and evaluated.

After collecting and organizing the responses from the survey through Survey Monkey, Psychologist Cathy Pelosi was consulted. Pelosi helped to organize and evaluate the results.

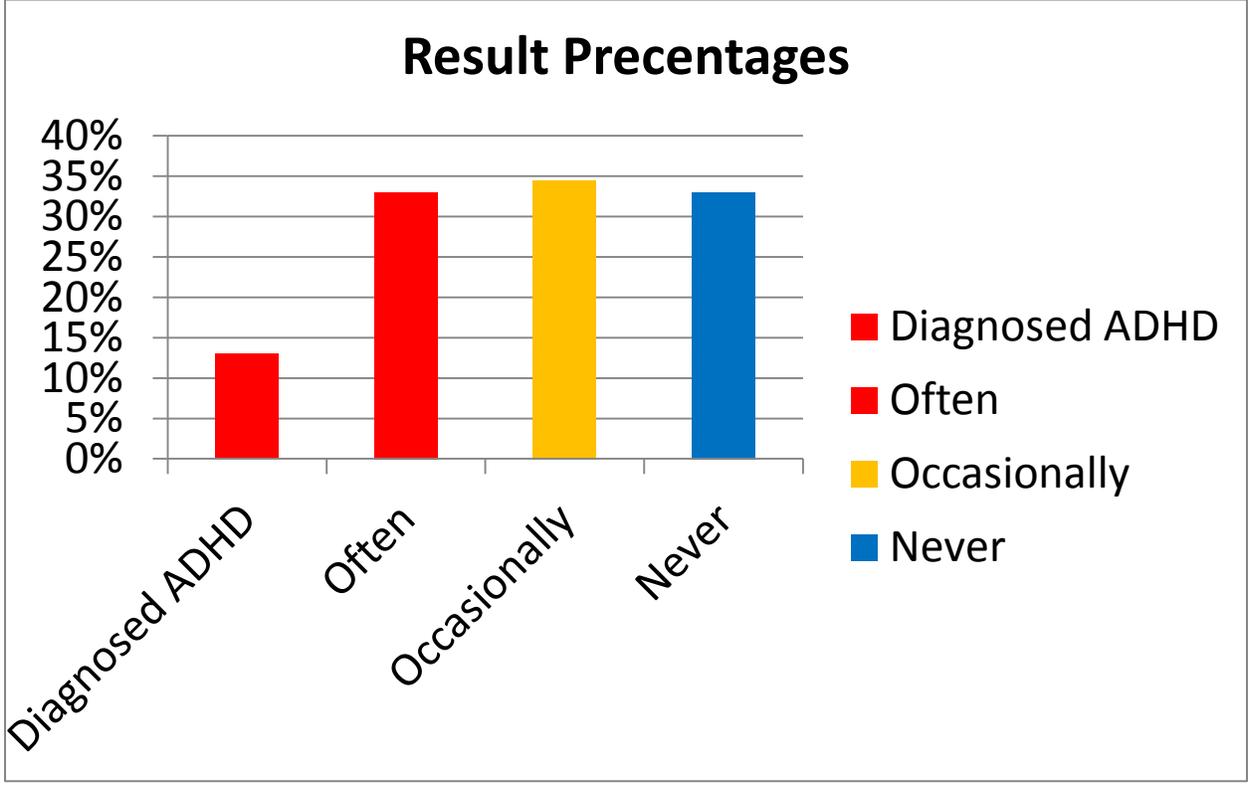
Both the Vanderbilt and Connor's Rating Scales are meant to diagnosis ADHD in children. Therefore, not all of the questions were applicable for adults. Many adults have been able to overcome or adapt lifestyles or work habits to compensate. Lynn Weiss, Ph.D. discusses her own realizations with ADD while she was working as a radio host in the 1980's, "During those years, I often heard people say "I don't know how you do it. You have so much energy. You're so enthusiastic, sensitive and empathetic." In retrospect, I see that every one of those comments and compliments related directly to my ADD. The particular way in which my brain worked, my ADD, fueled my performances and empowered me." (Weiss, 1996, p.4) "Also, in children the surveys are completed by teachers and/or parents. In adults, the survey is administered individually. This could be tempting for adults to alter their answers. It is not always easy to admit challenges or perhaps they may not realize they exhibit the characteristics

or the severity of them. Adults are more likely to be afraid of facing what the survey might actually show.

The questions on the survey rank a range of general distractibility, anxiety levels, attention spans, obsessive tendencies, compulsivity, hyperactivity, mood and emotions. The response options were “Never, Occasionally, Often and Very often”. Scores of “Often” and “Very often” were considered as indicative of ADHD tendencies. Pelosi grouped the Often and Very Often scores together. “Most, if not all individuals will demonstrate some occasional signs favorable for ADHD” (Pelosi, 2011).

Out of the 84 responses received, 11 individuals (13.1%) had been formally diagnosed with ADHD. Another 17 (20.2%) replied “Often” to having many of the characteristics of ADHD, (Appendix II). Based on the two categories, “Not Likely ADHD” and “Highly Likely ADHD” Pelosi concluded that out of the total number of surveys, 33% of the individuals demonstrate characteristics for ADHD. This would represent 1 out of every 3. These are higher statistics than the national norm of 1 out of every 8 people or 1 out of 20 adults (Amen, 2001). Pelosi stated that you would expect to see the adults diagnosed with ADHD rating themselves lower on each area of the survey due to medication, therapy or adaption plans in place for those individuals. When evaluating the results of the 73 individuals not formally diagnosed, 23.2% of the individuals demonstrate characteristics conducive to ADHD. This would be 1 out of every 4.3 which is also higher than the national norm.

Table 1



(Childs, 2011)

Another perspective of reviewing the outcome involves examining the individual surveys and survey questions. Separating the individual survey questions and calculating the percentages for the "Often" and "Very often", results in a total 303.9%. When divided by the number of survey questions (17) an average score of 17.87% is achieved. Unfortunately, some subjects avoided various questions, resulting in skewed results. The following table exhibits the products of "Often" and "Very Often" for each individual survey question. As instructed by Pelosi (2011), these would be the answers favorable for ADHD.

Question	Often	Very Often	Combined	Responses Received
Do you have difficulty organizing tasks and activities?	7.5% (6)	2.5% (2)	10%	80
Are you easily distracted by noises or other stimuli?	17.5% (14)	5.0% (4)	22%	80
Are you on the go or act as if driven by a motor?	24.1% (19)	7.6% (6)	31.7%	79
Do you fidget with your hand, feet or squirm while in your seat?	15.0% (12)	13.85% (11)	28.8%	80
Do you fail to give attention to detail or make careless mistakes in given tasks?	10.1% (8)	2.5% (2)	12.6%	79
Are you more likely to avoid or are reluctant to engage in tasks that require sustained mental efforts?	11.3% (9)	2.5% (2)	13.8%	80
Do you interrupt or intrude in others' conversations and/or activities?	8.8% (7)	3.8% (3)	12.6%	80
Are you forgetful in daily activities?	8.9% (7)	2.5% (2)	11.4%	79
Do you tend to talk too much?	11.3% (9)	5.0% (4)	16.3%	80
Are you fearful, anxious or worried?	16.3% (13)	5.0% (4)	21.3%	80
Do you have trouble understanding what you just read?	7.7% (6)	6.4% (5)	14.1%	78
Do you have temper outbursts or explosive unpredictable behavior?	5.0% (4)	3.8% (3)	8.8%	80
Are you easily distracted or have a short attention span?	11.3% (9)	6.3% (5)	17.6%	80
Do you have difficulty waiting in lines or waiting your turn in a group setting?	12.7% (10)	6.3% (5)	19%	79
Do you need everything to be just so?	13.0% (10)	15.6% (12)	28.6%	77
Do you find it hard to remain engaged while reading, in meetings or while doing paper work?	16.5% (13)	3.8% (3)	20.3%	79
Do you blurt out answers to questions before questions have been completed?	7.5% (6)	7.5% (6)	15%	80

Table 2-Results by Question

The most significant areas with elevated replies are: Are you on the go or act as if driven by a motor? (31.7%), Do you fidget with your hand, feet or squirm while in your seat? (28.8%), Do you need everything to be just so? (28.6%), Are you easily distracted by noises or other stimuli? (22%) and Do you find it hard to remain engaged while reading, in meetings or while doing paper work? (20.3%). These would be consistent with the Connor's and Vanderbilt Rating Scales result calculations (Pelosi, 2011).

DISCUSSION

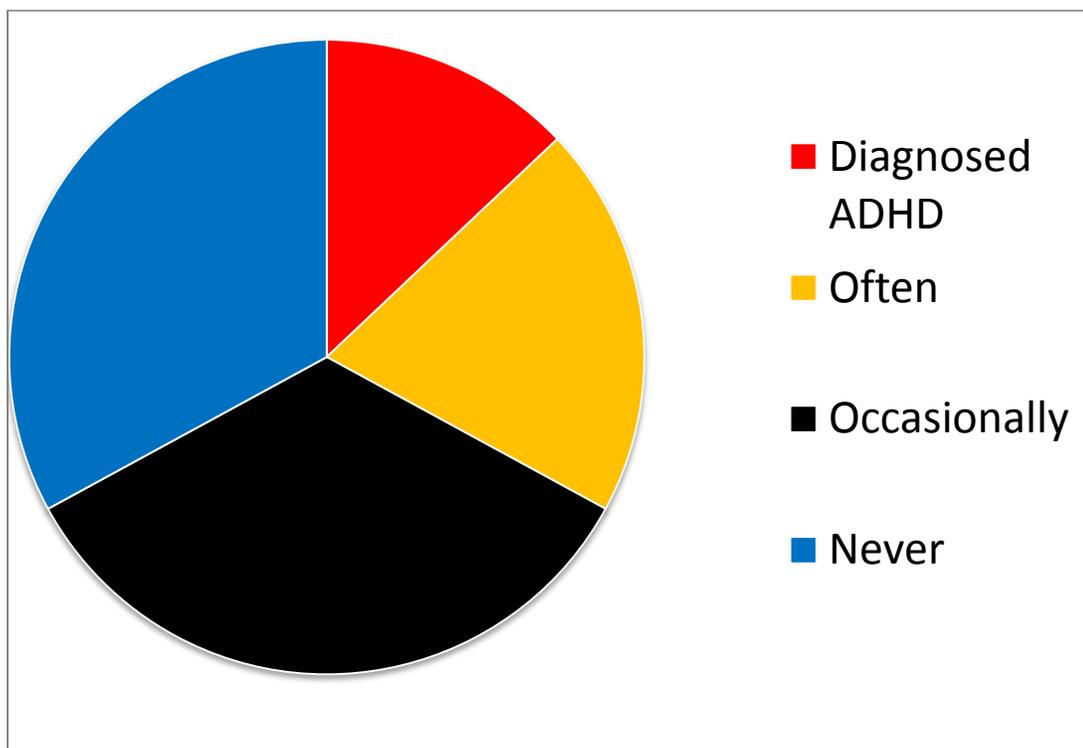
As far back as my memory will take me, I have wanted to be a firefighter. Being both the son and grandson of firefighters, I have been told it is my destiny. The high paced, action filled demands of firefighting were always appealing to me. Having been diagnosed with ADHD as a child and having a young son with ADHD, I am compelled to explore all angles of ADHD including taking time to examine the hereditary factor of ADHD.

According to the website adhdissues.com, “ADHD hereditary factors appear to run in families. There are likely to be genetic influences to ADHD. Around 25 percent of close relatives in the families of ADHD children also have ADHD.” At this date there is no conclusive answer on whether or not there is an ADHD hereditary component. However, recent research shows a link to family history. “There are many unanswered questions about ADD, but it is known that there is a strong genetic component. Children with ADD are likely to have ADD parents or close relatives” (Kelly and Ramundo, 2006, p.27). Evaluating family medical history and possible connections is one step in the ADHD identification process.

The amount of data collected during this research shows a probable chance that individuals in the fire service are at a larger risk of having ADHD. Of the subjects that participated in the survey 1 out of 7 had been formally diagnosed with ADHD. More impressive is that 1 out of 3 demonstrated characteristics inclusive to ADHD. The research showed a significantly higher amount of fire service individuals with ADHD than comparable to the national standards. These statistics represent approximately double the average adult population.

Figure 1.

The ratio of firefighters demonstrating characteristics associated with ADHD.



(Childs, 2011)

The general nature of the disorder, lends itself to attract individuals that thrive a highly active and adrenaline producing career. Often individuals with ADHD are creative, driven, motivated and energetic, just to name a few traits. “Impulsive people are quick reactors. Impulsive people are more likely to seize the moment, take the chance, make the sale, and grab the opportunity.” (Nadeau, 1997, p.100) The shear nature of the business of firefighters demonstrates that they are risk takers and quick decision makers. “Energy and a willingness to take risks characterize many ADD adults.” (Grossberg, 2005, p. 78)

Firefighters must be prepared to respond immediately to a fire or other emergency. Fighting fires is complex and dangerous. It requires organization, teamwork and quick thinking. A firefighter's duties may change several times during one shift. Flexibility and rapid response are imperative.

The paramilitary structure that is natural in safety services affords the structure and regiment that ADHD individuals thrive upon. Considering all their assets and focusing on the positive contributions they provide will result in a happy, thriving employee. One that is productive, positive and valuable to all.

“Results have shown that there are important ramifications in many areas regarding firefighters with ADHD: training, communication, situational awareness, leadership, human error, and group dynamics, to name a few. Those with ADHD are prone to distractibility and inattentiveness, and learning disabilities have been shown to be a common comorbid condition in those with ADHD. With this in mind, the current methods of training that rely heavily on a traditional lecture format, might not be the most effective way of educating firefighters. More experiential, hands-on types of learning activities might lead to better educational outcomes” (“Proceedings of the Second Conference on the Human Dimensions of Wildland Fire”, 2011).

Organization is imperative. Avoiding lengthy projects, trainings, lectures and meetings is beneficial. Providing strategies to help ADHD firefighters stay engaged is crucial. Allowing lots of notes, reminders, schedules and structure are all key. A detailed calendar and strong project management will afford individuals the ability to stay more focused. “The single most important thing that can be done to improve one’s organization is to buy a day planner, take a training course on its use, and actively work toward the habit of using it to plan each day, week, and month.” (Nadeau, 1997, p.50) Also, providing professional assessments that offer the opportunity to demonstrate one’s knowledge in manners other than writing are positive.

Americans with Disabilities Act requires employers to make reasonable accommodations for individuals with disorders such as ADHD. ADHD is considered a disability under the

classification “other health impairment”. The Ohio Department for Public Safety allows for alternative fire testing for ADA candidates. (Ohio.gov)

It is important to identify ADHD within firefighters in order to help the firefighter be more productive and accepted. It is also imperative that administrators not jump to conclusions when working with individuals with ADHD. Being proactive with the individual will be advantageous for all. Asking about their problems, asking for input on what they feel is different for them and finally how they believe they will benefit, are all important actions. The individual with ADHD has the best insight as to how he/she can be most successful. Working with such individuals to strategize ways they can meet their full potential will benefit everyone involved.

All of the negative characteristics associated with ADHD can be turned into positives if fostered in the proper manner. Ignoring the negatives that are associated with ADHD can have unfavorable outcomes. For example, according to Weiss (1996), hypersensitivity = a strong sense of intuition and distractibility = multiple-track awareness. “Although ADD-related behaviors can cause problems in a work environment, they can also be used in a constructive way to one’s advantage. ADD is, after all, only a different way of being wired, and that means people with ADHD do things in a unique way-not a wrong way, just a different way.” (Weiss, 1996, p.13)

RECOMMENDATIONS

Inquiry and investigation involving ADHD will continue to grow and change every day. This is not the first research project on the matter and it will not be the last. The more we learn the better we will be.

There is a wealth of information on the topic of ADHD in adults as well as ADHD in the workplace. First and foremost, all data from this study will be shared with the UTFD administration team to help create a plan of action for improving training and providing a comfortable work environment for all. Promoting a positive, successful work atmosphere will allow all employees to take the best advantage of his/her strong points while minimizing the negative impact of weaknesses.

The results collected in this research show that the implications for fire service organizations are widespread and significant. Taking a preemptive approach to establishing and structuring the actions of the departments training services as well as day to day operations will prove positive and constructive. By addressing the needs of all employees, departments are showing their compliance with ADA. Being proactive in this endeavor provides the best scenario for both employee and employer.

Administrators within the department are responsible for the day to day operations as well as the growth, development and work ethic of the employees. The best bosses recognize the strengths of their ADD employees, accept them for who they are and work to provide accountability in gentle ways. The best boss is able to recognize differences among people and bring the best out of each (Grossberg, 2005, p.126). Inappropriate and ineffective actions on the administrator's part can result in negative attitudes, low morale, disrespect, frustration, and misunderstanding. In some instances, the loss of an otherwise great employee is possible. Another valid concern is ADA compliance.

There are many things administrators can do to ensure that they are doing the most to guarantee a positive department. Firefighters with ADHD often have a wealth of knowledge and

experience to share. Exploring ways to encourage firefighters with ADHD is valuable. ADD employees do best with managers who are clear in their directions and who provide constant gentle prodding to get work done (Grossberg, 2005, p.126). Simple change will go a long way towards acceptance, appreciation and overall performance.

Trainings as well as day to day organization and operations can be modified to accommodate all individuals especially those with ADHD. If you have ADD, the odds are good that you will learn best with a hands-on approach. Though the process is slower, what you learn tends to stick. This is especially true when trying to learn things that are detailed, have a number of sequential steps, or are abstract(Weiss, 1996, p.27). Implementing this hands-on approach with trainings and other procedures will be constructive.



Figure 2

Positive changes departments could institute to maximize the performance from the members on the department with ADHD. (Childs 2011)

Cooperation and understanding from top fire department officials will have a positive impact on the department. Taking a proactive approach to educate department administrators and officers about ADHD and its effects is one step that can be taken. Demonstrating a willingness to accept ADHD employees as individuals with much to offer is just the beginning. Having clear, structured expectations and instructions as well as precise daily checklists and priorities are beneficial. Providing an encouraging and optimistic work atmosphere is also essential in meeting the needs of ADHD employees. “ADD adults tend to work best in environments in which they feel accepted and in which the levels of unwanted stress aren’t high.” (Grossberg, 2005, p. 95)

Due to the complex nature of ADHD and the unique individuals involved, it's hard to make recommendations that are accurate for each and every adult. There are some simple suggestions that can be implemented to provide assistance in leading a more productive and satisfying life.

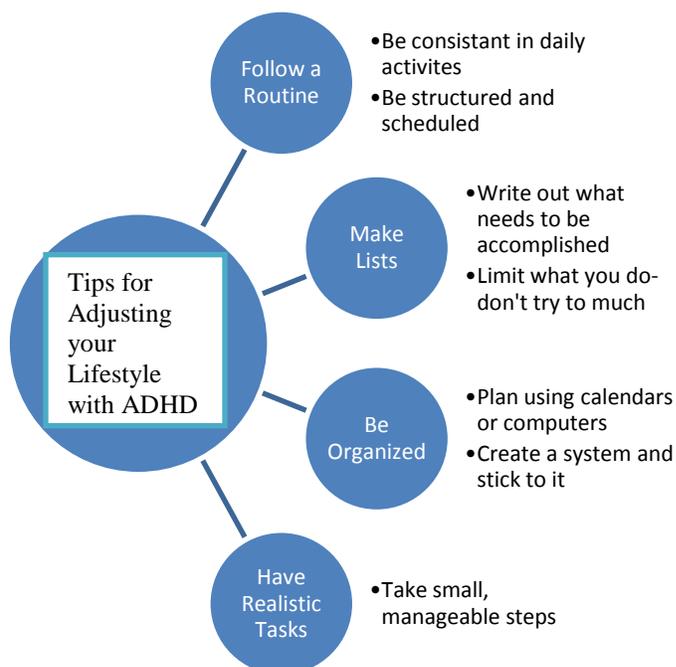


Figure 3

Tips for adjusting the lifestyle of adults with ADHD
(Childs 2011)

Making necessary adjustments and accommodations will be advantageous for employees. The attitudes of the employees with ADHD will improve thus leading to higher morale and more productive, effective members. Accepting your traits, adapting your weaknesses and focusing on your positives are quality attributes. This will all help to formulate the most dynamic and valuable employee.

In summary, it is first necessary for the individuals involved to seek assistance with their condition. It is also important that they advocate for their own success. Supportive and encouraging administrators partnered with motivated and determined employees provides for the best case scenario imaginable. When all members work together anything is possible.

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APPENDIX 1 – OHIO FIRE EXECUTIVE PROGRAM

PROJECT SURVEY MAY 2011

Ohio Executive Fire Officer Program/ Managing Adaptive Behaviors in the Fire Service

[Exit this survey](#)

1. Default Section

1. How many years have you been in the fire service?

	1-5 years	6-10 years	11-15 years	16-20 years	21-25 years	26 or greater
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="25"/>	<input type="text"/>
1 or greater years of service	How many years have you been in the fire service?	6-10 years	11-15 years	16-20 years	21-25 years	26 or greater
	1 or greater years of service					
	1-5 years					

2. What is your gender?

Male or Female

[male](#) or femaleWhat is your gender? male or female Male or Female

3. What is your current rank?

Chief-Firefighter

Chief-Firefighter

What is your current rank? Chief-Firefighter

4. Have you ever been diagnosed by a medical professional with Attention Deficit/Hyperactivity Disorder (ADHD)? If you answer the question yes then your survey is complete. If your answer is no, please continue with the survey.

Have you ever been diagnosed by a medical professional with Attention Deficit/Hyperactivity Disorder (ADHD)? If you answer the question yes then your survey is complete. If your answer is no please continue with the survey. yes

no

5. Do you have difficulty organizing tasks or activities?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you have difficulty organizing tasks or activities? Rate Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

6. Are you easily distracted by noises or other stimuli?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Are you easily distracted by noises or other stimuli? Rate Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

7. Are you on the go or often act as if you are "driven by a motor"?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Are you on the go or often act as if you are "driven by a motor"? Rate Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

8. Do you fidget with your hand, feet or squirm while in your seat?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you fidget with your hand, feet or squirm while in your seat? Rate Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

9. Are you more likely to avoid or are reluctant to engage in tasks that require sustained mental efforts?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Are you more likely to avoid or are reluctant to engage in tasks that require sustained mental efforts? Rate Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

10. Do you fail to give attention to details or make careless mistakes in given tasks?

	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you fail to give attention to details or make careless mistakes in given tasks? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
11. Do you interrupt or intrude in others' conversations and/or activities?				
Rate	<input type="checkbox"/> Do you interrupt or intrude in others' conversations and/or activities? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
12. Are you forgetful in daily activities?				
Rate	<input type="checkbox"/> Are you forgetful in daily activities? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
13. Do you tend to talk too much?				
Rate	<input type="checkbox"/> Do you tend to talk too much? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
14. Are you fearful, anxious, or worried?				
Rate	<input type="checkbox"/> Are you fearful, anxious, or worried? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
15. Do you have trouble understanding what you just read?				
Rate	<input type="checkbox"/> Do you have trouble understanding what you just read? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
16. Do you have temper outbursts or explosive unpredictable behavior?				
Rate	<input type="checkbox"/> Do you have	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

	Never	Occasionally	Often	Very Often
	temper outbursts or explosive unpredictable behavior? Rate			
17. Are you easily distracted or have a short attention span?				
	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Are you easily distracted or have a short attention span? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
18. Do you have difficulty waiting in lines or awaiting your turn in group setting?				
	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you have difficulty waiting in lines or awaiting your turn in group setting? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
19. Do you need everything to be just so ie.. arrangement of items on your desk etc.				
	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you need everything to be just so ie.. arrangement of items on your desk etc. Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate
20. Have you ever been a driver of a vehicle and caused an accident (Departmental or Private)?				
	<input type="checkbox"/> Have you ever been a driver of a vehicle and caused an accident (Departmental or Private)? Yes			
	<input type="checkbox"/> No			
21. Do you find it hard to remain engaged while reading, in meetings or while doing paper work?				
	Never	Occasionally	Often	Very Often
Rate	<input type="checkbox"/> Do you find it hard to remain engaged while reading, in meetings or while	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

	Never	Occasionally	Often	Very Often
doing paper work? Rate				
22. Do you blurt out answers to questions before the question's been completed?				
Rate	<input type="checkbox"/> Do you blurt out answers to questions before the question's been completed? Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate	<input type="checkbox"/> Rate

APPENDIX 2 – OHIO FIRE EXECUTIVE PROGRAM
APPLIED RESEARCH PROJECT SURVEY RESULTS MAY 2011

1. How many years have you been in the fire service?

1	2	3	4	5	<u>Response Count</u>
0.0%	0.0%	0.0%	57.1%	42.9%	7
6	7	8	9	10	<u>Response Count</u>
35.7%	0.0%	21.4%	14.3%	28.6%	14
11	12	13	14	15	<u>Response Count</u>
23.1%	0.0%	23.1%	7.7%	46.2%	13
16	17	18	19	20	<u>Response Count</u>
4.8%	14.3%	33.3%	14.3%	33.3%	21
21	22	23	24	25	<u>Response Count</u>
16.7%	0.0%	50.0%	33.3%	0.0%	6
26 years or greater					<u>Response Count</u>
100%					23

Answered Question 84

Skipped Question 1

2. What is your Gender?

Male 95.2% (80)	Female 4.8% (4)	<u>Response Count</u>
		84

Answered Question 84

Skipped Question 1

3. What is your current rank?

Chief	Asst. Chief	Batt. Chief	Captain	Lieutenant	Firefighter	Other
-------	-------------	-------------	---------	------------	-------------	-------

15	5	0	11	20	33	0
----	---	---	----	----	----	---

Answered Question 84

Skipped Question 1

4. Have you ever been diagnosed by a medical professional with Attention Deficit/Hyperactivity Disorder?

Yes 13.1% (11)

No 86.9% (73)

Response Count

84

Answered Question 84

Skipped Question 1

5. Do you have difficulty organizing tasks and activities?

Never

Occasionally

Often

Very Often

Response Count

43.8% (35)

46.3% (37)

7.5% (6)

2.5% (2)

80

Answered Question 80

Skipped Question 5

6. Are you easily distracted by noises or other stimuli?

Never

Occasionally

Often

Very Often

Response Count

27.5% (22)

50.0% (40)

17.5% (14)

5.0% (4)

80

Answered Question 80

Skipped Question 5

7. Are you on the go or act as if you are "driven by a motor"?

Never

Occasionally

Often

Very Often

Response Count

25.3% (20)

43.0% (34)

24.1% (19)

7.6% (6)

79

Answered Question 79

Skipped Question 6

8. Do you fidget with your hand, feet or squirm while in your seat?

Never

Occasionally

Often

Very Often

Response Count

37.5% (30)

33.8% (27)

15.0% (12)

13.8% (11)

80

Answered Question 80

Skipped Question 5

9. Are you more likely to avoid or are reluctant to engage in tasks that require sustained mental efforts?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
51.3% (41)	35.0% (28)	11.3% (9)	2.5% (2)	80

Answered Question 80

Skipped Question 5

10. Do you fail to give attention to detail or make careless mistakes in given tasks?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
34.2% (27)	53.2% (42)	10.1% (8)	2.5% (2)	79

Answered Question 79

Skipped Question 6

11. Do you interrupt or intrude in others' conversations and/ or activities?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
35.0% (28)	52.5% (42)	8.8% (7)	3.8% (3)	80

Answered Question 80

Skipped Question 5

12. Are you forgetful in daily activities?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
26.6% (21)	62.0% (49)	8.9% (7)	2.5% (2)	79

Answered Question 79

Skipped Question 6

13. Do you tend to talk too much?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
40.0 % (32)	43.8% (35)	11.3% (9)	5.0% (4)	80

Answered Question 80

Skipped Question 5

14. Are you fearful, anxious, or worried?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
43.8% (35)	35.0% (28)	16.3% (13)	5.0% (4)	80

Answered Question 80

Skipped Question 5

15. Do you have trouble understanding what you just read?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
33.3% (26)	52.6% (41)	7.7% (6)	6.4% (5)	78

Answered Question 78

Skipped Question 7

16. Do you have temper outbursts or explosive unpredictable behavior?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
62.5% (50)	28.3% (23)	5.0% (4)	3.8% (3)	80

Answered Question 80

Skipped Question 5

17. Are you easily distracted or have a short attention span?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
38.8% (31)	43.8% (35)	11.3% (9)	6.3% (5)	80

Answered Question 80

Skipped Question 5

18. Do you have difficulty waiting in lines or awaiting your turn in a group setting?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
40.5% (32)	40.5% (32)	12.7% (10)	6.3% (5)	79

Answered Question 79

Skipped Question 6

19. Do you need everything to be just so i.e.... arrangement of items on your desk etc?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
31.2% (24)	40.3% (31)	13.0% (10)	15.6% (12)	77

Answered Question 77

Skipped Question 8

20. Have you ever been a driver of a vehicle and caused an accident (Departmental or Private)?

Yes 43.8% 35	No 57.5% (46)	<u>Response Count</u>
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80

 Answered Question 80

Skipped Question 5

21. Do you find it hard to remain engaged while reading, in meetings or while doing paper work?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
30.4% (24)	49.4% (39)	16.5% (13)	3.8% (3)	79

Answered Question 79

Skipped Question 6

22. Do you blurt out answers to questions before questions have been completed?

Never	Occasionally	Often	Very Often	<u>Response Count</u>
35.0% (28)	50.0% (40)	7.5% (6)	7.5% (6)	80

Answered Question 80

Skipped Question 5

<http://nrs.fs.fed.us/pubs/38511>