

Law Enforcement Job Stressors, The Effects: A Look into What the Stressors Are and Their Effects on Health, Life and Retirement

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Abstract

Law enforcement officers have typically received higher retirement percentages than non-law enforcement personnel due to job related issues that are unique to the profession. These benefits, known as special risk in Florida, are common across much of the United States. This research looks into studies of chronic job stress unique to the law enforcement profession, and identifies the physiological effect of this chronic stress and the toll it takes. It also looks at the origins of special risk benefits in Florida. Three law enforcement agencies in Florida were surveyed to determine the level of knowledge law enforcement personnel had regarding the effects of chronic job stressors before and after they were hired.

Introduction

So, you want to go into law enforcement. Do you really know what you are getting yourself into? Maybe it's the job excitement and dangers, or your desire to serve the public; or maybe it's the retirement benefits.

The purpose of this research paper is to investigate how the effects of police officer job stress affects health and life expectancy issues, and how they relate to police officers' retirement benefits. My research will try to identify physiological stressors in law enforcement that are used to establish the correlation between officers' health and life expectancy. In the process, I surveyed law enforcement officers to determine their knowledge of the physiological effects of stress. Surveys were sent to different law enforcement agencies to test law enforcement officers' knowledge of the effects of and sources of job-related stressors. It also asked them if they were aware of the not-so-obvious job stressors in law enforcement prior to joining. Additionally, I wanted to know if special risk is a motivator for staying in law enforcement in lieu of the physiological effects law enforcement job stressors have on the body.

This paper also takes a brief look at how and why special risk was adopted in Florida. Follow along as I drill down into the data and show how all of these factors are connected.

Literature review

The Florida Retirement System (FRS) evolved from several different retirement systems but they were consolidated in 1970 into the FRS (Green, 2011). The earliest documented form of retirement that I found was the Confederate Pension Fund in 1885 to pay benefits to soldiers who were unable to work due to wartime injuries sustained in the Civil War (Services, 2009 – 2010). In 1961, early retirement age for Special risk was strongly supported by the Florida Sheriff's Association. The support was based on the mental, physical and emotional strain of the job and it was initially just for deputies (Kennedy, 1976).

Accrual rates used to calculate retirement benefits for Special risk were rare but this changed over time. The accrual rate for Special risk employees in Florida is currently 3 percent (Florida Legislature, 2010), as opposed to 1.6 percent for non-law enforcement employees.

Prior to 1953, the Florida Highway Patrol (FHP) retirement system had a 20-year retirement regardless of age, and no increase in the accrual rate was provided (Kennedy, 1976). In 1953, due to cost, the program was changed to retirement at the age of 55 after completing 20 years of service (Kennedy, 1976). According to the State Division of Retirement, in addition to the FHP plan, there were several other retirement systems in Florida that were consolidated in 1970 to create the Florida Retirement System (FRS), (Green, 2011).

According to Kennedy's report, in 1961, the Florida legislature established a committee to have actuarial studies made of all the retirement systems in Florida. At that time, the Florida Sheriff's Association (FSA) urged the committee to approve an early retirement age of 55 for all sheriffs and deputies (Kennedy, 1976). According to Kennedy's report, the Sheriff's Association felt that the need for early retirement was so great that they agreed to pay for the total cost of the early retirement. They argued that, for a sheriff's or deputy's own safety and that of the public, early retirement at age 55 was necessary due to mental, physical, and emotional strain of this type work. However, due to underfunding, it was not approved at that time (Kennedy, 1976). This underfunding was addressed in 1963 when a bill was enacted requiring deputies to contribute 2.5 percent of their pay to cover this high hazard plan.

It was not until 1967 that other fields of law enforcement would be included (Kennedy, 1976). Although the accrual rates varied over time, special risk employees contributed to their retirement prior to the FRS (Florida Legislature, Special Risk Retirement Program of the Florida Retirement System, 1976). This same report looked at positive aspects of special risk and identified that it would be expected that turn-over for covered employees would be reduced and that the public may benefit from having younger police and firefighters to protect them. Kennedy's historical report states that special risk was not designed to take care of those members in the FRS who were exposed to unusual dangers and hazards, unless those dangers and hazards were of such a nature that the average person could not serve in those occupations beyond a certain period of time or certain age. The age component referred to the reduced capacity to perform duties past a certain age without endangering such employee's health, well being or the safety of his co-workers or the general public, who were

depending on the employee's abilities to perform such duties in an efficient and acceptable manner (Kennedy, 1976).

The word "hazardous" carried forward into the new statute which did mean that the jobs were of such strenuous and demanding nature on the mind and body because of potential dangers that to work in these fields over a long period time or past a certain age, a person's efficiency and capability for performing these jobs would be materially diminished and such person should be able to retire earlier with as reasonable benefit as employees in other fields (Kennedy, 1976).

Special risk was scrutinized back in the 1970's as evidenced by the legislative report, and some of the early findings were interesting when it came to a comparison of special risk and regular class employees. The report cites that at that time only 4 percent of FRS employees were in special risk. It later says that through experience there were more bridge tenders and flagmen killed on the highways as compared to highway patrolmen. It specifically cites that 30 members were killed in the line of duty and only half of them were in special risk (Kennedy, 1976). The report appears to suggest that there is an equal amount of deaths but never refers back to the original data that says only 4 percent were in special risk. So, the question is, were 50 percent of the special risk deaths from a much smaller sub group? The report does mention that records were not well kept back then. The current statute says that the intent and purpose of the Legislature is to address the mental and physical demands similar to what was mentioned above. This is a means to recognize the peculiar and special problems of this class of employees (Florida Legislature, Florida Senate Website Archive, 2010).

Hans Selye, one of the foremost researchers on stress, stated that police work is "the most stressful occupations in America even surpassing the job stress of air traffic controllers" (Constant, 1984). We all have seen the news and see the obvious issues that police have to deal with when it comes to news making events; we slow down and watch them at accident scenes. These are often critical type incidents that we respond to, witness and make decisions on, and are stressful when you are in the middle of it. All eyes are on you and there is the responsibility that you will have to make life-saving or life-altering decisions, and face the consequences if you make a mistake.

However, how are these events affecting our bodies when we have to deal with these issues on a daily basis and even after our shift ends? We like the excitement, don't we? Perhaps, but what is it doing to us in the long term? Dr. Kevin Gilmartin states that most officers find experiencing stress in mild doses during the beginning years makes the career exciting and attractive (Gilmartin, 1990). Gilmartin describes the roller coaster we are on with this career and also cites some of Violanti's work in support of it in his book, *Emotional Survival for Law Enforcement*. Gilmartin also reiterates what many of us have heard over the years, in that "recruits are told that the job takes a toll" (Gilmartin, *Emotional Survival for Law Enforcement*, 2002). He even cites that poor diet, lifestyle, shift work and sleep deprivation can lead to emotional and physical changes. We are somewhat of a jack-of-all-trades in this profession: social worker, lawyer, first responder, disaster responder at a moment's notice, and all while in a state of hyper vigilance since we are still tasked with preventing crime and apprehending criminals.

This brings us forward so that I can delve into the peculiarity of this profession as it relates to our health and life expectancy. Most everyone has an idea that law enforcement is a dangerous job when they watch the news or read the paper. However, many may not hear about the ancillary effects that these dangers place on our bodies not just through an actual physical injury but through the stress that comes with it. Numerous studies have been done on the effects of these not-so-obvious dangers of the job. Many are familiar in the sense that law enforcement is stressful, but does the average cop really know what the stress is doing to his or her body?

John M. Violanti cited some of Hans Selye's work when he developed a physiological model of stress called the general adaptation syndrome (GAS), (Copes, 2005). Disease states occur when the body can no longer adapt to external stressors and remains in a state of chemical imbalance. The reason stress can be so damaging physiologically is that it alters activity at the centers of somatic control (Copes, 2005). Specifically, stress produces a neuroendocrine response that operates through both the nervous and endocrine systems (Copes, 2005). In his study of psychological stress, Violanti cites work by Greenfield & Sternback in that no bodily organ can avoid being affected in some way by the experience of stress (Copes, 2005). According to Violanti, this becomes problematic because when a person can't remove themselves from stressful situations such as job stress, the physiological response may become chronic and unregulated. The law enforcement profession requires us to respond to many events and incidents that are stressful in nature every time we go to work. Plus, it is not uncommon for many of us to take that work home with us.

Sleep disorders such as insomnia are often a side effect of stress and are compounded by shift work. Many of us, including myself, can attest to lack of sleep during our careers due to shift work and due to stress after being involved in serious, significant, critical or even contentious events. This can get even more compounded when these are chronic events. This lack of sleep can lead many to being irritable and subjecting ourselves to being less alert in a career where not being alert can get you hurt or killed. How many times have cops gone into work tired due to lack of sleep and being less alert? To make matters worse, studies have shown that adequate sleep is one of the most important requirements for resistance to stress, emotional health, and effective work performance (Anderson, 1995). So, law enforcement officers find themselves in a cycle that often prevents them from getting adequate sleep. I have personally found it more difficult to sleep and readjust my circadian rhythm as I have gotten older. This may be supported by studies that indicate it takes persons over the age of 40 a longer time for their circadian rhythm to readjust according to a Klein et al study (Anderson, 1995). Not only is it the lack of sleep but it is also the lack of deep sleep. There are several stages of sleep and the deeper stages, 3 and 4, are necessary for recuperation from physical fatigue, and stage 5, rapid eye movement (REM), is needed to recover from mental fatigue (Anderson, 1995).

There are many stressors that affect law enforcement officers, from critical events to the occupational related stress we deal with daily. How our body adjusts varies and each of us has different abilities to deal with stress. McEwen and Seeman addressed allostatic load which refers to how the body adjusts to a multitude of mental and physical stressors (Hoolihan, 2008). A high allostatic load is an overload of

stressors affecting the body. Hoolihan referred to work done by McEwen & Seeman in that an overload of allostatic stressor can cause a “cascade of cause and effect”. Hoolihan actually ties in all these scientific functions and hormones as to how they actually work in our body. He states that the connecting factor for mental stressors starts in an area of the brain known as the HPA axis. This consists of the hypothalamus, pituitary gland, and the adrenal gland. He adds that the HPA axis serves as the body’s emergency alert system that releases hormones in response to the stressors placed on a person. These different hormones prepare different body systems for action (Hoolihan, 2008). The HPA axis also releases growth hormone to repair tissue and promote growth and cortisol which fuels the body by maintaining glucose and fatty acid levels (Hoolihan, 2008). Hoolihan says that when the body is at a high allostatic load, our intricate immune system gets caught in a stress – hormone loop. During this loop, hormones are released at higher than normal levels, leading to an increase in pro-inflammatory cytokines, which is a vicious cycle, which then restimulates the HPA axis. Cortisol levels also get increased and alter the immune/inflammatory system (Hoolihan, 2008). Hoolihan’s report was more about the body’s ability to recover from physical exercise/stress/inflammation but did show how the mental stressors are connected to the physical stressors and how they affect hormones releases.

Now that we have a better understanding of the origin of the hormones, I will look more into specific effects of job-related stressors. In an article by Elizabeth Scott, there is stress in all industries and makes reference to chronic stress. In her research, she cited the British Medical Journal that chronic stress has been linked to the development of heart disease and type II diabetes, as well as other conditions. They found a link between job stress and metabolic syndrome which increases the risk in diseases including high blood pressure, insulin resistance and central obesity. The central obesity is linked to the high cortisol in the bloodstream (Scott, 2010). The cortisol finding is similar to those cited by Violanti and Hoolihan. Citing a King’s College report in London, the stress- mortality link may be due to stress exacerbating risk factors that are already present in people under stress (Scott, 2008). This same research suggests a link between stress and immunity which causes a weakened immune system that can leave people more susceptible to virtually all diseases and conditions and thus lead to a greater risk of mortality (Scott, 2008). Chronic work stress has been identified as a possible cause of disease to include an elevated overall mortality for police with malignant tumors (Violanti, 1998).

University of Buffalo (UB) researcher John M. Violanti, Ph.D., Department of Social and Preventive Medicine in the School of Public Health and Health Professions, is principal researcher of the study, called the Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) study. This study was based on the stress-disease hypothesis and he targeted the law enforcement profession. The study identifies evidence that the increased stress levels incurred by police officers had a correlation with increased risks of certain diseases when compared to reference populations (Violanti, 1998). Results from his study have shown that law enforcement officers over 40 had a higher 10-year risk of a coronary event as compared to national standards. He also identified higher cholesterol levels, pulse rates and diastolic blood pressure in law enforcement officers.

Violanti says "policing is a psychologically stressful work environment filled with danger, high demands, ambiguity in work encounters, human misery and exposure to death" (Science Daily, 2008). His research goes on to note that he looks at cortisol levels, a stress hormone, and noted that they are higher in police. He indicates that this increased cortisol level causes the body to be physiologically unbalanced and organs get attacked and the immune system is compromised. Violanti indicates that constantly high cortisol levels were associated with less arterial elasticity, a risk factor for heart disease (Copes, 2005). His research also cites these high levels of cortisol causes other health issues such as artery hardening which can lead to strokes and coronary issues. Violanti says "the plaque buildup was greater in police than the citizen population" (Violanti, 1998).

Another effect of stress among law enforcement officers is suicide. Suicide among law enforcement officers is actually about twice as high as the number of police killed in the line of duty each year on average (Calvert, nd). I did find data at the Badge of Life website indicating that the suicide rate for law enforcement officers is 140 to 150 per year which is closer to the number of those killed in the line of duty each year (Police Suicide Myths). Dr. Daniel Goldfarb believes that police suicide is almost always related to relationship problems. The relationship issue, such as divorce, which was caused by the stress of the job, led to an officer's suicide but the job stress caused the relationship to go bad (Goldfarb, nd).

I did find information on an American Psychological Association web site indicating that there is no clear information on occupational suicide as there is no set national data even though various occupations have contacted the National Center for Health Statistics, each to confirm suicide rates in their profession (Foxhall, 2001). Law enforcement officers can be a tough group as they are reluctant to talk to outsiders, or show a weakness, as compared to other emergency personnel such as paramedics and firefighters. The reason for this is because paramedics and firefighters typically work in teams where the law enforcement officer typically works alone (Miller, nd). Miller's research also indicates that twice as many officers, about 300 annually, commit suicide and this figure is twice the amount that are killed in the line of duty.

Methods

I used several online sources to include articles and studies along with various books that identified studies on the physiological effects of chronic stress in law enforcement. I also contacted the Florida Division of Retirement for information and conducted one phone interview with an employee. I had a great deal of difficulty finding legislative data discussing the special risk retirement benefit. I was, however, able to locate one legislative document from a 1976 legislative study. This document had a lot of historical data on the various state retirement systems and some data on how special risk came about. The document was basically a product of compiled data located in the Florida Legislative Library Archives.

I chose three Florida law enforcement agencies to survey: Altamonte Springs Police Department (ASPD), Brevard County Sheriff's Office (BCSO), and Florida Fish and Wildlife Conservation Commission (FWC). The three agencies were chosen because they represent agencies at the municipal, county and state level in Florida. Additionally, the three agencies should represent a good cross section of law enforcement personnel that should capture quality data and all three agencies have a special risk retirement benefit. I utilized Survey Monkey to send out a 10-question survey to all three agencies targeting the rank of captain and below. The respective numbers for those agencies are: ASPD 101, BCSO 821, and FWC 662. I chose the rank of captain and below because I felt personnel above that rank were most likely well versed in this topic based on experience and time, and felt it could skew the results from the target audience.

The survey asked the following ten questions:

- How many years in law enforcement?
- What they believe is the main cause for shorter life expectancy of law enforcement personnel?
- Do you think being in a state of chronic hyper vigilance causes job stress?
- The body's reaction to chronic L.E. job stress can cause? Five answers to choose from.
- Identify the biggest stressors in your law enforcement position. Ten choices to rank.
- What they thought was the PRIMARY effect of chronic police job stress on the body?
- I asked if they knew that studies on law enforcement officers had shown they are more likely to suffer various diseases due to chronic job stress as a result of HORMONE levels becoming unstable.
- I then asked if they knew about these not so obvious health effects from chronic law enforcement job stressors prior to joining.
- Knowing the risks and stressors, why they choose to stay in law enforcement?
- Knowing the risks and the effects of job stressors on the body, does the law enforcement special risk retirement play a significant factor in your decision to stay in law enforcement?

Results

I received mixed return rates from the three agencies I chose to survey. The survey not only asked questions but also educated the person about the health risks that I suspect many do not know about. I received a 36% return rate from FWC, 16% from BCSO and 20% from ASPD. These return rates were based on the total number of sworn personnel from the rank of captain and below in each agency. Not everyone answered every question as I did not require an answer to every question. However, the answers to the questions were pretty consistent between the three agencies. I used Survey Monkey to send the survey and compile the data.

Question #1 inquired about the amount of years in law enforcement and the amounts varied. There was a notable observation in that a majority of the respondents from each agency had 16 plus years on.

Question #2 results indicated that over 90% believed that heart/coronary issues were the cause for a shorter life expectancy in law enforcement.

Question #3 also indicated that over 90% believed that being in a constant state of hyper vigilance causes job stress.

Question #4 showed that over 94% believed that the body's reaction to chronic law enforcement job stress causes heart disease.

Question #5 inquired about the biggest stressors in the person's law enforcement position and the majority selected "concern for personal safety". ASPD's rate was 35%, FWC was 50.5% and BCSO was at 40%.

Question #6 asked what they thought was the PRIMARY effect of chronic police job stress and the rates varied but the majority did not select the correct answer. The following percentages show the correct amount that believed stress hormone levels cause the body to be physiologically unbalanced (ASPD 30%, FWC 22% and BCSO 19%).

Question #7 asked if they knew that studies on law enforcement officers had shown that diseases such as cancer and diabetes are due to chronic job stress as a result of hormone levels becoming unstable. Between 62% and 70% did not know that information.

Question #8 indicated that over 80% of the respondents did not know about the effects of chronic job stress prior to joining.

Question #9 asked why they stay in the profession knowing the job risks and stressors and a consistent majority, ASPD 73%, FWC 64% and BCSO 57%, indicated it was because of a desire to help others and serve the public.

Question #10 went a step further and asked if the special risk retirement benefit played a significant role in their decision to stay in law enforcement knowing the job risks and the effects of job stress on their bodies. The majority indicated that it did: ASPD 65%, FWC 62% and BCSO 80%.

Discussion

My survey was designed to test knowledge and educate the respondents on various physiological effects of chronic stressors in the law enforcement field. The results showed a lack of knowledge of chronic job-related stressors before hiring and after. It also showed a common belief that coronary issues were the primary effects of job-related stress when in fact there are other physiological events occurring first. I will go into some issues surrounding this and the possible need to conduct further research on related topics/issues.

I believed the survey would show that most law enforcement officers do not know many of the physiological effects that chronic law enforcement job stress has on our bodies. This assumption turned out to be accurate but why is this important? I suspect that many who get into law enforcement understand that there is going to be some job stress and danger but it does not manifest itself until they get into the job and actually see it and experience it over and over again. For many law enforcement officers, they may never realize what is happening to their bodies. I also feel that this data is important because it shows that these physiological effects are occurring and we don't even know it. Maybe more research could be done to study better ways to balance out unstable hormone and pro-inflammatory cytokines levels. Pharmaceutical companies have developed drugs to help balance out certain bodily hormones but has there been any research into balancing out cortisol levels? Does anxiety medication help counter unstable hormone and pro-inflammatory cytokines levels? This was not a topic of my research but as I surmise everything, it is a question that is probably worth looking into. Additionally, what are the cost savings benefits to healthcare, workers comp and turnover if there was a cortisol hormone balancing medication? Aside from these cost savings benefits, what about suicide prevention, which is priceless? I also wonder if law enforcement officers would even take it because there is evidence that cops typically might view this type of thing as a weakness.

I also suspected that most would not know that diseases other than coronary diseases, such as cancer and diabetes, are also side effects of unstable hormone and pro-inflammatory cytokines levels. This assumption also turned out to be correct. Coronary issues seem to be common in law enforcement so it was no surprise that most, 94% average, would assume the biggest physiological effect of stress would be heart related. There seems to be a common thread between stress and coronary-related issues in law enforcement but what many did not know is that there are physiological precursors leading up to it such as unstable hormone levels. The survey correctly identified a lack of knowledge among respondents that unstable hormones, such as cortisol, are a catalyst for health-related issues. What does this mean at the end of the day? It may lead to some new medication to balance the hormones but this

is beyond the scope of this paper. However, better awareness to applicants before they get hired, as well as better training for new officers on how the job actually affects them in ways they can't see, should be implemented.

My survey also asked respondents what were the biggest things causing stress in their job. A majority, up to 50%, in all three organizations cited concerns for personal safety. Another stressor was the excitement of the job with averages around 17%. Regarding job excitement, I feel this is important to look at because these are also chronic stressors that go hand in hand with law enforcement but not everyone has the same capacity to handle these stressors. For example, there is a "zone of stability" and people can function within this zone but when the stimulant/excitement is above or below a person's zone of stability, they will show signs indicative of distress (Anderson, 1995). So, should there be a filter to measure ones zone of stability during the hiring process? This was an unexpected finding of the research and a topic that could be reaserched further to see if agencies are using any such filter and what the long term results are. Couple occupational stress with all of lifes' daily stressors and it can be easy to exceed one's zone of stability. Many studies have identified many stressors that are unique to the law enforcment field but for the sake of brevity, I limited my survey to 10 choices:

a. Concern for personnel safety. Ranked #1

b. Ambiguity of the job (having many laws and decisions to make).

c. Shift work, lack of sleep. Ranked #2

d. Excitement of the job

e. Being exposed to injured and/or deceased persons.

f. Public image of law enforcement officers

g. Dealing with the criminal justice system

h. Personal liability in doing the job

i. Complaints from the public

j. The need to control one's emotions even when provoked

The #1 and #2 rankings above were for all three agencies and the percentages diluted from there. I was trying to get a good cross section broken down by agency but looking at the data, it probably would have been better suited to have one survey sent to all three agencies. Lack of sleep/shift work is clearly an issue and yet good quality sleep is the one of the most important defenses to counter physical and mental fatigue, which was also identified by Elizabeth Scott's research. Lack of sleep did not appear to be much of an issue early in my career as I found I could adjust easier as compared to when I got older.

That is what I thought but looking back, I now realize I was putting my body through a lot of stress and was actually putting work first and everything else second. I noticed as I got older, these late-night shifts were harder to recover from, if at all. This cyclical pattern of shift work coupled with lack of sleep and job stress actually put physical stress on my body as cited previously, that I was not aware of. However, it is not just the shift work that puts our bodies into compromise. The things we got involved in during our shifts were actually stressful and it is hard to leave the stress at work; it usually comes home with you. All those highs and lows I now know have taken a toll on our bodies.

I also wanted to know if respondents were really aware of the stressors of the career prior to joining. A vast majority, about 83%, did not know about it before joining. This high statistic speaks for itself but the key to this response is awareness. This particular question is designed to let fellow law enforcement officers know that there are physiological effects that their careers are placing on their bodies without their knowledge. The awareness may spark additional research to expand on the topic or help law enforcement personnel try to develop their own program to thwart the effects of these job-related stressors. Individuals and departments may even adopt better programs to address job stress. For example, an FBI Bulletin recognized that departments should use professional sources to help employees incorporate a wellness program that will last a lifetime (Shell, 2005). It even added that these lifelong wellness commitments may create some benefits such as lower insurance premiums, fewer early retirements and fewer work-related injuries.

The follow up question asks why respondents stay in this profession now knowing the additional risks. A majority, about 65%, choose to stay in it to serve others and 26% for the challenging career. So, what does this response mean? This could lead to further studies but if a majority of law enforcement officers stay in it despite all the associated risks, it appears that the law enforcement professionals are willing to risk their own well being to serve others. This is no real surprise to me because that is how I have felt about it coupled with the challenging career aspect and am proud to know that so many others feel the same way. However, that desire/passion for the job feeds the cyclical pattern where our immune system gets caught in the stress hormone loop that Hoolihan and others pointed out in their research. Short of a new medication to address the unstable hormones and pro-inflammatory cytokines, one can understand why legislators acknowledged the peculiarities of this profession and afforded a special risk retirement.

I also asked if the special risk retirement was a significant factor to stay in this profession in lieu of all the effects of stressors and there was an overwhelming

response indicating that is was. This may come as no big surprise but when you look at the big picture, such as quality of personnel hired and retained, this can play a big role in costs to operate and do business. It is no surprise that having to train new people to replace those who leave the job is an expense that we all have the burden to bear. Additionally, one of elements of the legislative report was that turnover would be reduced and the public could also benefit by having younger law enforcement officers (Legislature, Special Risk Retirement Program of the Florida Retirement System, 1976). Based on the responses I received, the special risk retirement is a significant factor in retaining personnel. One can also draw some comparisons to the military where there is combat pay. Was the shorter military retirement of 20 years based on similar circumstances? This may be a topic for another research paper.

Captain Chris Roszkowiak has worked for the Florida Fish and Wildlife Commission for over 20 years. He was a patrol officer and Lieutenant in southwest Florida before promoting to Captain. He is currently a field operations Captain overseeing several counties in the north central part of the state from Kissimmee to Daytona.

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Appendix

SURVEY:

1. **How many years do you have in Law Enforcement?**
 - a. 1 – 5
 - b. 6 – 10
 - c. 11 – 15
 - d. 16 –plus

2. **What do you believe is the main cause for a shorter life expectancy of law enforcement officers?**
 - a. Cancer
 - b. Diabetes
 - c. Suicide
 - d. Coronary/heart

3. **Do you think/feel that being in a constant state of hyper vigilance in the law enforcement profession causes job stress?**

4. **The body's reaction to chronic L.E. stress over a period of time can cause an increased risk of:**
 - a. Cancer
 - b. Heart disease
 - c. Cirrhosis
 - d. Diabetes
 - e. Ulcers

5. **What do you feel is the biggest chronic job stressor in your law enforcement position?**
 - a. Concern for personal safety
 - b. Ambiguity of the job (having many laws and decisions to make)
 - c. Shift work, lack of sleep
 - d. Excitement of the job
 - e. Being exposed to injured and/or deceased persons
 - f. Public image of law enforcement officers
 - g. Dealing with the criminal justice system
 - h. Personal liability in doing the job
 - i. Complaints from the public
 - j. The need to control ones emotions even when provoked

6. **What do you believe is the PRIMARY effect of chronic job stress on the body?**
 - a. High blood pressure leading to coronary issues
 - b. Stress hormone level changes that cause the body to be physiologically unbalanced
 - c. Hypertension leading to high blood pressure
 - d. None of the above

7. **Did you know that studies on law enforcement officers have shown that they are more likely to suffer various diseases such as diabetes and cancer due to chronic job related stress as a result of HORMONE LEVELS in the body becoming unstable?**

8. **Were you aware of these not so obvious health effects from chronic job stressors for the law enforcement profession prior to joining?**

9. **Knowing the job risks and stressors, why do you choose to stay in law enforcement?**
 - a. Family history
 - b. Desire to help others and serve the public
 - c. Excitement
 - d. Want a challenging career

10. **Knowing the job risks and effects of job stressors on the body, does the law enforcement Special risk retirement play a significant factor in your decision to stay in law enforcement?**