

**The Bill Blackwood
Law Enforcement Management Institute of Texas**

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**A Study of the Cost Effectiveness in Implementing a Physical Fitness
Program in a Law Enforcement Agency**

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**An Administrative Research Paper
Submitted in Partial Fulfillment
Required for Graduation from the
Leadership Command College**

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ABSTRACT

The health of the American population has recently come to the forefront as concerns regarding obesity and its related issues have arisen in numerous studies that have garnered media attention. Being overweight can cause diabetes, heart conditions, high blood pressure, as well as problems with a person's muscular and skeletal systems. As police officers are a part of the general population, the same problems have surfaced within their ranks. In addition to health issues that result from being overweight, recent studies suggest that because of the nature of police work, long hours, disruptions of sleep habits and bursts of adrenaline, the life expectancies of police officers are much less than that of the general population.

Literature suggests, very strongly, that exercise reduces the effects of many issues related to police work and will reduce the occurrence of obesity and its related health issues. Literature also suggests that improvements can be accomplished in the general mood of those that exercise routinely. Therefore one may conclude that a police agency can only benefit from implementing a fitness program for its officers as well as encouraging its civilian employees to exercise as well.

In implementing a fitness program, a police agency must weigh the costs involved. It can be daunting when one considers the cost of a possible rise in overtime, or sick time as a result of injuries incurred during exercise. Also, police agencies are always concerned with the possibility of civil litigation. However, if enacted properly, a police agency can reduce its civil liability through a fitness program. Also, the initial costs of a fitness program should be outweighed by having healthier employees who utilize sick time and medical insurance less.

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INTRODUCTION

Traditionally one's law enforcement career began with a written examination to evaluate the applicant's aptitude for learning the laws the applicant is hoping to enforce in his chosen career and the rules by which he is expected to follow in enforcing those laws. The applicant has also been expected to pass a physical fitness test to evaluate the applicant's strength and stamina. If hired, the applicant would be expected to successfully complete instruction at a training academy. While in the academy, the new recruit, would be subjected to intense academic training and rigorous physical training in preparation for the demands to be placed on him in the future.

Presently, the officer is required to attend in-service training to maintain his knowledge of the law and to be apprised of changes in the law. The officer is also required to attend training in the use of his firearm to maintain a level of proficiency. However, officers are not required by the state, or by many local law enforcement agencies, to maintain even a minimum standard of physical fitness. In numerous law enforcement agencies and law enforcement academies across the state, physical fitness testing and/or training are not included in the hiring process or training of new recruits.

Staying physically fit is not just important to law considered 97 million American adults, more than one out of three, to be overweight. (National heart, Lung and Blood Institute, 1998) enforcement officers, but Americans in general. With that in mind, consider that people who are sedentary and/or obese are admitted to the hospital with greater frequency and are more likely to have frequent pain associated with various chronic disease, such as arthritis and cardio pulmonary disease. (S.N Blair and S. Brodney, 1999) Couple that with the odd hours worked by law enforcement officers, poor dietary habits of officers, partially caused by those odd hours, and

the hours of relative inactivity interrupted by sudden, sometimes life threatening, activity, officers indeed have a need for maintaining physical fitness.

In addition to the obvious health benefits of physical fitness, fitness improves mood, sleep habits, and mental sharpness. These improvements benefit both the officer and the department. A well rested, mentally sharp officer makes better decisions while on calls and will be more productive between answering calls.

Methods of inquiry for this study will include surveys of Texas law enforcement agencies of various sizes and locations. The survey will be provided to representatives of law enforcement agencies attending the Leadership Command College, Module I, January 25 through February 13, 2004 and other law enforcement agencies. Literature will be reviewed and analyzed from the fields of sports fitness, law enforcement, physiology, and personal development. Literature will include resources from the Sam Houston State University Library, periodicals, professional journals and electronic sources such as the internet. Interviews of personal trainers and kinesiology professionals may also be included.

It is expected that this research will reveal that a physical fitness testing program, either mandatory or incentive based is financially feasible for law enforcement agencies. It is also expected that conducting a pre-employment physical fitness exam will benefit a law enforcement agency without subjecting that agency to possible liability. Law enforcement agencies will benefit by having healthier, more alert officers on patrol and by having recruits that are better prepared for both the rigors of a police academy and the emergency situations that arise as a result of the very nature of their chosen profession. Finally, and possibly most importantly, citizens will benefit by having officers that will be better able to respond to their needs, both in emergency and non emergency situations.

REVIEW OF LITERATURE

A review of the available literature reveals that, as expected, physical fitness offers benefits beyond improving strength and speed. Those who maintain a healthy fitness program see a gain in overall health, both mental and physical. Also, officers who maintain physical fitness will see an improvement in public image and performance. Officers' health will improve with a higher level of fitness, which correlates to reduced health care cost for both the officer and the police department.

A recent publication of the ICMA (International City/County Management Association) IQ Report revealed justifications to improved physical fitness among police officers as well as firefighters. The IQ Report stated that improved job performance, public image, employee health and health care cost containment were all benefits to increased fitness among public safety workers. Police officers are expected to quickly adjust from seated positions to perform dynamic, physical actions without hesitation. Failure to perform puts the officer, other officers and the public in danger (ICMA IQ Report). The IQ Report also states that, "Many taxpayers go through life having hardly any contact with public safety personnel, and their views of the police department may be affected more by the appearance of the officer directing traffic than by the latest crime statistics."

Regarding employee health, a police officer is 21 times more likely to die of heart disease than at the hands of a criminal (Devallis Rutledge). Furthermore, among the general population, it has been found that mortality rates among the obese are considerably higher than those who maintain an appropriate body weight. (Duncan, Vaitkus, and Barko, 2000). As one might guess, there is little argument against exercise among health care professionals or the general public. It

is accepted fact that through exercise, one can expect to live a healthier life than one without exercise. If this is true, then why do we find that there are many people who don't exercise or refuse to even think of beginning an exercise program. We must look to institutionalize the thought process to make our officers more healthy. Actions must occur at the organizational and institutional levels (Duncan, Vaitkus, and Barko, 2000).

Officers become fit enough to perform the essential physical tasks of the job safely and effectively by participating in a fitness program (Collingwood, Hoffman and Smith, 2003). Furthermore, physical performance testing is a tool to measure if the program is having the desired results (Collingwood, Hoffman, and Smith, 2003). Taking the aforementioned information regarding the reduction in heart related illness as well as the possible reduction in injuries occurring on the job into account, one can only deduce that if a department implements a fitness program in general, a reduction of sick time and worker's compensation claims will follow. However, there have been studies that, excluding those at the highest fitness levels, more fit police officers actually used more workers' compensation dollars than less fit officers (Boyce, Hiatt and Jones, 1992). In their study, Boyce, Hiatt and Jones (2009) found that absentee rates are related to so many variables that it is very difficult, if not impossible, to prove that increased fitness has any effect on workers' compensation claims.

As with fitness being universally regarded as improving the overall health of individuals, there is little if any argument stating that fitness will not improve the overall productivity of an officer. Performing emergency activities safely and effectively requires a level of conditioning that cannot be achieved without a structured and vigorous exercise routine. Regular maintenance of the public service employee is critical (ICMA IQ Report). Also, it was learned during LEMIT, Module II, occurring during the dates of October 10 –October 29, 2004, that exercise

releases endorphins and other chemicals into the body and brain that keep the individual more alert and reduces fatigue. According to the instructor, , once the body becomes accustomed to exercise the body will feel more energized and prepared for daily activity. In keeping with this theory, it is easy to transfer this knowledge to the time spent on-duty by a police officer. Many hours of an officer's shift is spent patrolling which is a static activity that requires little activity. As stated earlier, the officer on patrol is, at a moment's notice, required to go from a static activity to one that is both physically and mentally demanding. An officer that is not fit and does not exercise, one would reason, would have a slower reaction time to the physical demands of some calls than an officer that is reasonably fit and performs some sort of exercise routine.

A review of the literature shows that not only public safety employees, but the population in general benefits from exercise and increased fitness. From this other questions arise, the legality of requiring officers to maintain a certain level of fitness and that of compensation of those officers. One question that has arisen has been that of compensating officers for fitness training in preparation for a fitness testing by their department. According to the FSLA, training programs need not be counted as working time only if four criteria are met, namely: it is outside normal hours, it is voluntary, not job related and no other work is concurrently performed (U.S. Dept. of Labor). At this juncture of this research, it is difficult to determine if this applies to the mandatory passing of a fitness examination of police officers. Further research will need to be conducted to correctly answer this question. It stands to reason however, that if the passing of a fitness examination is not mandatory and, the failure to pass the examination has no negative bearing on the officers employ, any training involved for the examination would be voluntary, not job related as only some sort of reward would be offered, it would be outside normal hours, and no other work would be concurrently performed. In speaking with officers regarding this

issue, an informal survey, it has been found that rewards often come in the form of additional pay or the offer of compensatory time if the testing of officers is incentive based.

Requiring officers to maintain a level of fitness is legal according to U.S. v. City of Wichita Falls a court case in 1988. In their decision, the court held that the city could conduct physical assessment tests for persons seeking employment with the police department; additionally, the training academy could require physical agility testing after recruits had entered the academy. Additionally, in Parker v. The District of Columbia, a court case in 1988, the court found the department to be liable for the shooting of a suspect during his arrest due to the officer not being physically fit and the department for failing to maintain a certain level of physical fitness for their officers. These two court decisions not only show the courts are in support of officers maintaining physical fitness but they seem to lean toward requiring officers to maintain physical fitness.

To pass the legal muster for physical fitness testing, departments must show their chosen test is “valid”. The Equal Employment Opportunity Commission has defined three acceptable validation strategies when determining job relatedness. (Piant, 1995)

1. Content Validity – The content of the test is the same as that specified by the job.
2. Criterion Validity – The test should predict with some accuracy an officer’s ability to perform a task.
3. Construct Validity – The test measures the underlying factors that enable an officer to perform a task. (Piant, 1995)

A department may use one of three ways to validate a test. The least expensive way to validate a fitness test is to cite what other agencies are doing, reviewing job descriptions, and cite societal trends in the current fitness and health movement. (Collingwood). An intermediate step is to

conduct a job analysis using rating groups of officer incumbents, whereby both criticality and frequency are assessed. (Collingwood). The most expensive validation is to conduct an ergometric job task analysis to assess the actual energy cost and strength demands performed by law enforcement officers. (Collingwood).

METHODOLOGY

The question at hand is the feasibility of implementing a physical fitness program in a law enforcement agency. In researching the feasibility of a physical fitness program, one must take several questions into account. First, is having a physical fitness requirement for officers, both current officers and applicants for positions within the agency legal? Does a physical fitness program open the agency up to possible liability issues due to ADA laws? Also, one must take into account the cost of the program itself. If the program is mandatory, meaning that if officers do not pass they are subject to disciplinary measures, is the agency required to provide the officers with time to work out or access to a gym or exercise equipment at no cost to the officers? If officers are injured during training for the testing to prove fitness, will the agency be liable for the time off the officer must take to heal and the payment of associated health care bills? If the program is incentive based, meaning that if officers are rewarded for passing minimum fitness standards, will those rewards cost the agency too much in these budget conscience times?

The hypothesis is, while there may be a cost to implementing a physical fitness program for a law enforcement agency, the benefits far out way those costs. Through having healthier officers, both mentally and physically, the agencies will find reduced costs in sick time, worker's compensation claims. Furthermore, there will be unseen benefits to the agency. As the officers will be in better physical condition, there should be a better attitude toward the agency from the

community. The community the officer serves expects officers to be in good physical condition, more so than in other professions. Because of that expectation, officers that arrive at calls for service that are in poor physical condition, in the eyes of those citizens, shows a lack of caring about his profession and therefore a lack of caring about the call they are investigating.

The method of inquiry for this research paper is a written questionnaire. In the questionnaire, the agency was asked questions regarding if their agency has an ongoing physical fitness requirement for its officers and/or applicants. If the agency does have an ongoing fitness program, is the passing of periodic fitness tests required for continued employment or is the passing of periodic fitness tests by the officers rewarded in some manner, additional pay, additional paid time off, etcetera? Furthermore, if the agency has a fitness program, does the agency provide time or equipment for the officers? Additionally, if the agency has a fitness program, has the agency seen a benefit through improved citizen attitudes toward the agency? Finally, has the agency seen a benefit in reducing lost time as a result of the fitness program?

The survey document was provided to the twenty-two attendees of LCC Module II held at Texas Women's University in Denton, Tx. beginning on October 10, 2004. Those attending the module represent agencies from around the state of Texas as well as one representative of the U.S. Marshall's Service. Additionally, a survey questionnaire was provided to the attendees of LCC Module I at Texas A&M University in College Station, Tx. Beginning in January of 2004.

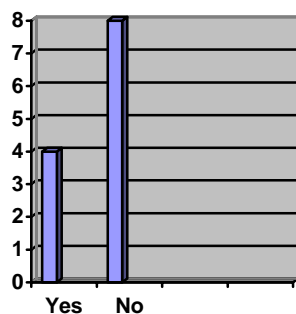
FINDINGS

The findings of the survey that was provided to law enforcement agencies within the state of Texas are inconclusive. A questionnaire was sent via email to representatives of approximately 40 agencies. Those representatives are ones who attended LCC Modules I and II in College Station, Tx. beginning in the month of January, 2004 and the month of October,

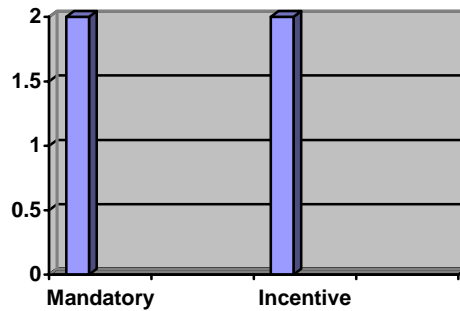
2004 respectively. The questionnaire contained 8 questions regarding fitness programs within law enforcement agencies. (See Appendix I) In summary, the questions ranged from if the agency had a physical fitness program, how the program had been implemented, response to the program from both officers and the community, and have there been any studies regarding the physical fitness program.

From the survey it was determined that physical fitness programs do not enjoy a wide spread following in Texas. Not even half of the respondents indicated that their agencies conduct an on-going fitness program. Furthermore, those with on-going fitness programs have not followed up the programs with any studies to determine the financial benefit to the department as a result of the programs they have enacted. Of those with fitness programs in place, a majority found the response from the officers has been generally positive. Half of those that responded that their agency had a physical fitness program indicated that their program was mandatory, indicating that officers could be punished for not passing a minimum required score on their tests. The other half of the respondents indicated that their agency had enacted an incentive or voluntary program indicating that no negative response from the agency occurs if the officers chose to not maintain a minimum level of fitness.

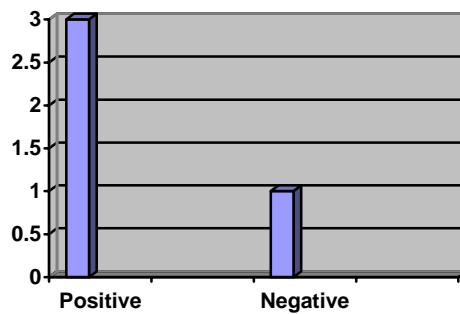
The below graph depicts the number of respondents that have a fitness program vs. those that do not.



The below graph depicts the number of those with mandatory fitness programs vs. those that have incentive based programs.



The below graph indicates the officers' response to the fitness programs.



DISCUSSION

The purpose of this study has been to determine the feasibility or cost effectiveness of instituting a continuing physical fitness program for law enforcement agencies. A continuing physical fitness program has been broken into two types, one consisting of incentives for officers that pass a series of tests that measure an officer's level of fitness and one that requires the officers to pass a series of tests to measure the level of fitness of the officers. Furthermore, the study was to have shown that a similar, if not exactly the same, test would be feasible for applicants to a police agency. The hypothesis, as stated before, was that the costs required for

providing the physical tests would be far outweighed by the cost benefits of having more healthy officers. In calculating the cost of having such fitness tests, one should consider the benefits of having officers that are more alert, have better community relations and possibly less use of force issues.

In reviewing the literature available on the subject, I have found that enacting a fitness program within a police agency should provide the previously listed benefits. It is accepted common knowledge that exercise makes one healthier. Through exercise, many of the functions of the body improve such as the immune system, the cardiovascular system, the muscular system, the skeletal system and the neurological system. Aerobic exercise improves the strength of the heart and therefore the circulation. Strength training strengthens the muscular system which improves metabolism and protects the skeletal system. All exercise reduces body fat and improves the levels of cholesterol, which can lead to heart disease and improves the general feeling of well being.

Literature also revealed that, as long as the tests reasonably exemplify the duties required of law enforcement personnel, fitness tests are accepted by the courts. At this point in the research, this researcher has been unable to determine the possible costs an agency may incur as a result of the time and money spent by officers in preparing for the fitness testing.

In providing an incentive based program, law enforcement agencies will, more than likely, avoid some negative connotations related to fitness training. Incentive based programs, because only the officers that wish to participate will participate, should negate negative morale issues that result from changes made in the organizations. Furthermore, incentive based

programs should avoid problems arising from officers suing or complaining to the agency's governing body or arbitration board as, again, the program is voluntary.

While, from the information that was available, a mandatory program passes the legal test, a dip in morale should be expected if implemented. Officers, as any other employees, do not like change in the workplace. Furthermore, the question of requiring officers to maintain a level of fitness is still relatively new and new court decisions are to be expected as a result of officers with lengthy tenure are expected to exhaust all legal avenues before accepting the fitness program.

The survey conducted for research of this subject proved to not necessarily support the hypothesis regarding the financial benefits of implementing a physical fitness program within a police agency. Of approximately 40 survey instruments disseminated, only 12 were returned. Furthermore, of the 12 that were returned, only 4 of the respondents' agencies were conducting a physical fitness program. Of those departments, none had conducted any studies to determine the cost benefit of the programs. As a result of the poor response to the survey and the fact that none of those that responded had conducted any feasibility studies regarding their programs, the research cannot support the original hypothesis regarding the feasibility of a fitness program within a police agency. However, the literature does in fact support the financial gains a department would see through the implementation of a physical fitness program.

This study is relevant to law enforcement in that many agencies are finding themselves with officers that are possibly unsafe to themselves and other officers they may work with. Additionally, those officers, due to their lack of fitness, may be a danger to the community they serve. Finally, officers who have allowed themselves to be physically unfit, may be forced to use more force against suspects than would be necessary if they were fit, opening up the agency

to possible lawsuits and community distrust. Healthy officers, as with employees in the private sector, are more of a benefit to their employers and their customers, the citizens.

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Appendix I

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Fitness Program Survey

1. Does your agency have a physical fitness testing program? (If no, skip to end)
yes_____ no_____
2. If so, is the program mandatory or incentive based (rewarded if the officer passes)?
mandatory_____ incentive_____
3. Has there been any studies at your agency to determine any savings due to officers using less sick time or worker's compensation since the enacting of the program?
yes_____ no_____
4. If there has been a study, what were the results?
less_____ no difference_____
5. Has there been any studies to determine if complaints against officers have been reduced since the enacting of the program?
yes_____ no_____
6. If there has been a study, what were the results?
less_____ same_____ more_____