CURRENT PHYSICAL FITNESS STANDARDS OF POLICE OFFICERS

by

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HONORS THESIS

Submitted to Texas State University in partial fulfillment of the requirements for graduation in the Honors College May 2020

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ACKNOWLEDGEMENTS

I would like to thank the Austin, Lubbock and New Braunfels police departments for their participation in this study. I would also like to thank Dr. Matthew McAllister for all your leadership and guidance throughout this project. This thesis would have not been possible with out you.

ABSTRACT

Police officers are often the on front line in any community. They are there to keep the community safe in any situation and are usually first on the scene in any incident. However, contrary to popular belief police work can often be sedentary with a great deal of work related stress. This combination can often lead police officers to stop maintaining their physical fitness which can then leave them at risk for developing cardiovascular disease, metabolic syndrome, hypertension, alcohol and drug use (Williams & Ramsey, 2017). This can be detrimental to their career and overall health.

To combat this many large corporate businesses have invested in corporate wellness programs to keep their employees healthy. Through these programs, companies have been able to reduce health care costs and decrease absenteeism (Williams & Ramsey, 2017). This being said, police officers might also benefit from these wellness interventions to keep them physically fit long-term. This study aimed to assess the physical fitness standards of law enforcement through an online survey targeting the current physical activity of police officers. The hypothesis of this study was that police officers are not receiving enough physical activity necessary for their wellbeing in law enforcement and that they will be in favor of wellness intervention programs. This might lead to the implementation of wellness programs in more law enforcement agencies in Texas and programs that are specifically geared towards their needs.

I. BACKGROUND

As we know, police officers are a large part of a community. They are responsible for keeping their community safe and healthy for all of those who live there. However, there is often a misconception about police officers especially when it comes to their own fitness. Police officers are portrayed as those who are always busy chasing suspects and jumping over fences as seen as in the media but in reality their work is quite sedentary (Maher, 1984). Due to this, police officers are susceptible to increased risk of cardiovascular disease and obesity (Magnavita et al., 2018).

In a law enforcement career there are multiple tasks that one has to go through in various situations. As an on-duty police officer there might be times where they will need to perform physically demanding tasks that require components of aerobic fitness, strength, power and endurance (Quinones). Thus, suggesting that officers need to be in good physical condition in case of these situations. Another component of physical fitness is the stress police officers often face while on the job. Due to the nature of police work officers might be faced with chronic stress which can also be linked to weight gain and an increase risk of developing cardiovascular disease (DeNysschen et al., 2018). This is important to mention when thinking about the fitness of police officers as police work is both physically and psychologically demanding (Magnavita et al., 2018). Nonetheless, it is important for police officers to not only focus on physical training for job skills but to also create an atmosphere that is open about wellness for all aspects officers health and wellness (Mattos., 2010).

In order to keep employees healthy, large corporate businesses have invested in corporate wellness programs where they bring in exercise science professionals to create

programs for their employees in addition to creating an atmosphere that values health and fitness. In fact, 92% of businesses with 200 or more employees offered wellness programs for their employees in 2009 (Williams & Ramsey, 2017). These programs differ based on the company but overall include health fairs, weight-loss challenges, exercise classes, nutrition counseling, stress management and lifestyle evaluations (Williams & Ramsey, 2017). With the nature of police work, corporate wellness like programs might be helpful in terms of keeping with higher fitness standards and coping with work stress.

Health and wellness programs often encapsulate physical, mental and emotional wellness and with physical conditioning being a higher priority as contributing to overall health. Many studies have also looked at fitness testing within police departments with many of them looking into the Cooper fitness tests. These tests are designed to assess cardiovascular health, flexibility, muscular strength, muscular power and muscular endurance typically through a 1.5 mile run test, vertical jump test, push-up test, sit-up test and sit-and-reach test (Lockie et al., 2019). However, there are mixed reviews on these testing standards but they all agree that physical fitness is important when it comes to police work and should be prioritized more than what is currently.

Being that many officers report lack of time as a barrier to keeping with a regular fitness routines police officers might benefit from corporate wellness programs in house as compared to that off site (Williams & Ramsey, 2017). These programs should be geared specifically towards police officer needs such as technical skills that are needed in physical situations these skills include the need to "pull, carry, drag, jump, crawl, sprint, use force and sustain pursuit of a suspect" (Lokie et al., 2019). These movements require

the need for muscular strength, endurance along with flexibility and cardiovascular endurance which can be improved with progressive physical training. In a pilot study involving college students wanting to enter the police force, a 14 week physical training intervention was implemented to improve upon the main areas of physical fitness. Upon completion of this program the participants had improvements in cardiovascular fitness, strength and endurance all meant to translate to the physical assessment test and into their career (DeNysschen et al., 2018). This shows that physical intervention programs do offer benefits to police officers and can be useful especially to those who feel a lack of motivation or feel they do not have enough time in order to work out on their own.

Therefore, having in-house physical fitness and wellness programs might be able to help police officers maintain a good level of physical health throughout their career. Thus keeping them able to perform essential tasks related to the field. This study is focused on a self-assessment of current physical fitness standards of police officers in the central Texas area. The hypothesis of this study is that police officers are not as physically fit as needed in a career in law enforcement and that they will be in favor of wellness programs in their own agency.

II. METHODS

To conduct this study, an online survey was created to assess the current physical fitness standards of police officers. The Survey was approved by the Texas State Institutional Review Board (7082) and consisted of twenty questions all aimed at the physical activity of police officers. The questions asked about age, weight, and physical activity levels along with other lifestyle questions (Appendix A). The survey was

distributed online through email via Qualtrics to the Austin, Lubbock and New Braunfels police stations.

III. RESULTS

From the survey a total of 20 responses were received. However, 2 of the responses were left unanswered for a total of 18 data sets. There were a total of 17 male participants and 1 female participant. The average age of the participants was 37 years old, with the oldest being 67 years old and the youngest participant being 25 years old. As for experience in law enforcement 39% had between 0-5 years' experience, 17% had 6-10 years' experience, 28% had 11-20 years' experience, and 17% had 20+ years' experience. Lastly, all participants stated that they currently engage in physical activity.

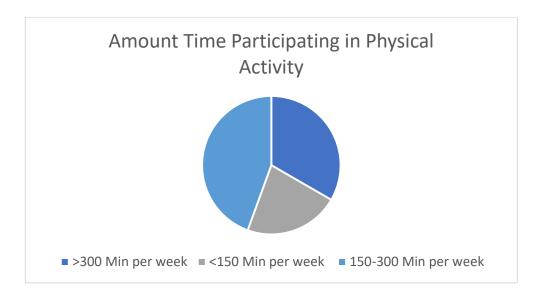


Figure 1.

For time participating in physical activity, 44% of participants claimed to get between 150-300 minutes of physical activity a week, 33% stated they get over 300 minutes of physical activity a week, and 22% stated to get less than 150 minutes of physical activity a week.

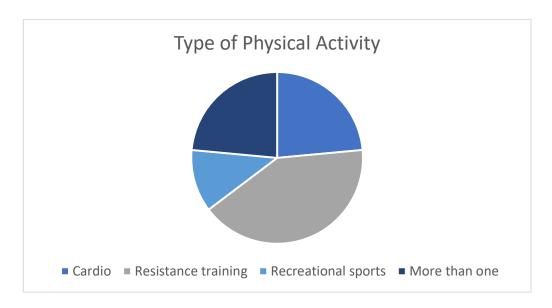


Figure 2.

For type of physical activity, 24% of participants participated in cardio as their exercise, 41% state resistance training, 12% state recreational sports and 24% claim to do more than one of the previous options.

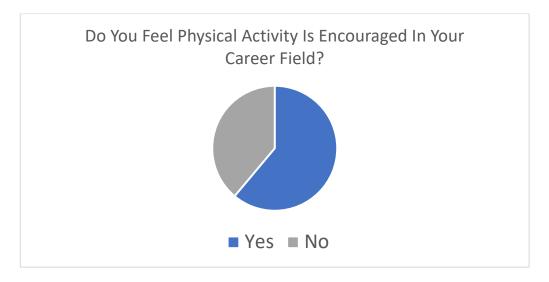


Figure 3.

All of the participants stated that staying active is important in their career field. However, 39% state that they do not feel physical activity is encouraged, 61% state that yes it is encouraged in their career field.

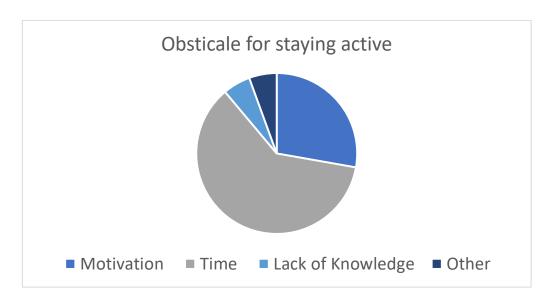


Figure 4.

As for the biggest obstacle to staying active, 61% of officers stated that time was the largest obstacle to staying active, 28% state motivation, 6% stated lack of knowledge and the other 6% stated other which was department limitations.

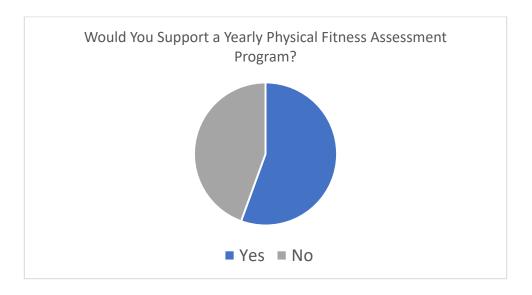


Figure 5.

When asked about a yearly physical fitness assessment, 56% of participants stated that yes they would support a yearly fitness assessment and 44% stated that no they

would not support a yearly physical fitness assessment. When asked why, those that were in favor for the assessment their reasoning was that physical fitness is important to their career and is essential for the job. For those who were against the assessment the main reason was that it might jeopardize their career.



Figure 6.

As for support of a health intervention program, 72% stated that yes they would support a health intervention program and 28% stated that no they would not support a health intervention program. Another 62% state that it would be beneficial for their career.

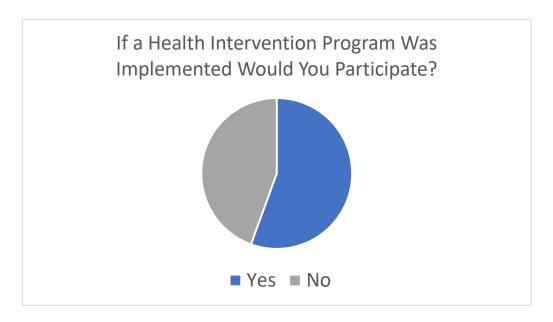


Figure 7.

Lastly, when asked if the officer would participate in a health intervention program if one was implemented 56% state that yes they would participate and 44% state that no they would not participate in the program.

IV. DISCUSSION

From participation in this study, many of the results were in favor of health and wellness programs for police officers in Central Texas. These health intervention programs have already been implemented in other police stations and will hopefully transpire to the development of programs and testing for officers in Central Texas. For example, a Florida police department introduced wellness programs as well as on-duty time to exercise and resulted in an increase of performance on yearly fitness evaluations (Police Executive Research Forum, 2018). This is also supported by a 6-month health intervention program designed specifically for officers and showed an increase in cardiovascular health, muscular fitness and a reduction in body mass index (BMI) (Rossomanno et al., 2012). However, the study also showed that without continuation of

supervised exercise programs many of the participants stopped exercising which resulted in a return to baseline fitness levels.

Furthermore, while many officers stated that they did receive enough physical activity, 22% reported doing less than 150 minutes of physical activity a week.

According to the U.S. Department of Health and Human Services, it is recommended that adults receive 150 minutes of physical activity a week. However, based on the results 22% of officers did not meet the minimum guideline to maintain weight which if combined with high stress and larger caloric intake can result in unhealthy weight gain. This might be due to a variety of factors such as age, rank and lifestyle. For example, a study tracking the physical activity of officers found that age, rank and BMI was inversely related to the activity level of the officer (Ramey et al., 2014).

Additionally, 39% of the participants from the survey stated that they did not feel that physical activity was encouraged in their career. This might be due to the department limitations as stated by one participant in the survey which might be a common theme in other departments as well. To combat this, a station in San Diego moved their wellness center from an off-site location to one located in headquarters in order to "normalize wellness" at their department (Police Executive Research Forum, 2018). This on-site health and wellness center idea might be a useful tool for the Texas departments in order to help emphasize the importance of physical activity in addition to making it more accessible.

Additionally, due police stations being governed by predetermined budgets, funding for these health programs might prove difficult if there is no participation (Williams & Ramsey, 2017). Therefore, continuation of wellness programs in police

officers is determined by participation along with a decrease in health care costs as seen in that of corporate wellness programs implemented in large corporations (Police Executive Research Forum, 2018). Furthermore, with many participants stating that time and motivation were the largest obstacles when being physically active, health intervention programs should be able to provide the on-duty time and resources to be active thus, improving physical fitness over time.

In further support for these health programs, 72% of the participants stated that they would support a health intervention while another 62% stated that health intervention programs would be beneficial in their career field. This is supported by other research where they found a reduction in sick days, lower rates of disability, injuries and reductions in officer obesity (Police Executive Research Forum, 2018). Lastly, with 42% of the participants stated that they would not participate in health intervention programs if one was available. This might be due to the large number of younger participants that were featured in the survey as well as many of them being already physically active and therefore might not feel they would benefit from these programs.

The limitations in this study would be that this survey had a relatively small sample size and focused on one area of Texas. Consequently, it is difficult to say that other stations in the central Texas area would feel the same way about health intervention programs as they might have more or less resources than those mentioned in the survey. Also, there was a lack of equal participation between male and female officers along with a lack of variation in age. Lastly, this is a self-reported survey focused on the physical activity of officers and thereby meaning there is no accurate way to determine the physical activity of the officers without further research. If this study was to continue

beyond this self-assessment survey it would be might beneficial to implement a trial program to see if wellness programs would actually impact to these police departments.

V. CONCLUSION

Using the data collected in this study, this group of police officers seem to be in favor of health and wellness programs and with the proper resources might be able to benefit from these programs in order to improve their physical fitness. Since this study focused on the physical fitness side of wellness the programs implemented should have resources such as exercise instructors, equipment and on-duty time to use these facilities. With the implementation of these physical fitness programs officers will be improve their health, prevent injury and provide a stepping stone for a well-rounded wellness culture in law enforcement.

APPENDIX A

Survey Questionnaire

Current Physical Fitness Standards of Police Officers

Q1. Gender
O Male
○ Female
Q2.Height
Q3.Weight
Q4. Age
Q5. How long have you been in law enforcement?
O-5 years
○ 6-10 years
○ 11-20 years
O 20+ years
Q6. Do you smoke?
○ Yes
○ No
Q7. If yes, indicate number of cigarettes per day.
O Less than 1/2 a pack
O 1 pack
O Greater than 1 pack

Q8. Do you drink alcohol?
○ Yes
○ No
Q9. If yes, indicate the number of alcoholic beverages per week.
C Less than 10
O 10
O Greater than 10
Q10. Do you engage in physical activity?
○ Yes
○ No
Q11. If yes, indicate how much physical activity you engage in per week.
C Less than 150 min/wk
O 150 - 300 min/wk
○ Greater than 300 min/wk
Q12. If you currently engage in physical activity, what types of exercises do you participate in regularly?
Q13. Do you feel that staying active is encouraged in your career field?
○ Yes
○ No

Q14. Do you feel that engaging in regular physical activity is important in your caree field?	r
○ Yes	
○ No	
Q15. What do you think is the biggest obstacle to staying active in your career?	
○ Time	
O Motivation	
Lack of knowledge about proper exercise routines	
Other (please explain)	
Q16. Would you support a yearly physical fitness assessment program?	
○ Yes	
○ No	
Q17. Why or why not?	
Q18. Would you support a health intervention program?	
○ Yes	
○ No	
Q19. Do you feel that health intervention programs will be beneficial in your career field?	
○ Yes	
○ No	
O Maybe	

Q20. If a health intervention program was implemented would you participate?
○ Yes
○ No
Q21. Thank you for your participation!
End of Block: Default Question Block

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