Texas Department of Public Safety

Physical Fitness and Command Presence Testing

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What is the importance of physical fitness testing and command presence testing for law enforcement officers?

The nature of law enforcement unfortunately has lent itself to poor health and fitness levels. There are many instances of health issues in this occupation. Some examples are cited below:

- Law enforcement has of the poorest cardiovascular disease profiles of any occupation.
- Instances of depression are nearly double than that of the general population (12% vs 6.8%)
- Officers are four times more likely to sleep less than 6 hours/day than general population (33% vs 8%)
- Higher percentage of officers were obese compared to the general population (40.5% vs 32.1%)
- Law enforcement officers have a higher rate of metabolic syndrome (26.7% vs 18.7%) (Hartley, et.al., 2016).

One of the ways to determine health disparities is to implement examination/testing protocols to identify individuals with health and mortality issues, as well as to determine current fitness levels. By establishing testing protocols, agencies would have greater assurance of an officers overall readiness and fitness for duty. This could impact the agency in many ways: affecting successful arrests, decreasing workplace injuries, decreasing workers compensation claims, increasing longevity of the force in the agency as well as other benefits. While mandatory testing in the academy can assist with the issues pre-employment, currently standards are not universal across agencies after their hiring date. However, many agencies are on the same platform as the Texas Department of Public Safety (DPS) with their training programs.

- The sedentary nature of police work may tempt police agencies to downplay the importance of physical readiness. However, it is important to recognize that while activities that require physical abilities may be infrequent, they are often critical. In addition, policing must do more to ensure the physical fitness of officers throughout their careers.
- However, results of the study indicated strong support of mandatory physical agility and fitness requirements for new recruits but not incumbents. It is important to note that incumbent officers were the individuals responding to the survey administered in this study. As many as 27% of incumbents admitted they could not pass a common physical

agility test and these physical tasks are not used commonly on the job (Bissett et. al., 2012).

This information is extremely alarming- while we have made it mandatory to have standards in the academy, these standards have not always carried on into the occupational level, nor are they universally accepted by the officers themselves. However, the importance of maintaining standards throughout the law enforcement career should not be compromised.

In your expert opinion, is the TX DPS Physical Fitness Testing Program consistent with generally accepted scientific physical fitness testing options and standards?

- Program components include physical fitness testing demonstrating passing thresholds at the 70th percentile ranking on the 2,000m Row Test, 4 Minute O'Neill Row Test, 500m Row Test, Standard PRT (2 minute crunch test, untimed push-up test and 1.5 mile run) or the Combat Fitness Test which includes three rounds of one minute of each of the following: wall ball, sumo deadlift high pull, box jump or step up, push press, row with each rep counting as one point or each calorie on the row as one point.

In examining the unique aspects of police work, it is important to identify the nature of the job and the physical characteristics are best suited for adequate completion of each task, along with ensuring a decreased risk of mortality and morbidity. It is well documented that much of the law enforcement occupation is sedentary, potentially interspaced with short periods of anaerobic taxing activity. When examining the accepted components of physical fitness (cardiovascular endurance, muscle strength, muscle endurance, flexibility and body composition) it can be noted that there is not an anaerobic component listed. For the general public who are engaged in normal day-to-day activities, anaerobic training is generally not of an essential nature. Once again, due to the unique nature of the law enforcement occupation, anaerobic training is essential component of job performance. Therefore, proper testing should focus on the components necessary for proper job performance and increased longevity and should include testing components to mirror those needs. For example, Beck, et al (2015) found that a simple foot chase test called the Officer Physical Ability Test (OPAT) was correlated with a range of other fitness tests similar to the current DPS physical fitness testing program. When searching for the best possible tests for agencies, it is not possible to predict every activity or action an officer will engage in throughout their career, nor can we know how much force is required to execute a certain action on every occasion. For example, when removing someone from a vehicle, there are several factors that can impact how much force is necessary: the size of the person, strength, body fat level, fitness level, etc. When an arrest is affected, those factors will obviously impact that situation as well. Therefore, testing should replicate the execution of those actions and the individual physiological responses. Utilizing both upper and lower body strength, the ability to continue while holding one's breath (Valsalva maneuver), and immediately experiencing a rapid increase in the heart rate due to the sympathetic stimulation during these activities. It is

extremely important to identify tests that can predict performance in certain key areas. Therefore, the current mandated DPS tests do align with job related activities, and in my opinion the tests align with generally accepted scientific standards.

In your expert opinion, is the TX DPS Command Presence Evaluation Program consistent with generally accepted scientific standards?

Program components include waist circumference measurement thresholds of <35" for females and <40" for males as well as additional tiers for compliance, including options based on height and weight as well as percent body fat with thresholds of up to 18-21% for males and 25-29% for females dependent on age

In my expert opinion, I believe this to be true. The DPS command presence evaluations are consistent with generally accepted scientific standards. A great deal of research has shown the relationship of body composition (including waist measurements) to overall health and increased risk of mortality and morbidity. A lower body fat percentage is well associated with a decrease in all cause mortality.

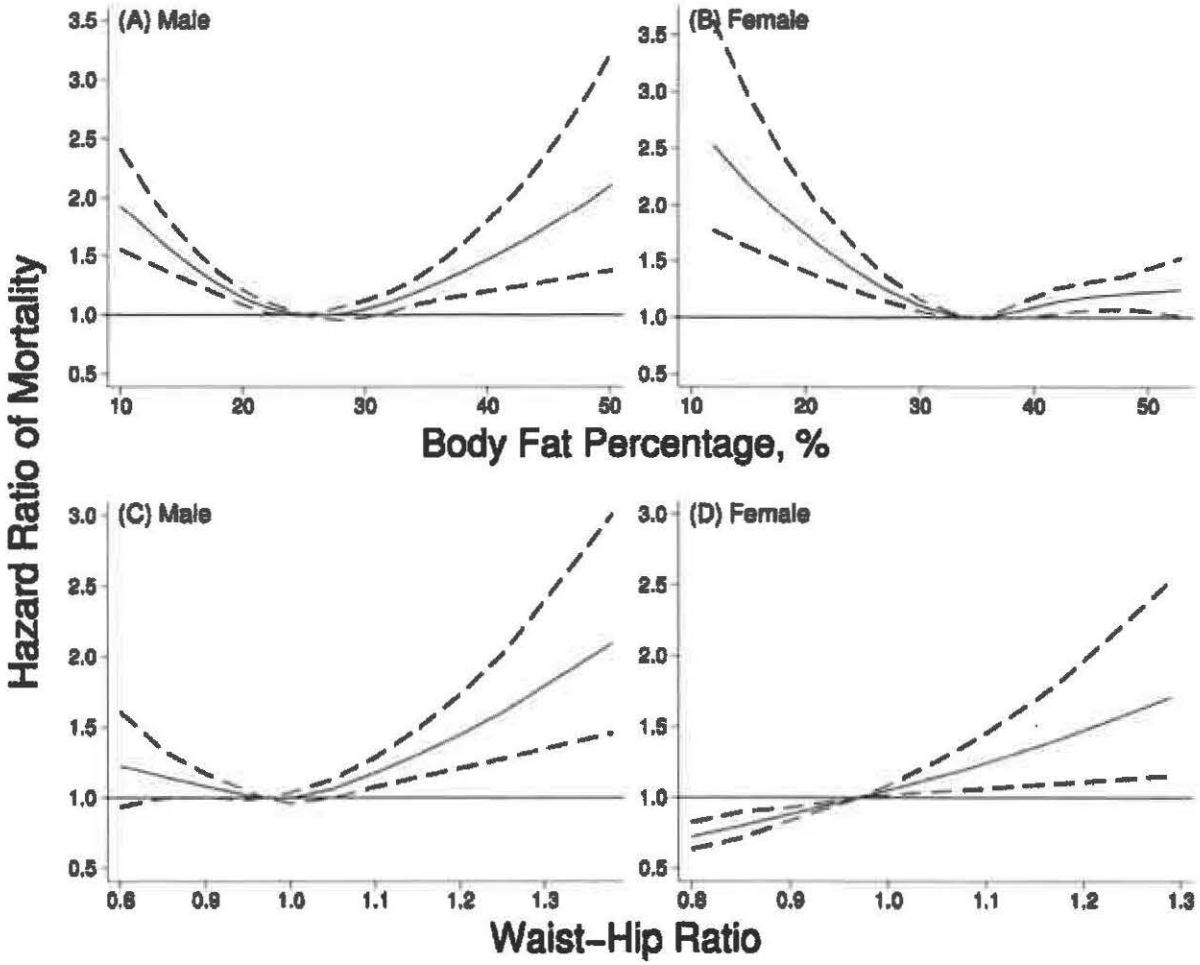

Fig 1. Association between body fat percentage (A and B) and waist-hip ratio (C and D) with hazard ratio of all-cause mortality in males and females, NHANES 1988–2011. Notes: Solid lines and dash lines represent the hazard ratios and their 95% confidence intervals after adjusting for baseline age and ethnicity.

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- Lean body mass was significantly and positively correlated with push-ups, bench press and vertical jump measures
- Increased fat mass was significantly associated with reduced performance on sit-up, vertical jump, 1.5 mile run and VO2max.
- A targeted approach, going beyond just decreasing percentage body fat to also selectively increasing lean mass, should be applied for optimal improvement in physical fitness performance. (Dawes, et al, 2016).

It has been consistently shown in the research that lower body fat percentage will not only positively impact mortality and morbidity rates, it can impact fitness levels and therefore job performance.

References

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