Fit for Duty, Fit for Life? An Analysis of the Health and Fitness of Deputy Sheriffs after Working in Custody
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Published: 01/10/2018

Document Version: Peer reviewed version

Link to publication in Bond University research repository.

Recommended citation (APA):

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ABSTRACT

Deputy sheriffs are typically required to work in custody prior to patrol. The sedentary job demands of custody, and lack of a mandated fitness standard, may influence the general health of deputies and their ability to perform patrol-related tasks. The purpose of this study was to examine fitness characteristics of deputies after working custody. A retrospective analysis was conducted on 60 (37 F, 23 M; age = 33 ± 6.3 years) deputies from one patrol school (Sheriff's Office, Colorado). Health assessments included for male: body mass index (BMI), resting blood pressure, grip strength, sit and reach; push-ups and sit-ups in 60 s; and recovery heart rate from a YMCA 3-min step test as a measure of aerobic fitness. Data were compared to ACSM age- and sex-related norms, as low fitness norms for push-ups and sit-ups. Analysing body fat, 14% of the deputies were classified as good; 43.1% as fair; 28.1% as poor, and 5.7% as very poor. For BMI, 40% were overweight; 20.7% were class I obesity, and 30% were class 2 obesity. For blood pressure, 13.4% of the deputies had normal blood pressure, 13.4% had elevated blood pressure, 3.0% were considered stage I hypertension, 0.67% were considered stage 2 hypertension, and 1.49% were in a hypertensive crisis. Considering grip strength, 10.7% were above average; 21.0% were above average; 31.1% were above average; while 60.8% were poor; for the sit and reach, 1.7% were excellent. 5.8% were very good; 18.7% were good; 28.6% were fair; and 61.9% were deemed needing improvement. When comparing push-ups to other law enforcement agencies, 13.0% were in the 75th–100th percentile, 4.7% in the 51st–75th, and 4.7% in 26th–50th percentile. The same was true of sit-ups from 15.0% were in the 75th–100th percentile, 4.7% in the 1st–25th, and 4.7% in 51st–75th percentile. The same was true for the YMCA test, 5% were above average, 6.7% were average, 21.5% of the deputies were below average: 40% poor, and 26.4% very poor. Very poor: 25% noted poor fitness, deputies rated their health fitness and fitness trends that were below the general population, and poor fitness levels. Agency staff should encourage, and facilitate, the maintenance of health and fitness of deputies working in custody to ensure deputies are fit for duty and duty.

INTRODUCTION

• Upon graduation from academy Sheriff’s deputies are typically assigned to work in a supervisory capacity in custody facilities for several months to potentially several years prior to deployment as a patrol deputy.

• The job demands of working in custody are predominately sedentary and involve the monitoring of inmates and patrolling the facilities.

• Currently, there are no mandatory fitness standards that deputies need to adhere to, and when combined with their sedentary custody assignment, this may negatively influence their general health and ability to perform their patrol job tasks.

• Officers that are transitioning from working their custody assignment to working patrol are given a 3-week refresher course in patrol job duties, policies, and procedures called Patrol School.

• Potentially, if data were to show that deputies who are coming out of working in custody are more likely to have declined in their health and fitness, Patrol School could be utilized to help deputies make changes to halt any declines in fitness or health.

• Therefore, the purpose of this study was to analyze health and fitness data from a single Patrol School class of deputies to determine their overall health and fitness after working in custody.

METHODS

• A retrospective analysis was conducted on data gathered from a single patrol school class of 60 deputies (Male = 48, Female = 12; age = 33 ± 6.3 years).

• Health and fitness assessments included: fat mass measured from a bioelectric impedance analysis device; body mass index (BMI); resting blood pressure; grip strength; sit and reach; push-ups and sit-ups in 60 s; and recovery heart rate from a 3-minute YMCA step test as a measure of aerobic fitness.

• Data gathered were classified according to norms from the American College of Sports Medicine (2), and law enforcement norms were used for push-ups and sit-ups (13).

• Updated blood pressure and BMI guidelines were used from the World Health Organization and the American Heart Association (3,4).

RESULTS

• The results of the comparison to age and sex related norms are displayed in Figures 1-8.

• The data indicated that across all measures, a majority of deputies displayed worse health characteristics than the general population and poorer physical fitness compared to other law enforcement officers.

• The job demands of working in custody are predominately sedentary and involve the monitoring of inmates and patrolling the facilities.

CONCLUSIONS

• For health characteristics, a majority of the class displayed larger than average amounts of body fat (88.1% poor and very poor combined), were classified as overweight or higher (81.67% overweight+), had higher than normal blood pressure according to updated standards (86.67% elevated+), and had poor grip strength (75.86 below average and poor combined).

• When analyzing the fitness characteristics, a majority of the class had poor aerobic fitness as measured by the YMCA step test (88.34% below average, poor and very poor combined) and as Figures 7 and 8 show, performed close to average in the push-up while tending to perform worse in the sit-ups.

• These data indicated that deputies post custody assignment are exhibiting poorer health and fitness characteristics which may impact job performance and quality of life.

• Agencies should attempt to facilitate opportunities for deputies working in jails to maintain their health and fitness.

References