Fit for Duty, Fit for Life? An Analysis of the Health and Fitness of Deputy Sheriffs after Working in Custody
Moreno, Matthew R.; Cesario, Karly A.; Dulla, Joseph; Orr, Rob Marc; Lockie, Robert G.

Published: 01/10/2018

Document Version:
Peer reviewed version

Link to publication in Bond University research repository.

Recommended citation (APA):

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.

Download date: 03 Aug 2019
Fit for Duty, Fit for Life? An Analysis of the Health and Fitness of Deputy Sheriffs after Working in Custody

Matthew R. Moreno1 • Karly A. Cesario1 • Joseph M. Dulla4 • J. Jay Dawes2 • Robin M. Orr2 • Robert G. Locke1
1Center for Sport Performance, Department of Kinesiology, California State University, Fullerton, CA, USA. 2Department of Health Sciences, University of Colorado-Colorado Springs, Colorado Springs, CO, USA.
3Tactical Research Unit, Bond University, Robina, Qld, Australia. 4Recruit Training Unit, Training Bureau, Los Angeles County Sheriff’s Department, Los Angeles, CA, USA.

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 routine, may influence the general health of deputies and their ability to perform patrol tasks. The purpose of this study was to examine fitness characteristics of deputies after working custody. A retrospective analysis was conducted on data gathered from a single patrol school class of 60 deputies. The job demands of custody were predominantly sedentary and involved the monitoring of inmates and patrolling the facilities. 

• The job demands of working in custody are predominateley 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 overall 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.

RESULTS

• 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 (11). 
• Updated blood pressure and BMI guidelines were used from the World Health Organization and the American Heart Association (3,4).

METHODS

• 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.

CONCLUSIONS

• For health characteristics, a majority of the class displayed larger than average amounts of body fat (88.13% 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.

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 predominantly 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 overall 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.