Run To The Hills: The Effects of Academy Training on the Physical Fitness of Law Enforcement Recruits across Three Classes
Mitchell, Peter K; Balfany, Katherine; Dulla, Joseph; Dawes, Jay J.; 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.
Run To The Hills: The Effects of Academy Training on the Physical Fitness of Law Enforcement Recruits across Three Classes

Peter K. Mitchell • Katherine Balfany • Joseph M. Dulla • J. Jay Dawes • Robin M. Orr • Robert G. Locke

Center for Sport Performance, Department of Kinesiology, California State University, Fullerton, CA, USA.
Recruit Training Unit, Training Bureau, Los Angeles County Sheriff’s Department, Los Angeles, CA, USA.
Department of Health Sciences, University of Colorado-Colorado Springs, Colorado Springs, CO, USA. "Tactical Research Unit, Bond University, Robina, Qld, Australia.

ABSTRACT

Law enforcement agencies (LEA) use the academy period to train recruits in the skills needed to undertake the demands of their job. Recruits must become prepared for the many physical rigors of law enforcement duties such as running, sprinting, draging, pursuing fleeing suspects, and controlling those resisting arrest (1,4).

As recruits make the transition from the general population to becoming law enforcement personnel, they may not be accustomed to the amount and type of physical fitness that will be demanded in law enforcement (2). This indicates the need for academy fitness programming that should be specific to the demands of law enforcement personnel.

Ideal training for recruits should include exercises that emphasize the movements and explosiveness needed for the daily tasks of law enforcement (2). Other considerations should be muscular strength and endurance, anaerobic power, flexibility, and injury prevention (1,3).

The purpose of this study was to compare the effects of physical training across three classes through pre- and post-academy assessment to determine the effectiveness of the training regimen implemented by the academy training staff.

METHODS

• Retrospective analysis was conducted on three classes from one law enforcement agency:
  - Class 1: males = 62 (age=25.7 years ± 4.13, height=178.2 cm ± 6.41, body mass=81.7 kg ± 10.28), females = 6 (age=26.5 years ± 3.27, height=164.0 cm ± 10.44, body mass=66.6 kg ± 10.29)
  - Class 2: males = 47 (age=26.0 years ± 5.98, height=179.7 cm ± 9.11, body mass=81.8 kg ± 12.28), females = 7 (age=26.4 years ± 6.32, height=165.0 cm ± 8.70, body mass=66.0 kg ± 12.28)
  - Class 3: males = 52 (age=26.8 years ± 5.42, height=175.9 cm ± 8.69, body mass=68.1 kg ± 10.29), females = 8 (age=26 years ± 3.63, height=164.4 cm ± 9.06, body mass=67.8 kg ± 10.55)

• Recruits performed pre- and post-academy testing in the following assessments: medicine ball throw with a 2 kg ball (MBT), 75-yard pursuit run (75 PR), and the multi-stage fitness test (MSFT).

Recruit training was conducted over 22 weeks. Pre-testing occurred in the week prior to academy, while post-testing occurred in the last five weeks. Multivariate dependent t-tests were performed to compare differences in assessment results between classes and pre- to post-academy training. A significance level of p < 0.05 was used.

RESULTS

• Due to the nature of law enforcement agencies, each of the classes began their academy training at different baseline levels and were not homogenous. Class performed significantly lower on MBT than Classes 1 (p < 0.023) and 2 (p < 0.002). Class 3 was significantly slower (p < 0.003) than Class 1 on 75 PR. Class 2 performed significantly fewer shuttles than Classes 1 (p < 0.011) and 3 (p < 0.002). The MSFT assessment of the MBT showed significant improvement in Classes 1 (p < 0.030) and 3 (p < 0.003). The 75 PR did not improve in Classes 1 and 3, while Class 2 performed significantly (p < 0.001) poorer. MSFT showed all three classes having significant (p < 0.001 for all three classes) improvement in the amount of shuttles completed.

CONCLUSIONS

• The data indicated that there were major improvements in the MSFT for all three classes, a lack of improvement in MBT for Class 2 (MBT distance decreased, however it was not statistically significant), and lack of change or even decreases in performance in the 75 PR (even for Class 3 which started with a significantly slower performance in 75 PR).

• These results suggest that the physical training programs implemented for these academy classes consistently focused on anaerobic development. This would suggest a greater implementation of interval running and long slow distance running, which is typical of law enforcement academies (1,4).

• However, the data also suggests that training staff did not focus on developing recruits' anaerobic and aerobic capacities in a consistent manner. Given the majority of law enforcement job tasks tend to be anaerobic in nature, physical training programs should consider an increased focus on anaerobic training during academy job readiness for recruits. Future research should investigate the performance benefits of training programs that include anaerobic and aerobic development.

REFERENCES