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Run To The Hills: The Effects of Academy Training on the Physical Fitness of Law Enforcement Recruits across Three Classes

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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, including running, vaulting, sprinting, dragging, pursuing fleeing suspects, and controlling those resisting arrest (1,4).

Recruits make the transition from the general population to becoming law enforcement personnel, they must be not only accustomed to the amount of physical training 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.

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 academy classes through pre- and post-academy assessment to determine the effectiveness of the training regimen implemented by the academy training staff.

METHODS

Pre Academy Post Academy Pre Academy Post Academy

Retrospective analysis was conducted on three classes from one LEA (Class 1: n = 47; 27.5 years ± 4.13, height=178.2 cm ± 6.41, body mass=81.7 kg ± 10.28, Class 2: n = 47 (age=26.5 years ± 3.27, height=164.3 cm ± 10.44, body mass=66.6 kg ±10.29, Class 3: n = 51, 26.4 years ± 6.32, height=156.5 cm ± 8.70, body mass=66 kg ±12.28). Recruits performed pre- and post-testing in the following assessments: 7.5 yard pursuit, ball throw through a 1.22cm (MBT), and multiple-stage fitness test (MSFT).

Recruits performed post- and pre-academy testing in the following assessments: medicine ball throw with a 2 kg ball (MBT), 7.5 yard pursuit run (PR), and the multi-stage fitness test (MSFT).

Recruits that performed significantly different between classes and pre/post-academy training.

RESULTS

• 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)
  - Class 2: males = 47 (age=26.5 years ± 3.27, height=164.3 cm ± 10.44, body mass=66.6 kg ±10.29)
  - Class 3: males = 51 (age=26.4 years ± 6.32, height=156.5 cm ± 8.70, body mass=66 kg ±12.28)

• Retrospective analysis showed significant benefits were observed in the following assessments:
  - Class 1: significant improvements were observed in the 7.5 yard pursuit run (PR), and the multi-stage fitness test (MSFT).
  - Class 2: significant improvements were observed in the 7.5 yard pursuit run (PR), and the multi-stage fitness test (MSFT).
  - Class 3: significant improvements were observed in the 7.5 yard pursuit run (PR), and the multi-stage fitness test (MSFT).

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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 PR 75).

• These results suggest that the physical training programs implemented for these academy classes consistently focused on aerobic 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 capabilities in a consistent manner. Given the majority of law enforcement job tasks tend to be anaerobic in nature (1,4), physical training programs should consider an increased focus on developing anaerobic power during the academy to optimize job readiness for recruits.

• Future research should investigate the performance benefits of training programs, aerobic and anaerobic development, as well as additional modalities.

References:

Figure 1. Significant improvements were observed in the following assessments: