Perceived vs. Actual Reported Peace Officer Physical Job Demands: What Three Points in Time Tell Us
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ABSTRACT

A common perception among incumbents and some trainers is that muscular endurance and aerobic capacity are the most prevalent and important components of occupational job demands. We relate to the regular tasks of a Peace Officer (PO) that these assumptions are based on. The purpose of this study was to review job demand studies, and present the most recent data from a job-task analysis for peace officers in California. In 1983, the California Commission on Peace Officer Standards and Training (CA POST) conducted a state-wide job-task analysis study. The data of 1,625 officers showed that the underlying fitness components of agility, anaerobic capacity, anaerobic power, and strength were more predominant in daily physical tasks than muscular endurance and aerobic capacity. As a result, the U.S. Army Test Battery (ASTB) was developed and validated. With the exception of a 50-yard run, the other nine MOS tests (9-yard obstacle course, chair lift fork climb, solid wall climb, battery drag, and assessed components of agility) were shown to be highly correlated to the physical demands of the police officer tasks. In 2008-2010, Martis and colleagues reported that components of fitness reported as important by recruits in (n=162) were: 15% strength, 15% muscular endurance, 10% power, 10% anaerobic power, and 5% aerobic capacity. An even larger 2018 statewide survey of California peace officers assigned to patrol duties (question respondents = 3,874,1378) reported the following data to task components of the fitness for peace officer tasks: 17.0% stability; 14.6% flexibility; 13.2% power; 13.1% agility; 12.3% anaerobic capacity; 10.5% muscular strength; 8.25% muscular endurance; 7.49% balance; 6.5% aerobic power. These data are relevant to the importance of those assigned to patrol duties of anaerobic qualities (e.g. strength and power). Training programs need to develop future POs that are weighted toward muscular endurance and aerobic capacity. The approach to these tasks is to create more active POs who are able to adapt to the work demands more accurately in the line of daily physical tasks of patrol officers. To increase effectiveness and optimize job-relevant performance, physical training must be more closely targeted and reflect the actual components of fitness for stability, power, agility, muscular strength, muscular endurance, balance, and aerobic capacity.

INTRODUCTION

• Essential job tasks for law enforcement officers (LEOs) include numerous physical motions such as pushing, pulling, dragging, running, and other physically demanding body movements.1,2,3 These actions are often completed while the LEO is under load carriage conditions (bullet-resistant vest, gun belt, and other equipment). However, the actions could also be completed while not under the same load (the LEO not wearing the above listed protective equipment).

• To ensure candidates and employees can successfully complete required job tasks, a job task analysis is an industry-accepted first step.

• A job task analysis (a survey of tasks performed by employees) at the state or local level is part of a multi-step process that forms the basis for selection standards, training, rehabilitation, and “return to play/duty” standards.

• In the case of Law Enforcement Agencies, these types of analysis are often conducted at the state level (California Commission, Peace Officer Standards and Training Commission).

• The physical job task analysis process requires respondents (usually subject matter experts [SME] and incumbent patrol officers) to rate the criticality, frequency, and time spent performing specific tasks. The responses are then grouped into underlying physiological constructs such as aerobic/anaerobic capacity, muscular strength and endurance, power, agility, stability, balance, etc.

• The purpose of this study was to review job demand studies, and present the most recent data from a job-task analysis for LEOs in California.

METHODS

• For this inquiry, three large scale studies were reviewed. The first and third studies were conducted by the California Commission on Peace Officer Standards and Training (CA POST) and the third was a local study by the Los Angeles County Sheriff’s Department (LASD).

• Study #1 (CA POST-1) was conducted in 1983 and surveyed 1,625 LEOs on physical abilities required of the California patrol officer by frequency, importance/criticality to success, time spent performing.

• Study #2 (LASD)1 was conducted between 2008-2010 and surveyed 162 deputies assigned to patrol duties in Los Angeles County.

• Study #3 (CA POST-2018)2 was conducted in 2018 survey (question respondents = 3,874,1378) and on physical abilities required of the California patrol officer by frequency, importance/criticality to success, time spent performing.

• Subject matter experts assigned to each study at the respective point in time each study was conducted rated physical tasks identified in surveys and assigned each tasks to an underlying physiological construct. Following this, underlying physiological constructs from each study was compared.

RESULTS

• Study #1 [CA POST-1 from 1983]3 contained limited information and the showed that the underlying fitness components of agility, anaerobic capacity, anaerobic power, and strength were more predominant in daily peace officer tasks than muscular endurance and aerobic capacity.

• Study #2 [LASD]1 contained greater information and the distribution of underlying physiological constructs are depicted in Figure 1.

• Study #3 (CA POST-2018)2 contained similar information to Study #2 and the distribution of underlying physiological constructs are depicted in Figure 2.

Figure 1. LASD patrol physical abilities distribution based on statewide SME input.

CONCLUSIONS

• When the results of all three large scale studies4-5,3 are examined for trends, the reported importance by those assigned to patrol duties appear to focus on the constructs of anaerobic qualities, strength, and power. Agility also consistently ranked highly.

• The prevalence of stability in Study #3 (POST-2/2018)3 can be attributed to more precise definitions of constructs for this specific study. The Study #3 stability trend can also be observed in Study #2 (LASD) under the equalization category.

• Taken together and longitudinally, these job task analyses indicate that numerous respondents (SME and California patrol officers) over nearly 35 years continually rate the underlying physiological constructs required in patrol work as stability/equilibrium, anaerobic, agility, strength, and power as more prevalent (importance/critical, frequent, and time spent performing) than muscular endurance and aerobic tasks.

• The five event CA POST Work Sample Test Battery4 (a state required physical ability test to graduate all peace officer academies) is also reflective of these observed trends.

• As a result, law enforcement physical training programs should as closely as possible reflect the reported physical ability demands of the patrol function to ensure successful completion of required physical job tasks.

REFERENCES