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Comparisons between Male and Female Deputy Sheriff Recruits in the Work Sample Test Battery

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ABSTRACT

OBJECTIVES: The job demands of law enforcement may require officers to perform strenuous tasks with little advanced warning. In addition to having to complete generic tasks (pushing, pulling, carrying), on-duty law enforcement officers (LEOs) may have to execute job-specific tasks (defensive tactics, vaulting obstacles, pursuing suspects). These job-specific tasks are the same for all LEOs, regardless of sex. Barriers will complete job-specific tests, such as in the Work Sample Test Battery (WSTB) in California, intended to prepare them for these demands. The WSTB was designed to duplicate what a LEO may encounter on duty. PURPOSE: To determine differences between male and female deputy sheriff recruits in the WSTB.

METHODS: A retrospective analysis was conducted on 308 deputy sheriff recruits (males = 295, females = 9). The WSTB is comprised of five tests completed for time in a 500-pound obstacle course (505CC), 6-foot chain link fence climb (1F), 6-foot solid wall climb (SW), and a 500-yard run (500R). These tests must be completed to a state-mandated minimum standard in order for recruits to graduate, and were typically performed in the last weeks of academy. Independent samples t-tests (p = 0.05) and effect sizes (d) were calculated to document any differences between the sexes. Effect size ranges were set as follows: trivial effect (d < 0.2), small effect (0.2 ≤ d < 0.6), moderate effect (0.6 ≤ d < 1.2), large effect (1.2 ≤ d < 2.0), very large effect (2.0 ≤ d < 4.0), and an extremely large effect (d ≥ 4.0). RESULTS: Females were significantly (p < 0.001) slower on all items of the WSTB when compared to males. Specifically, females scored significantly lower on the 505CC (males = 178 ± 13.9, females = 202 ± 7.1; t(39) = 4.68, p < 0.001), the 1F (males = 671 ± 17.8, females = 713 ± 8.4; t(39) = 4.19, p < 0.001), and the SW (males = 7.6 ± 1.9, females = 9.4 ± 1.5; t(39) = 6.71, p < 0.001). The females completed the 500R in 630 ± 22.8 (males = 504 ± 11.2, females = 543 ± 22.8) s. The effects ranged from small (0.16 < d < 0.56) to extremely large (d > 4.00). CONCLUSIONS: Females scored lower on the WSTB items. Slower performance in job-specific tests could translate to slower performance in the tasks required in the line of duty for many female LEDs while working alongside their counterparts. Although the majority of job tasks are sedentary, when officers are required to take quick, precise action, the situations can be unfortifying. Therefore, slower performance may pose a liability not only to themselves, but to their colleagues. Training staff should consider developing the physical qualities important for WSTB performance in females to enhance future job performance.

CONCLUSIONS

• Females scored lower on all WSTB items. Slower performance in job-specific tests could translate to slower performance in the tasks required in the line of duty for many female LEDs while working alongside their counterparts. Although the majority of job tasks are sedentary, when officers are required to take quick, precise action, the situations can be unfortifying. Therefore, slower performance may pose a liability not only to themselves, but to their colleagues.

• In the current findings, the areas in which female recruits were the furthest behind were the 990C, 1F, and 500R. Upper body strength, arm-, and lower-body power, and aerobic capacity are underlying traits that affect those tests (3, 4). Indeed, Locke et al. (3) found predictive relationships between WSTB tasks and fitness test items on the PTSD (a separate, agency-specific testing battery). As that is the case, female recruits should consider strength, power, and aerobic capacity training in preparation for academy. Additionally training staff should consider developing these physical qualities while academy is ongoing in order to enhance female recruits’ future job performance.

• The physical limitations of many female recruits’ line up with job-specific demands measured by the WSTB. If female recruits are not properly prepared for the job demands (even though they may pass the WSTB), this could expose these recruits to preventable risk. Initially, the first step could be working on improving those physical abilities most relevant to job demands for female recruits, even after they graduate academy and begin working in the field.

RESULTS

• Females were significantly (p < 0.001) slower on all items of the WSTB when compared to males.

• The between-sex differences within the 990C (Figure 1) had a large effect (d = 1.27); the BD (Figure 2) had a moderate effect (d = 0.85); the CLF (Figure 3) had a large effect (d = 1.36); the SW (Figure 4) had a small effect (d = 0.56); and the 500R (Figure 5) had a large effect (d = 1.54).

Figure 1. Male and female recruit performance on the 990C.
Figure 2. Male and female recruit performance on the BD.
Figure 3. Male and female recruit performance on the CLF.
Figure 4. Male and female recruit performance on the SW.
Figure 5. Male and female recruit performance on the 500R.

REFERENCE