

Relationships Between Physical Training and Marksmanship Performance in Law Enforcement Officers

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ABSTRACT

Law enforcement is a dangerous occupation that necessitates excellent physical fitness levels as well as exceptional shooting skills to ensure officer safety and survival. **PURPOSE:** The purpose of this study is to assess relationships between dynamic shooting accuracy and physical training behaviors in law enforcement officers. **METHODS:** Subjects consisted of 70 tactical (SWAT) law enforcement officers from various local, state and national agencies. Each subject completed a survey including information on general experience in law enforcement, as well as previous and current weapons and physical training. Subjects completed several dynamic shooting drills with both a pistol and a rifle. Performance in the drills were used to create an overall shooting score. **RESULTS:** An operator's overall shooting performance was associated with their years of experience in special operations with more accurate shooters having 6-10 years of experience ($p = 0.027$). Operators in the lowest shooting category logged fewer hours training (< 250 rounds) with their primary weapon with their team ($p = 0.047$). Operators in the highest shooting category had a greater tendency to participate in shooting competitions (64.7%, $p = 0.016$). Operators at the 50% ranking or above were more likely to train at the department or agency gym (61.1% for 51-75%, 47.1% for $>75\%$, $p = 0.040$). **CONCLUSION:** Law enforcement officers must consistently perform in high stress and high risk environments that require substantial physical demands as well as firearm proficiency. Years of experience have an overall pragmatic effect on shooting performance and likely increases operational success. Increased experience in law enforcement may be an indicator of improved performance and proficiency. Participants who performed in the highest percentiles were more likely to partake in competition shooting. This does not conclusively predict that performance relies on completion shooting alone, however it does suggest that the training used to prepare for such competitions positively affects shooting performance.