

An Ergonomics and Human Factors Approach to Research and Development of Model Body Worn Cameras and Implementation Processes in Law Enforcement Agencies

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Author Note: The authors of this paper consist of students from the University of Central Florida and an exchange student from Pennsylvania State University. The team would like to thank the student government association of the University of Central Florida for funding the trip to the conference. The team would also like to thank our advisor Dr. McCauley and the Orange county Sheriff's department for providing feedback and resources that allowed us to complete our research.

Abstract: Body-worn cameras are a relatively new technology with the objective being to reduce false complaints and controversial actions against officer while at the same time providing a useful technology that enhances the demanding task of the law enforcement professional. The goal of this study was to develop a foundational methodology that assesses the ergonomic aspects of body-worn cameras on law enforcement professionals. The officers of the Orange County Police Department were a partner in this study conducted by the UCF Industrial Engineering and Management Systems Department. A comprehensive literature review was conducted, and interviews and analysis of law enforcement professionals were gathered in this study in order to develop a methodology to assess the use of body worn cameras for law enforcement professionals. A scoring rubric as well peripheral analysis were established to measure functionality of various types of BWC for selected law enforcement activities.

Keywords: Body Camera, Wearable Computers, Police Body-Worn Camera, Law Enforcement, Ergonomics, Peripheral Vision, Camera Positioning, Evidence Proofing, Camera Positioning Evaluation, Industrial Engineering