



### C10 Assessing the Psychological Well-Being of Multimedia Forensic Analysts

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**Learning Overview:** After attending this presentation, attendees will have a better understanding of the psychological well-being of multimedia forensic analysts exposed to evidence from different types of criminal cases, as well as the availability of mental health services.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by explaining the psychological impact on multimedia forensic analysts who work different types of criminal cases.

Nearly every criminal investigation involves more than one form of digital evidence. In some cases, multimedia forensic examiners need to enhance audio and video evidence in order to identify the actors or clarify the context of the situation. Examiners may also need to compare/analyze clothing, tattoos, or individuals, which may involve viewing or hearing heinous acts (e.g., homicide, child sex abuse, torture). Research indicates criminal justice occupations are associated with high work-related stress leading to psychological illness and high burnout rates, such as investigators or digital forensic examiners working child pornography investigations and 911 dispatchers who respond to emergency phone calls.<sup>1-3</sup> However, there has not been any research that has examined the psychological well-being, job-related satisfaction, stress related to working specific types of cases, and availability of mental health services for multimedia (audio/video/image) forensic analysts. For example, do analysts experience more stress as a result of working specific cases or crimes (e.g., child sex abuse vs. homicide), and are there differences on psychological well-being for audio analysts vs. video analysts? The overall goal is to better understand the well-being of multimedia forensic analysts exposed to evidence from different types of criminal cases.

This current study was the first to compare the psychological well-being and work-related stress experienced by multimedia forensic analysts. The anonymous internet-based survey was hosted on Qualtrics®; respondents were solicited through professional organizations for multimedia analysts, and members were encouraged to share the link with fellow analysts (i.e., snowball sampling). One hundred thirty-six respondents completed the anonymous internet-based survey assessing psychological well-being, job satisfaction, stress related to the type of criminal cases worked (e.g., child sex abuse, elderly abuse), and availability of mental health services. Respondents were compensated with a \$10.00 Amazon® e-gift card by completing a separate, independent survey that collected only an email address—it was not possible to link the responses from the two surveys.

Based on their current self-reported duties, 67 respondents were identified as audio analysts; 126 as video analysts; and 68 as image analysts. In addition, 27 respondents reported that they also worked as an investigator or detective. Each duty was coded dichotomously (Non-Audio vs. Audio analysts). It was possible for respondents to self-report multiple duties (e.g., working as both an audio and video analyst). The results suggested significant differences between multimedia forensic analysts on psychological well-being and job satisfaction. In addition, the results varied when controlled for the role of detective. The results will be fully discussed as well as suggestions for future research and policy implications regarding mental health services for multimedia forensic analysts.

#### Reference(s):

1. Perez, L.M., Jones, J., Englert, D.R., & Sachau, D. (2010). Secondary Traumatic Stress and Burnout Among Law Enforcement Investigators Exposed to Disturbing Media Images. *Journal of Police and Criminal Psychology*. 25(2), 113-124.
2. Seigfried-Spellar, K.C. (2017). Assessing the Psychological Wellbeing and Coping Mechanisms of Law Enforcement Investigators vs. Digital Forensic Examiners of Child Pornography Investigations. *Journal of Police and Criminal Psychology*. Advance online version.
3. Ramey, S.L., Perkhounkova, Y., Hein, M., Chung, S.J. & Anderson, A.A. (2016). Evaluation of Stress Experienced by Emergency Telecommunications Personnel Employed in a Large Metropolitan Police Department. *Workplace Health & Safety*. 65(7), 287-294.

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#### Mental Health, Multimedia Forensics, Digital Forensics