E89 How Does Training and Certification Affect the Perception of Accuracy During Fingerprint Examinations?

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Learning Overview: After attending this presentation, attendees will understand the different training and certification requirements of latent print examiners at local, state, federal, and private agencies, and how that training and/or certification impacts the individual fingerprint examiner's perception of accuracy during fingerprint examinations.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by showing the decision-making process for standardization of training and certification for latent print examiners and providing recommendations for future research in this area. This study could potentially be expanded to include the training and certification requirements for other fields in forensic science.

For more than 100 years, fingerprints have been used as a means of human identification.[1] Fingerprint technology is one of the oldest disciplines in forensic science and has been accepted in the court system for more than a century.[1-4] However, several high-profile cases have highlighted the potential for human error during the identification process, and the reliability of latent print identifications and other forensic sciences are now being challenged.[5-8] However, very little research exists to determine if differences in training or certification have any effect on the accuracy of fingerprint examinations.

A quantitative correlational study was conducted to examine the training and certification process for fingerprint examiners at various levels of law enforcement (local, state, federal, and private) and to determine what effect, if any, these differences had on the accuracy of conclusions drawn during fingerprint identifications. A total of 404 fingerprint examiners from the American Academy of Forensic Sciences (AAFS) or the International Association for Identification (IAI) participated in an online questionnaire. The data obtained from that questionnaire was analyzed using the latest SPSS software and a Pearson's Chi-square.[9]

The results of the study indicated a significant correlation between the level of agency and the type of training a fingerprint examiner was required to complete. There was also a significant correlation between the level of the agency and a requirement for certification. No significant correlation was found between differences in training and the accuracy of fingerprint examinations. However, logistic regression analysis suggested that fingerprint examiners who received Outside Training, and a combination of Outside Training with On the Job training were significant predictors of a perception of accuracy by fingerprint examiners. Finally, there was a significant correlation between the requirement for certification and the perception of accuracy during fingerprint examinations.[9]

Identifying the training and certification procedures that result in the greatest accuracy and reliability of fingerprint examinations will reinforce the credibility of fingerprint examinations as a means of identification and pave the way for recommendations of standardized training and certification. This presentation will demonstrate the inconsistencies that exist in the training and certification of fingerprint examiners and the areas that need more research.

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Latent Print Examiners, Training, Certification