Latent Print Examiner Black Box Study 2022
Request for participation – STUDY NOW OPEN

Purpose

The Latent Print Examiner Black Box Study 2022 (LBB22) is being conducted to measure the accuracy and reproducibility of latent print examiners' decisions when comparing latents to known fingerprints that were acquired by searches of the FBI Next Generation Identification (NGI) system, and to compare these results with those from previously published Black Box studies. In particular, this study will evaluate whether latent print examiner performance has changed since the 2009-2011 FBI-Noblis Latent Print Black Box Study, in which nonmated image pairs were selected using the earlier FBI IAFIS (Integrated Automated Fingerprint Identification System).

Rationale

This study is being conducted by the FBI Laboratory and Noblis as a follow-on to the FBI-Noblis Latent Print Black Box Study (2009-2011). In the decade since the publication of the original study, the accuracy of automated latent fingerprint algorithms has greatly improved and the FBI's fingerprint repository has significantly increased the number of records it contains. One side effect of these changes is that high-ranking nonmated candidates returned by NGI may be much more similar than those returned by IAFIS—raising the potential concern that latent print examiners using NGI are being asked to conduct more challenging comparisons, which may in turn have an effect on accuracy or reproducibility of their conclusions.

Test design summary

Participants are asked to perform analysis, comparison, and evaluation on a series of latent-exemplar fingerprint image pairs using a custom web browser-based software interface. For each image pair, participants are required to provide responses to a series of multiple-choice questions, including the value (suitability) of the latent, the comparison conclusion, and the difficulty of the comparison.

Participation

Because of privacy and human subject research restrictions on use of the fingerprint data, participation in this study is limited to latent fingerprint examiners from U.S. federal, state, local, tribal, and territorial government agencies (i.e., agencies that have access to the FBI NGI system). To be eligible, latent fingerprint examiners must have conducted casework (latent print examination, technical review, or verification) as an employee or contractor for one of the above agencies within the last 2 years.

Extent of support requested

The study is currently open! Participants have until 11:59PM Eastern on Wednesday, May 24, 2023 to submit their responses. Each participant will perform 100 comparisons of latent and exemplar fingerprint images. Participants are also asked to complete a short background questionnaire prior to beginning the study and a brief post-test questionnaire after completing all assigned comparisons.

Publication of results

The results will be presented at conferences and will be submitted for publication in a peer-reviewed journal.

Confidentiality

Results will be anonymous, and information in the study records will be kept confidential. Personally Identifiable Information (PII) will be used only for the purpose of conducting the study. In reporting, results will be aggregated across multiple examiners; care will be taken so that the results are not aggregated in a way that compromises anonymity. No reference will be made in oral or written reports, publications or in the databases in which results may be stored that could link an individual to the study.

Benefits

There are not direct benefits to you from participation in this study. However, there is a significant benefit to society in improving our ability to solve crimes, prosecute those who commit them, and ensure the continued admissibility of fingerprint evidence in court.

To register, go to https://latentbb.edgeaws.noblis.org/

For questions, contact latent@noblis.org