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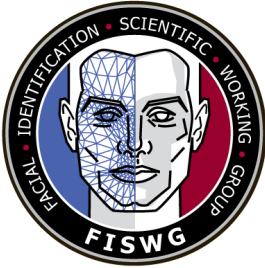
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Guide for Facial Comparison Awareness Training of Assessors

1. Scope

1.1 This guide provides the minimum criteria for training of facial assessors and should be read in conjunction with FISWG document Guide for Role-Based Training in Facial Comparison.

2. Referenced Documents

2.1 *ASTM Standards:*

E2916-19e1 Standard Terminology for Digital and Multimedia Evidence Examination

2.2 *FISWG Standards:*

FISWG Minimum Training Criteria When Using Facial Recognition Systems

FISWG Guide for Role-Based Training in Facial Comparison

FISWG Facial Image Comparison Feature List for Morphological Analysis

FISWG Physical Stability of Facial Features of Adults

FISWG Effects of Printing Methods on Facial Images used for Comparison

FISWG Standard Guide for Scanning Facial Images

3. Terminology

3.1 *Definitions:*

3.1.1 *Aptitude, n*—natural talents, special abilities, or the capacity to learn- traits that are considered highly stable over a long period of time.

3.1.2 *Assessment, n*—a quick image-to-person or image-to-image comparison typically conducted in a high throughput environment (e.g., screening and access control applications or field operations).

3.1.3 *Class characteristics, n*—characteristics common to many individuals within a group (e.g., the overall shape of the nose, eyes, mouth).

3.1.4 *Comparison, n*—the second step of the ACE-V method; the examination of two or more samples to establish similarities and dissimilarities.

3.1.5 *Face matching, n*—a type of face identification task requiring a perceptual decision on whether two simultaneously presented faces (photo, video, live) depict the same person or different people.

3.1.6 *Face recognition, n*—(1) by humans, the cognitive process by which an observer identifies a person as being one they have seen before, (2) by automated systems, the automated searching of a facial image (probe) against a known collection resulting in a list of candidates ranked by computer-evaluated similarity score.

3.1.7 *Facial assessor, n*—a human conducting a comparison in a high throughput environment (see Assessment).

3.1.8 *Familiar face, n*—faces of people known to an observer.

3.1.9 *Holistic process, v*—the innate human ability of comparing faces by looking at the face as a whole without specifically considering the component parts in isolation.

3.1.10 *Individual characteristics, n*—characteristics allowing one to differentiate between individuals having the same class characteristics (e.g., scars and marks).

3.2 Acronyms:

3.2.1 *ACE-V, v*— Analysis, Comparison, Evaluation – Verification

3.2.2 *FRS, n*—Facial Recognition System

4. Significance and Use

4.1 The task of a facial assessment is defined as a quick image-to-person or image-to-image comparison typically conducted in a high throughput environment (e.g., screening and access control applications or field operations). This task may be conducted by personnel during the course of their duties to generate lines of inquiry or by a point of entry controller for a restricted area.

4.2 Due to time constraints, assessment is the least rigorous of all the facial comparison categories (assessment, review, examination). The role requires an

awareness of the major elements and limitations of the facial identification discipline and training in the use of available tools.

4.3 Assessors who query a Facial Recognition System (FRS) should meet the minimum requirements in the FISWG document Minimum Training Criteria When Using Facial Recognition Systems.

5. Summary of Guide

5.1 Minimum training requirements for facial assessors include awareness of the following:

5.1.1 The practical application and operational uses of facial images.

5.1.2 Common terminology used in facial image comparison discipline.

5.1.3 The differences in human recognition of familiar and unfamiliar faces.

5.1.4 Facial Recognition Systems, including the use and limitations.

5.1.5 The distinction between holistic face processing, and unfamiliar face matching (e.g., person to image, juxtaposed image comparison).

5.1.6 The difficulty in comparing faces and variability in individual aptitude to perform facial comparison.

5.1.7 The principles of comparison (specifically, the morphological analysis methodology).

5.1.8 Facial features and the differences between class and individual characteristics as outlined in The Facial Image Comparison Feature List for Morphological Analysis.

5.1.9 The Physical Stability of Facial Features of Adults.

5.1.10 The basics of image science including, but not limited to:

5.1.10.1 Human Vision (e.g., color, perception),

5.1.10.2 Photography (e.g., distortion, pose, illumination), and

5.1.10.3 Image Distortion (e.g., compression, scanning, printing, intentional alterations)

5.1.11 Overview and effects of bias (e.g., cognitive, confirmation, contextual) and techniques for minimizing bias, such as context management procedures.

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