J16 How Well Do People Know Their Signatures?

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After attending this presentation, attendees will be aware of the ease and effectiveness with which one can forge a signature using a simple method. Attendees will also learn the challenges of differentiating a genuine signature from a simulated signature by the original author of the signature.

This presentation will impact the forensic science community by showing that, with the use of a simple device and computer programs, forged versions of signatures can be easily produced. It will show Forensic Document Examiners (FDEs) that differentiating between genuine and simulated signatures is complex and sometimes even the author can be unaware of the nature of their own "signature."

Signatures have always served the function of identifying a writer and verifying or authenticating documents. The act of writing a name is an automatic action and can become extremely individualized. Therefore, one can assume that a signature itself can, or even should, be highly specific and unique for every individual. This could imply that each person should be familiar with his or her own signature and thus be able to discriminate between the genuine signature and a simulation.

The purpose of this study was to investigate how well people know and recognize their signatures. One hundred participants were asked to provide ten signatures on paper. The sheet was then scanned to obtain an "electronic" version. The original genuine signatures on paper served as a model to produce simulated versions on a computer (with the help of a digitizing tablet). Then both groups of signatures (scanned genuine and computer-processed simulations) were adjusted in order to make them the same size. After two weeks, every participant was shown ten signatures one by one on a computer screen and asked to judge whether they were genuine or forged (for every participant, a set of ten signatures shown to them contained from zero to ten simulated signatures).

The results show that it can be difficult for people to recognize their own genuine signatures and differentiate them from the forged versions. Everyone found the task challenging, even those who claimed to have had characteristic and "unforgeable" signatures. Among all 100 participants, only one person was 100% correct in recognizing the signatures (ten out of ten signatures were judged correctly to be either genuine or simulations). The lowest result was 20% (two out of ten correct answers) and the average of all results was 57.6%. The total number of questioned signatures in the project was 1,000 (100x10). Out of 550 genuine signatures, 309 (56.2%) were correctly recognized to be genuine. Out of 450 simulated signatures, 267 (59.3%) were correctly identified as simulations. Only 25 participants correctly identified all forged versions of their signatures (eight of these participants had only one forged signature in the set of ten signatures that were presented to them).

Signature Forgery, Simulated Signatures, Genuine Signatures