



Questioned Documents - 2017

J16 A Forensic Examination of Simulations of Illegible Signatures

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After attending this presentation, attendees will better understand various aspects of genuine and forged signatures. Generally, the forensic document expert encounters such cases in order to opine as to whether a given signature is genuine or simulated or whether the disputed signatures match a variable group of signatures.

This presentation will impact the forensic science community by informing forensic document examiners and criminal investigators about various methodologies for the detection of forgery by distinguishing a copied signature from a genuine one.

Signatures are an expression of a living form that is repeated time and again in slightly different form as the writer produces them for various needs. Signatures can be entirely legible or partially legible or they may be completely illegible, that is, where none of the letters are decipherable. Despite the complexity of the nature of signatures, the importance of identification has been recognized. Genuine or forged signatures are generally encountered in forensic documents examination cases. A detailed examination of the genuine signatures of all the three groups, that is, entirely legible (Group I), partially legible (Group II), and completely illegible signatures (Group III) with their respective copied signatures was performed. The writing characteristics, such as line quality, pen-pauses, pen-lifts, retouchings, speed, nature of initial and terminal strokes, alignment, spacing, slant and relative slant, overall size and relative size, rubber stamp effect, legibility, and letter formations were studied in detail. It was found that, slight to considerable variations in all the features were present in the copied signatures of all the three groups. A study of copied signatures has revealed that although the forgers have tried to copy the pictorial appearance and other features of the genuine signatures, there are certain features of the genuine signatures which help to differentiate copied signatures from genuine signatures, for instance, defective line quality in case of copied signatures (i.e., the presence of tremor, pen lifts, and pen pauses at unlikely places and careful retouchings). The presence of blunt starts and ends may also be evident in copied signatures. A rubber stamp effect is found to occur in most of the copied signatures. Also, while copying, the forgers have given more attention towards the letter design of the signature whereas little attention has been given to the alignment, spacing, size, slant, and relative slant. It was observed that due to the complexity in the pattern of signatures and the unfamiliarity with the direction of strokes, the illegible signatures of Group III were most defective in line quality than the legible and partially legible signatures. Although the numbers of signature specimens taken in this study were limited, it is hoped that the observation and conclusion of the study will be helpful in further research and signature examination.

Questioned Documents, Signatures, Simulated Signatures