Objective:

• Define a 9 level scale of forgery training
• Determine if there is a statistically significant difference among the variables across levels 2 - 9 of training

Methodology:

• A group of 25 volunteers were trained at Level 1 and then instructed to attempt the forgery
• The same group of volunteers would move to the next training level, complete the training, and attempt the next forgery
• The forgery attempts were then compared to a set of 25 genuine signatures

Results

• A general increase in forgery quality did not result across the levels of increased training
• Some variables were progressively worse with additional training.
• Speed and total distance traveled by the pen were 2 factors that made a forgery easily detectable when the genuine signature was traced
• Some subjects had considerable variation of speed across the levels of training.

Conclusions:

• The lack of increasing similarity of forgery attempts and the genuine signature over the levels suggest that a forger that is coached by an authentic signer is no more likely to succeed at forging the signature than someone who has only seen the name printed on a business card.
• Forgers were able to mimic the genuine signature for 14 of the measured variables at Level 3, the most of any level.
• Additional work should be done to increase the sample size of forgers, and to also increase the number of forgery samples created at each level to determine a normal range of variation for each subject, and get a better idea of the variation due to training.
• The pen speed and total pen distance traveled are 2 variables that would be useful in an algorithm for detecting tracings of genuine signatures.