

About Voice Stress and the Law

Polygraph is the only approved detection of deception method (lie detection method) approved for use within the United States Federal Government and numerous States. No federal government agency that has an established and accredited detection of deception program uses any form of voice stress analysis.

A review of 24 empirical studies that were conducted over a period of more than 30 years failed to provide evidence of the validity or reliability of Voice-Stress analysis based technologies for the detection of deception in individuals.

The Virginia Department of Occupational Professionalism and Regulation recently prepared a report on voice stress. This document was pivotal in the decision by the Virginia State Legislature to disallow the use of Voice-Stress analyzers in criminal investigations.

In addition, individuals are cautioned that using a service that utilizes voice-stress analysis over the telephone to surreptitiously record another individual are in violation of State of Nevada and or Federal Communication Commission laws (for interstate recordings).

Below is a list of the university-grade research studies that have investigated voice stress as a deception detection approach:

University of Oklahoma – Voice Stress Analysis (Excerpt):

“The important finding is that the Voice Stress Analysis programs do not appear to provide any probability of detecting deception than chance. These findings add to the growing literature on tests of voice stress analysis theory and devices”

University of Florida – Voice Stress Analysis (Excerpt):

“The findings generated by this study led to the conclusion that neither the CVSA nor the LVA showed any sensitivity to the presence of deception or stress. Several analyses of subsets of the data were undertaken to explore any possibility that either system could perform under more controlled conditions, but no sensitivity was observed in any of these analyses (see the Technical Results section). These results are congruent with those observed in past surveys of research on voice stress analysis (National Research Council, 2003)”

Cestaro, V.L. (1995). A Comparison Between Decision Accuracy Rates Obtained Using the Polygraph Instrument and the Computer Voice Stress Analyzer (CVSA) in the Absence of Jeopardy. (DoDPI95-R-0002). Fort McClellan, AL: Department of Defense Polygraph Institute.

Conclusion: Accuracy was not significantly greater than chance for voice-stress

Fuller, B.F. (1984). Reliability and validity of an interval measure of vocal stress. *Psychological Medicine*, 14(1), 159-166

Conclusion: Validity of voice-stress measures was poor

Horvath, F. S. (1979). Effect of different motivational instructions on detection of deception with the psychological stress evaluator and the galvanic skin response. *Journal of Applied Psychology*, 64(3, June), 323-330.

Conclusion: Voice-stress did not detect deception greater than chance

Suzuki, A., Watanabe, S., Takeno, Y., Kosugi, T., & Kasuya, T. (1973). Possibility of detecting deception by voice analysis. *Reports of the National Research Institute of Police Science*, 26(1, February), 62-66.

Conclusion: Voice measures were not reliable or useful

Waln, R. F., & Downey, R. G. (1987). Voice stress analysis: Use of telephone recordings. *Journal of Business and Psychology*, 1(4), 379-389.

Conclusions: Voice-stress methodology did not show sufficient reliability to warrant its use as a selection procedure for employment