

**Timm, H. W. (1983). The efficacy of the Psychological Stress Evaluator in detecting deception. Journal of Police Science and Administration, 11, 62-68.**

The validity of the Psychological Stress Evaluator (PSE) was tested in the detection of deception when the actual guilty or innocent decision could be made and when the level of perceived jeopardy was high. The PSE is designed to capture imperceptible changes in voice that occur as a result of stress. The PSE processes taped-recording of vocal responses, and creates a display of vocal changes that would be evaluated by a PSE analyst. Although the manufacture claims that the PSE is as accurate as the traditional polygraph method, evidence for the validity of the PSE is very mixed. In the present study, the PSE was tested in determining if a participant was actually guilty or innocent of smoking marijuana.

There were 6 participants in the study. Half of them were accused of smoking marijuana, and the other half were accused of other offenses. They were all facing university disciplinary action. The 3 participants who were accused of smoking marijuana were told that all charges against them would be dropped, if the PSE outcome indicated innocence or turned out to be inconclusive. The other 3 participants who were not accused of smoking marijuana were told that all charges against them would be dropped, if they took the PSE examination about an incident of smoking marijuana. The PSE examination took place in the presence of a clinical psychologist, and the participants were asked questions about an actual marijuana incident, a fictitious marijuana incident that did not occur, and neutral questions. All responses were recorded for the PSE analysis, and evaluated by the trained PSE analyst.

The PSE analyst made only one correct decision for the 6 participants. Only one correct guilty decision was made for a participant who was accused of smoking marijuana. Other decisions included incorrect guilty and innocent decisions, and inconclusive decisions. Thus, although the level of perceived jeopardy was high in the present study, the PSE was not able to provide information to indicate the act of deception.