



Criminal Justice

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John,

Enclosed please find several pages of my research on the PSE. I will locate the entire text and forward it to you.

Jim

CHAPTER ONE

The Problem

Since Dektor Counterintelligence and Security, Inc, Savannah, GA, began to market the Psychological Stress Evaluator (PSE) in 1971, its value as an investigative tool has been a source of both professional and academic controversy. The proficiency of the PSE for identifying vocal stress has been tested against that of the polygraph. Both of these machines have been used for interrogation purposes, to gather evidence for the prosecution or acquittal of suspects. Proponents and manufacturers of both the PSE and the polygraph have used the data obtained from these tests as support for the accuracy of their particular interest and to undermine the credibility of their opponents' products.

This issue of credibility has been especially important in the area of court acceptance of testimony gained or confirmed through the use of either of these instruments. Each has become accepted for limited use as corroborating evidence in a few states, but neither the PSE nor the polygraph has been accepted as admissible evidence in the Federal Court system. This was primarily because of the inherent subjective nature of conclusions reached by the interviewer when interpreting the graphic output of a machine.

The area of the effect of the practical application of the PSE remains largely unstudied. This is possibly because of competitive interest in the legal acceptance of the instruments and possibly because some of the research, especially that which compares the two instruments, arises from an academic area blurred by professional involvement and competition. Research reports, using the PSE, tend to fall into two categories; these reports contain either data from an artificially produced laboratory situation, or are anecdotal reporting of short-term field use.

After nearly 19 years of use, it is time for a major, long-term, field study of the PSE. Little research has

been conducted using the PSE in actual criminal

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investigation, and no long-term study has shown the true value of the instrument. That value is in the ability of a well-trained operator/examiner, using a PSE, to extract court admissible and supportable confessions from subjects who had previously resisted admitting their guilt through any other means of interrogation.

Two major questions thus remain unanswered. First, is there a pattern of effects when the PSE is used systematically over a long period of time in actual questioning of criminal suspects and witnesses? Second, how can the information obtained from PSE interviews be presented in a court admissible objective form?

CHAPTER TWO

The Experiment

This field study was drawn from the total number of cases processed with a Psychological Stress Evaluator, PSE-101, by James L. Chapman, Criminologist, during the eighteen years between 1971 and 1989. The procedure in each case consisted of briefing by the requesting agency, suspect interviews, questioning, and the processing of requestioning through a PSE-101, manufactured by the Dektor Counterintelligence and Security, Inc., Savannah, GA.

All criminal cases in which a confession was a possible outcome were separated from the original total group. Excluded from this study were cases involving statement veracity testing, employment clearances, and stress studies used as confirmation of witness testimony. Also excluded were the eight case histories used in this thesis to illustrate typical scenarios and the progression of cases in which the PSE-101 was used to obtain a confession. Eliminated, in addition, were all cases involving non-controlled narrative testing, such as taped responses from perpetrators in terrorist/hostage situations where these responses could not be verified by structured requestioning.

The cases remaining for study in the Confession Possibility Group totaled 2,109. They were then numbered in consecutive order. Numbers corresponding to the case designations were placed in a container. From this container 211 numbers were drawn to complete a random 10% sample of the PSE tested cases. The chosen cases were renumbered consecutively. In those cases in which more than one individual was a suspect or when an individual suspect was questioned more than once regarding separate crimes, each Confession Possibility was numbered individually. The difference between the number of cases in the initial random set, 211, and the final number of cases, 236, reflects the suspect breakdown. Involved in the 236 cases were 324 separate crimes or total Confession Possibilities.

Nearly all of the cases (91%) represented criminal investigations in which legal authorities had reached an impasse. Causes of this impasse included: conflicting evidence or testimony; lack of witnesses, especially in child and sexual abuse cases where the victim was too young to make a statement; accusation and denial situations where corroborating evidence was lacking (the "He did it/ No, I didn't" type); and cross accusations without specific implicating evidence (the "He did it/ No, she did it" type). The remainder of the cases were abuse cases in which agency requested PSE testing was

a matter of both policy and routine, or cases where the suspect requested the PSE testing in an effort to be cleared.

Subjects examined included both those with no criminal history, as well as those with previous arrest and/or conviction records. The socio-economic background ran the gamut from wealthy, well-educated professionals to illiterate indigents, and also included several subjects who had been professionally tested and found to be of below normal intelligence. The occupations within the study group ranged from hired hit men to elected public officials. Composed of both males and females, the group's age range was from 5 to 74 years. The cases were drawn from all parts of the United States and Canada.

Crimes included, but were not limited to, multiple murder, corporate theft, organized crime contract murders, sexual abuse of children, and arson for profit. A complete breakdown of individual charges can be found on the page following the Sample Case List.

Each suspect within the Confession Possibility list was individually interviewed by the PSE operator/examiner. The extraction of a supportable confession from the suspect was the objective goal. The interviews were all conducted according to a standard structured procedure in which the wording, but not the method, was adapted on-site to each case. This procedure consisted of six steps.

First, the PSE examiner was briefed by police officers or representatives of other investigative agencies in order to become familiar with the circumstances surrounding each case. This briefing included available physical evidence, witness and suspect statements presented to date, and any background information concerning the suspect to be tested. A determination of focus areas for questioning was made at that time by the PSE examiner.

Second, a pre-test interview with the suspect was conducted. The tape recording of the entire interview was begun. Also, during this segment of the interview, sufficient time was used to: (a) obtain the subject's informed consent for the interview, (b) review the topical area of questioning with the subject, (c) attempt to help the subject relax and feel at ease with the examiner, (d) provide an opportunity to discuss the subject's concerns and to clarify terms and issues, (e) administer any pre-test screenings, and (f) allow the examiner to formulate precise questions to be asked of the subject. The initial test questions were then presented to the subject who at this point provided informal answers for them.

The third step was to administer the initial formal oral test to the subject. This test consisted of approximately 15 questions for which the subject provided "yes" or "no" answers. The purpose of the initial set of questions was to establish specific areas of concern

for future questioning rounds. The questions directly concerning the crime would, at this point, be of the general information type. Also included in the list, interspersed among the relevant questions, were several questions with known answers, such as, "Is your name Bob?" To this, the subject was directed to answer correctly. Another question with a known answer was included. In response to this question, the subject was directed to answer incorrectly. The kymographs produced by these control questions provided additional reference points for the interpretation of the relevant test questions.

The fourth step was to process the taped responses through the Psychological Stress Evaluator, PSE-101 for analysis. The resulting kymographs were then interpreted by the operator/examiner. If stress patterns associated with specific answers were observed by the operator, an opportunity was given for the subject to provide additional clarifications. In some cases the subject's stress reaction, created by a specific question, was only indirectly associated with the topic of the questioning.

The fifth step was to conduct a re-test in those question areas where stress had been indicated and to have the subject provide explanations for that stress. The questions were then reformulated by the examiner to test the veracity of the explanations offered by the

suspect. This set of responses was taped, processed through the PSE, and the graphs interpreted. This procedure was repeated until all necessary questions had received non-incriminating answers which had no stress reaction, or until remaining stress reactions could not be eliminated by the explanation/requestioning method.

The last step was to deal with the outcome of the PSE examination. If the relevant questions continued to produce the "no stress" pattern, the subject was classified as "cleared" by the PSE procedure. This information was turned over to the agency requesting the examination.

In the case of the second alternative, if an unalterable stress pattern was produced, the examiner shared this information with the suspect. At the same time the examiner revealed to the suspect the subjective interpretations of the stressed answer pattern. If a spontaneous confession had not occurred up to this point, the PSE operator employed an appropriate verbal closing specifically aimed at speedy suspect confession.

In creating this closing, the operator must take into consideration the background and personality of the suspect. The tactics and intensity of the closing must be gauged according to the level of the subject's knowledge and understanding as well as the subject's level of intimidation.

For instance, the operator could choose to present a verbal scenario describing the suspect's possible involvement in the crime. The operator creates this scenario using a combination of background information plus further input gained from the PSE examination. If the operator has judged correctly, and created the proper scenario, the confrontation between the suspect and what appears to be the operator's knowledge frequently provokes a confession.

In other circumstances, the operator might choose to adopt an assertion using an approach such as the following, "Now is the time to make an honest person of yourself". The operator might also use an empathetic approach such as, "From what you've told me, I see you're in a tight spot. What can we do to get you out of this mess so you can get on with the rest of your life." If confession occurs at this point, the operator then asks the suspect to support his confession by verifying the scenario either as it is or by adding any data that is missing. False confessions are by no means unknown in legal circles, and it is imperative that the confession be verified in as absolute a way as possible. The suspect would be asked to confirm evidence which had not been made public and to provide his own narration of the event. This would be checked closely against all available evidence.

During this entire process the tape recording has continued. It remains as a non-subjective part of the taped interview record. If a spontaneous confession has occurred, this entire interview tape is turned over to appropriate law enforcement officials for court admissible prosecution purposes.

If no confession has occurred, the examiner reports his subjective findings to the agency requesting the PSE screening in order for that agency to use this information as a guide for further investigation (Chapman, 1980, 1983; Fleisher, 1981).

CHAPTER FOUR

Summary

This study shows that, with effective use of the PSE by a well-trained operator/examiner, criminal confessions can be obtained from a wide variety of suspects in an equally wide variety of situations ($N=324$) at a rate ($R_2 = 91.4\%$) far above chance rate of 50%.

In the nineteen years since the Psychological Stress Evaluator, developed by Dektor Counterintelligence and Security, Inc., Savannah, GA, became available to the public, many users and researchers have attempted to utilize it for a variety of purposes. These included market research, opinion surveys, situational stress analysis, pre-employment interviews, and criminal investigations. During this time, however, most research was focused, not on the ability of the PSE to perform these tasks, but on a comparison of the PSE with the polygraph in frequently non-parallel laboratory situations. The outcome of these artificial studies often resulted in validity rating near chance levels, and included disparaging comments about the capability of the PSE to detect deception.

In truth, the PSE does not detect deception. It does detect stress. The source of this stress and its implications are a matter for study and subjective

interpretation by the PSE operator/examiner. However, if the operator/examiner is involved in examining criminal suspects, then the information obtained through the questioning procedure must be converted to a court admissible or non-subjective form.

Many researchers have attempted to demonstrate a statistical reliability for the polygraph and in turn urged the acceptance of polygraph data as court admissible evidence. Those who saw the PSE as competition for the polygraph downplayed the versatility and reliability of the Psychological Stress Evaluator. Proponents of the PSE, in turn, produced their own supporting data, urging judicial acceptance. As both the research and public sectors became concerned with the subjective nature of raw data from deception detection interviews, it became more and more obvious that a widespread judicial acceptance of this material was not going to occur.

However, if the operator/examiner of a stress detection instrument used that equipment to obtain a confirmed criminal confession, the question of judicial acceptance was obviated. The primary value of the PSE lay in the fact that the unforced confession of a criminal was and is universally accepted as legal evidence.

The PSE confession rate of 91.4% is even farther above the 30% to 40% polygraph induced confession rate which the Los Angeles Police Department obtains.

This PSE confession rate is obtained by a systematic method of questioning and requestioning of the criminal suspect. The operator/examiner begins by presenting, to the suspect, a format of basic informational questions, concerning the crimes. The examiner gradually progresses through a series of interview sessions with the intensity of the questions becoming more and more pointed.

At the point at which the suspect can no longer account for stressed reactions, other than to accept responsibility for committing the crime, the examiner verbally places this burden of guilt on the shoulder of the suspect. The suspect can either accept responsibility by confessing to the crime or reject responsibility by maintaining his position of innocence.

When presented with this burden, more than 90% of the suspects, in this 19 year study, confessed to a specific crime and continued by supporting their confession with personal knowledge of the crime.

Crime Breakdown

Grand Larceny.....	29
Larceny.....	19
Burglary.....	32
Robbery.....	11
Murder.....	60
Arson.....	19
Rape.....	52
Child Abuse.....	5
Sexual Abuse.....	37
Assault.....	16
Weapons.....	3
Armed Robbery.....	5
Felony DWI.....	1
Kidnapping.....	2
Criminal Mischief.....	3
Manslaughter.....	1
Sodomy.....	6
Bomb Calls	2
Narcotics.....	3
Coercion.....	1
Misconduct.....	4
Attempted Murder.....	1
Attempted Rape.....	1
Fraud.....	3
Missing Person.....	1
Indecent Assault.....	3
Sexual Contact.....	2
Buying Testimony.....	1
Perjury.....	1