South Carolina Law Review

Volume 20 | Issue 5 Article 5

1968

The Role of the Polygraph in Our Judicial System

Archie L. Harman

Follow this and additional works at: https://scholarcommons.sc.edu/sclr

 Part of the Law Commons

Recommended Citation
The Role of the Polygraph in Our Judicial System, 20 S. C. L. Rev. 804 (1968).

This Note is brought to you by the Law Reviews and Journals at Scholar Commons. It has been accepted for inclusion in South Carolina Law Review by an authorized editor of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

THE ROLE OF THE POLYGRAPH IN OUR JUDICIAL SYSTEM

I. INTRODUCTION

The polygraph, commonly known as the lie-detector has been a subject of great controversy in the United States since the 1920's. The debate has centered around the question of the polygraph's accuracy and what its role should be in our judicial system. The instrument operates on the relatively simple theory that conscious lying causes physiological changes in such things as blood pressure, pulse, and respiration.[1] The blood pressure and pulse rate of the subject are measured by a physician's blood pressure cuff attached to the left arm. The respiration rate and depth are measured by a hollow, flexible rubber hose which is fastened around the subject's chest. The galvanic skin response (the resistance of the skin to a minute electrical current) is measured by attaching two electrodes to the skin, usually affixed to the palm and back of one hand. The blood pressure and pulse rate, respiration rate and depth, and the galvanic skin response are each recorded on a moving chart by three separate pivoted pens.[2] Once the subject is attached to the instrument the examiner normally asks a series of questions which can be answered by a simple yes or no, some of which are relevant and some irrelevant to the matter under inquiry. Later the subject's responses to these questions, as revealed by the chart, are carefully analyzed by the examiner to detrmine whether the subject has given truthful or deceptive answers to the relevant questions posed by the examiner.

It is general knowledge that the polygraph is now widely used by various law enforcement organizations as an aid to investigation. However, the general rule of the courts is that the results of polygraph tests, in the absence of a stipulation by the parties to the contrary, may not be admitted in evi-

1. Wicker, *The Polygraphic Truth Test and the Law of Evidence*, 22 TENN. L. REV. 711, 712 (1953). It should be noted that modern polygraphs include a psychogalvameter for recording changes in the resistance of the skin to the passage of a minute electrical current.

2. For a complete description of the polygraph and how the subject is connected to the instrument, see Trovillo, *Scientific Proof of Credibility*, 22 TENN. L. REV. 743, 748, 749 (1953).

Published by Scholar Commons, 2020

dence.[3] The scope of this article is to review the case law on the admissibility of polygraph test results, to discuss their accuracy and reliability, and to reach some conclusions as to what the law in respect to the admissibility of these tests should be.

II. LEGAL STATUS

The first case reported in the United States dealing with the admissibility of deception test results was *Frye v. United States*,[4] decided in 1923. The test in question was a systolic blood pressure deception test, a forerunner of today's polygraph. The defendant had been convicted of murder and appealed on the ground that it was error for the lower court to disallow testimony offered by an expert witness as to the favorable results of a deception test made on the defendant. The court recognized the difficulty in determining when a scientific principle or discovery leaves the experimental stage and enters the credible stage, and held that this deception test was still in the experimental stage. It concluded that there was no error in refusing to allow the expert testimony on the test results because this deception test had not gained such standing and scientific recognition among physiological and psychological experts as would justify its admission into evidence.[5] Ten years later in *State v. Bohner*[6] the Wisconsin Supreme Court followed the *Frye* precedent and disallowed in evidence the results of a polygraph test showing the defendant innocent of a burglary charge. The court determined that the "lie detector" had not gone beyond the experimental stage.

The case of *People v. Kenny*[7] decided in New York fifteen years after *Frye* is an interesting decision for several reasons, the principle one being that it is the only reported case allowing the unqualified admission of lie-detector test results in evidence in the absence of a stipulation between the parties.

3. 22A C.J.S. *Criminal Law* § 645(2) (1961); C. MCCORMICK, EVIDENCE § 174 (3d ed. 1954).
4. 293 F. 1013 (D.C. Cir. 1923).
5. "It is interesting to note that although the defendant was convicted in the *Frye* case and sentenced to life imprisonment, the excluded blood pressure deception test results indicating his innocence were subsequently corroborated when a third person confessed that he was the real murderer." Wicker, *The Polygraphic Truth Test and the Law of Evidence*, 22 TENN. L. REV. 711, 715 (1953).
6. 210 Wis. 651, 246 N.W. 314 (1933).
7. 167 Misc. 51, 3 N.Y.S.2d 348 (N.Y. Queens County Ct. 1938).

The device used in this case was a pathometer, which measures electrical impulses on the skin. Professor Summers, a psychologist at Fordham University, testified that the results obtained from this instrument in detecting deception were 100 percent accurate. Testimony as to the favorable results of a test performed by Professor Summers on the accused was admitted over the objection of the prosecution that the device was in the experimental stage and had not received general scientific acceptance. The evidence was admitted because a proper foundation had been laid as to the validity of the test. The court felt that if handwriting testimony, psychiatric testimony, and other expert opinion could be allowed in evidence, then testimony as to the results of a pathometer test should be accepted after a proper foundation was laid. *People v. Forte*,[8] another New York case, decided in the same year raised serious doubts as to the precedent value of *Kenny*. The defendant made a motion to reopen his case in which he had been convicted for murder in order that he could be examined under the pathometer. On appeal from the denial of this motion, the court upheld the denial on the grounds that the record did not show a general scientific recognition of the accuracy of the pathometer. The court stated that it could not hold as a matter of law that error was committed in refusing to allow a defendant to take a test until that test was recognized as accurate by experts.

The broad assertion of the lack of "scientific recognition" continued to be a bar to the admission of polygraph test results in the early 1940's. A 1942 decision, *People v. Becker*,[9] excluded polygraph test results because of the lack of testimony indicating general scientific recognition. In *State v. Cole*[10] the defendant's motion that all witnesses of the state and defense take a lie-detector test was also rejected because the polygraph had not attained scientific recognition.

The case of *State v. Lowry*[11] is of special interest because the court laid down some specific objections to the admission of polygraph test results. The defendant was charged with felonious assault and the prosecuting witness as well as the defendant had submitted to polygraph examinations. The trial

8. 279 N.Y. 204, 18 N.E.2d 31 (1938).
9. 300 Mich. 562, 2 N.W.2d 503 (1942).
10. 354 Mo. 181, 188 S.W.2d 43 (1945).
11. 163 Kans. 622, 185 P.2d 147 (1947).

court allowed the polygraph examiner to testify as to his opinion that the defendant was not telling the truth. However, the conviction was reversed and the court stated that to allow the examiner's testimony would impair the right of cross examination. Although the examiner could be questioned, the machine itself would escape cross examination. The court also observed that highly sensitive persons may show unfavorable reactions, while many guilty persons of less sensitive spirit would show no physical indications of falsification. In concluding that the polygraph had not yet gained scientific recognition and accuracy, the court found reversible error in admitting the polygraph testimony.

A concurring opinion supporting the admissibility of polygraph test results gives the case of *Boeche v. State*[12] some special significance. Although the majority of the Nebraska Supreme Court held the test results inadmissible for practically the same reasons expressed in *Lowry*, Judge Chappell in his concurring opinion stated:

> I do not agree with that part of the opinion holding that as a matter of law the so-called polygraph or lie-detector, here involved, "used for determining the truthfulness of testimony has not yet gained such standing and scientific recognition as to justify the admission of expert testimony deduced from tests made under such theory."[13]

Judge Chappell agreed that a sufficient foundation had not been laid to qualify the operator or the exhibits showing the recorded test results, but said that if a proper foundation had been laid, as in the *Kenny* case, the test results would have been admissible.[14]

Two significant cases appeared during 1951. In deciding against the admission of polygraph evidence in *Henderson v. State*,[15] the Criminal Court of Appeals of Oklahoma considered the available statistics on its reliability rather than merely relying on earlier precedents. The court noted some figures which showed that polygraph tests had been proved

12. 151 Neb. 368, 37 N.W.2d 593 (1949).
13. *Id.*, 37 N.W.2d at 597.
14. This seems to be the first time an appellate judge has suggested that the polygraph has gained sufficient scientific recognition to justify admitting test results in evidence where a proper foundation has been laid.
15. 95 Okla. Crim. 45, 230 P.2d 495 (1951), *cert. denied*, 342 U.S. 898 (1951).

correct in 75 percent of the cases and that such factors as emotional tension, physiological and mental abnormalities, and unresponsiveness were responsible for the 25 percent of failures. The court also reviewed the case law on the admissibility of polygraph results and concluded that such tests had attained neither scientific nor psychological accuracy and general recognition.

The second case appearing during the same year was *Stone v. Earp*.[16] Its special interest lies in the fact that it was apparently the first appellate decision to involve the admissibility of polygraph test results in a civil action. The plaintiff sought to establish that he was the legal and equitable owner of certain personal property. During the original trial the judge declared that he would not decide the case until both parties submitted to a lie-detector test; the tests were administered and the results were admitted in evidence. On appeal, the Michigan Supreme Court stated:

> We are not unmindful of the fact that at the direction of the trial court, the parties agreed to submit to the tests, but whether by voluntary agreement, court direction, or coercion, the results of such a test do not attain the stature of competent evidence.[17]

The court held the admission of the test results was improper because the lie-detector was still in the experimental stage, relying on its decision in *People v. Becker*.[18] This opinion indicates that polygraph evidence may not be admitted in Michigan even when there is a stipulation between the parties to admit the results in evidence.[19]

Several years later the Ohio Court of Appeals in *Parker v. Friendt*[20] handed down another of the few cases dealing with admissibility of polygraph evidence in civil actions. In an action brought on a cognovit note, the testimony sought to be introduced was that of a police polygraph examiner with three and one-half years of experience with the polygraph. This fact seemed to have a great bearing on the court's de-

16. 331 Mich. 606, 50 N.W.2d 172 (1951).
17. *Id.* at 611, 50 N.W.2d at 174.
18. 300 Mich. 562, 2 N.W.2d 503 (1942).
19. For an excellent discussion of the case law concerning the admissibility of polygraph evidence through 1951 see Wicker, *The Polygraphic Truth Test and the Law of Evidence*, 22 TENN. L. REV. 711 (1953).
20. 99 Ohio App. 329, 118 N.E.2d 216 (1954).

cision. The court noted that the person conducting a polygraph test must have sufficient training and knowledge to understand the delicate physiological reactions upon which his conclusions are based, and he must have a complete comprehension of the mechanism as well as broad experience in the operation of the instrument. The court expressed doubt that the operator, whose testimony was sought to be introduced, would be competent to answer detailed questions about the physiological and psychological reactions involved. Thus, while the court cited earlier cases where polygraph evidence was held inadmissible, it seems that its decision was predicated upon the examiner's lack of adequate qualifications.

In *People v. Davis*,[21] decided in Michigan in 1955, a determined and exhaustive effort was made to enter the results of a polygraph test in evidence. The defendant contended that he had lost control of his automobile and had accidently run down his wife, but he was prosecuted and convicted of murder. On appeal, the defendant claimed error in the refusal of the trial court to admit testimony concerning the favorable results of a polygraph test taken by the defendant. The trial court had allowed the defendant to make an offer of proof for the purpose of the record, and the defendant presented as a witness Dr. Lamoyne Snyder, a well known doctor, lawyer, and internationally known scientist. Dr. Snyder testified that the consensus of opinion in the medical profession was that the theory on which the polygraph operates is correct. He also testified that the validity of the results depended on the qualification of the examiner but that even in the most capable hands a diagnosis could not be made in about 10 percent of the cases for mental or medical reasons. He also testified that the use of the polygraph was a scientific procedure used by the Army, Navy, Air Force and the Atomic Energy Commission, and that while not infallible, it was more accurate than eye witness testimony. Despite this strong testimony the court held it was not error to disallow the results of the polygraph test in evidence. The court quoted Professor Fred Inbau, an authority in the field of lie detection, as to the scientific acceptance of the polygraph technique: "It must be reported, therefore, that at the present time the technique is not an 'accepted' one among the scientists whose approval

21. 343 Mich. 348, 72 N.W.2d 269 (1955).

is prerequisite to judicial recognition."[22] The court stated that the percentage of error estimated by experts ranged from less than 10 percent up to 25 percent and that in view of the great weight such tests would carry in the minds of the jury, the court should not allow these tests in evidence before their accuracy and scientific acceptance is clearly shown. Thus another attempt to break down the rule of inadmissibility of polygraph tests ended in failure.[23]

In reviewing the cases dealing with the admissibility of polygraph tests which appeared in the late 1950's and 1960's, there were no substantial new reasons given for rejecting this kind of evidence. The courts have relied on the earlier cases and the rationale contained therein. An excellent example of the more recent type of summary treatment given the subject of lie-detector evidence appears in *Lee v. Commonwealth.*[24] On appeal from a conviction for petit larceny the court found no error in the trial court's exclusion of lie detector testimony. The court disposed of the matter quickly by stating that the tests had not yet been proved scientifically reliable and citing the earlier case law. The case of *State v. Foye,*[25] a North Carolina case which appeared in 1961, was decided in much the same manner. The defendants had been convicted for first degree murder and the court, on appeal, held that the admission in evidence of lie detector test results was reversible error. The basis for this decision was the earlier case law. Again in *State v. Arnwine*[26] the court's decision rejecting testimony relative to a polygraph test was based on previous case law even though the court's attention was directed to a recent study in New York, which revealed that out of 7,400 cases, the accuracy of polygraph tests was reported to be 95 percent with less than 4 percent indefinite determinations and a 1 percent margin of maximum possible error. These later cases seem to rely almost exclusively on the earlier case law. Of course, there have been many other cases decided in the state and federal courts involving the admissibility of polygraph tests in evidence which have not been reviewed here, but in the absence of a stipulation be-

22. *Id.* at 371, 72 N.W.2d at 281, *quoting from* F. INBAU & J. REID, LIE DETECTION AND CRIMINAL INTERROGATION 130 (3rd ed. 1953).
23. *See also* California Ins. Co. v. Allen, 235 F.2d 178 (5th Cir. 1956).
24. 200 Va. 233, 105 S.E.2d 152 (1958).
25. 254 N.C. 704, 120 S.E.2d 169 (1961).
26. 67 N.J. Super. 483, 171 A.2d 124 (1961).

South Carolina Law Review, Vol. 20, Iss. 5 [2020], Art. 5

tween the parties, not one has ruled in favor of admissibility.[27]

There have been at least two cases in the federal courts within the last ten years in which polygraph evidence was involved in motions for new trials. The district court in *United States v. Stromberg*[28] denied a motion for a new trial and held that a polygraph test, indicating the defendant's innocence, taken after the original trial, could not produce a different result in a new trial since it would not be admissible. The decision is interesting because it rejected polygraph evidence not merely on precedent but on the grounds that the polygraph could not be examined or cross-examined.[29] Judge Kaufman in his opinion stated: "A machine cannot be examined or cross-examined; its 'testimony' as interpreted by an expert is, in that sense, the most glaring and blatant hearsay."[30] In *McCrosky v. United States*[31] the court relied on *Stromberg* and again held that a polygraph test, indicating innocence and taken by the defendant after his trial and conviction, would not warrant the granting of a new trial.

III. ADMISSION ON STIPULATION

The general rule of inadmissibility of polygraph tests has been modified in some states and the results of such a test admitted when both parties in the case stipulate beforehand that a polygraph test will be taken and that the results may be admitted in evidence by either side.[32] One of the first cases involving a stipulation by the parties was *LeFevre v. State*[33] in which the defendant was convicted for murder. The defendant had agreed to take a polygraph test, and had signed a stipulation that the results of such a test could be admitted in evidence by either the prosecution or the defense. The defendant actually took several tests given by two different experts and signed a stipulation as to each of the tests. At the trial the defendant offered the report and findings of the experts, but upon the state's objection the results of the tests were not admitted in evidence. On appeal the court held without any discussion that they were properly

27. F. INBAU & J. REID, TRUTH AND DECEPTION 243 (1966).
28. 179 F. Supp. 278 (S.D.N.Y. 1959).
29. This objection has also been made in the state court decision of *State v. Lowry*, 163 Kans. 622, 185 P.2d 147 (1947).
30. United States v. Stromberg, 179 F. Supp. 278, 280 (S.D.N.Y. 1959).
31. 339 F. 2d 895 (8th Cir. 1965).
32. *See* F. INBAU & J. REID, *supra* note 27, at 237.
33. 242 Wis. 416, 8 N.W.2d 288 (1943).

excluded, citing the earlier Wisconsin case of *State v. Bohner*,[34] which had held polygraph evidence inadmissible for lack of scientific recognition. *People v. Houser*,[35] decided in 1948, was the first case in which an appellate court upheld the validity of a written stipulation. Both parties stipulated that the defendant was to take a polygraph test, that the results were to be admissible in evidence, and that the operator of the polygraph was an expert operator and interpreter of such tests. The results indicated that the defendant had guilty knowledge, and the court, on appeal, upheld the trial court's ruling admitting the test results over the defendant's objection. The court observed that the defendant could not derogate from a stipulation merely because the test results were unfavorable to him. A few years later, however, in *Stone v. Earp*[36] the Michigan Supreme Court by way of dictum announced that it would not allow polygraph test results in evidence even though the parties had so stipulated. The Court of Appeals of Kentucky in *Colbert v. Commonwealth*[37] refused to allow polygraph test results in evidence even though the defendant had orally agreed to take a polygraph test and to be bound by the results. This case can be distinguished from *Houser*, however, in that there was no stipulation as to the examiner's qualifications and the agreement was oral and not entered into the record at the time it was made. The court determined that there had been no stipulation of full admissibility.

Admissibility of polygraph tests in evidence was upheld in *State v. McNamara*[38] in which the defendant agreed to submit to a polygraph test and that the examiner could testify in court as to the results of the test. The written stipulation was signed by the defendant and was similar to the one in *Houser*. The test indicated the defendant was not telling the truth. In affirming the conviction for second degree murder, the court held that the admission of the examiner's testimony over the defendant's objection was proper since the defendant had signed the stipulation agreeing to allow the results of the polygraph test in evidence. This trend has continued and

34. 210 Wis. 651, 246 N.W. 314 (1933).
35. 85 Cal. App. 2d 686, 193 P.2d 937 (1948).
36. 331 Mich. 606, 50 N.W.2d 172 (1951).
37. 306 S.W.2d 825 (Ky. Ct. App. 1959).
38. 252 Iowa 19, 104 N.W.2d 568 (1960); *contra*, State v. Trimble, 68 N.M. 406, 362 P.2d 788 (1961).

in *State v. Valdez*[39] the results of a polygraph examination were allowed in evidence over the defendant's objection since the defendant had stipulated that he would take the polygraph test and that the results could be admitted in evidence. The Arizona Supreme Court held that polygraph evidence had developed to the point that its results were sufficiently probative to warrant admissibility on stipulation at the discretion of the trial judge. The court carefully considered the admission of the polygraph evidence and formulated a list of qualifications which must be met before the evidence is admissible. The attorney who considers the use of the polygraph in a given case may find it valuable to consider the requirements laid down by the Arizona Court, which are as follows:

1. That the county (prosecuting) attorney, defendant and his counsel all sign a written stipulation providing for the defendant's submission to the test and for the subsequent admission at trial of the graphs and the examiner's opinion thereon on behalf of either the defendant or the state.
2. That notwithstanding the stipulation the admissibility of the test results is subject to the discretion of the trial judge, *i.e.* if the trial judge is not convinced that the examiner is qualified or that the test was conducted under proper conditions, he may refuse to accept such evidence.
3. That if the graphs and examiner's opinion are offered in evidence the opposing party shall have the right to cross-examine the examiner respecting:
   (a) the examiner's qualifications and training;
   (b) the conditions under which the test was administered;
   (c) the limitations of and possibilities for error in the technique or polygraphic interrogation; and
   (d) at the discretion of the trial judge, any other matter deemed pertinent to the inquiry.

39. 91 Ariz. 274, 371 P.2d 894 (1962).

4. That if such evidence is admitted the trial judge should instruct the jury that the examiner's testimony does not tend to prove or disprove any element of the crime with which a defendant is charged but at most tends only to indicate that at the time of the examination defendant was not telling the truth. Further, the jury members should be instructed that it is for them to determine what corroborative weight and effect such testimony should be given.[40]

The line of cases upholding the admission of polygraph test results in evidence under stipulation was approved in *State v. Brown*[41] in which the defendant was convicted of robbery in the face of equal evidence pointing to his innocence or guilt. On motion for a new trial, the trial judge expressed doubt as to the guilt of the defendant; and as a result, the attorneys for the parties agreed that the defendant should be given a polygraph test. Three tests were taken; two showed him innocent and one showed him guilty. The trial judge granted a new trial, and on appeal the court upheld the lower court's decision, saying that the parties, in effect, had stipulated that the court could consider the results of a polygraph test on the motion for a new trial and thus it had been proper to consider the test results.

The rule admitting polygraph tests under stipulation seems to be a logical one. Whenever opposing parties and their attorneys are willing to resort to a polygraph test, it is most probably a doubtful case—a case in which the evidence on either side is not convincing and a decision reached on the available evidence would be guesswork. Therefore, there is good reason for using polygraph test results which would probably be more accurate than the guess by the judge or jury deciding the case without the test. Also, with opposing sides agreeing upon the selection of an expert in the stipulation, it can be assumed that the person selected is an honest and competent examiner. Thus the stipulation agreement provides an extra safeguard.[42]

40. *Id.* at 283, 371 P.2d at 900.
41. 177 So. 2d 532 (Fla. Ct. App. 1965).
42. F. INBAU & J. REID, *supra* note 27, at 247-248.

IV. COLLATERAL EVIDENTIARY ASPECTS

There is some law relative to the polygraph which does not concern the issue of its admissibility in evidence and thus is not directly within the scope of this article. However, these general rules of law should be briefly mentioned. The first rule, very simply stated, is "that it is improper for any witness or counsel to make reference to the fact that a polygraph examination was conducted on the defendant."[43] The rule and the rationale behind it are thoroughly discussed in the case of *State v. Kolander*.[44] The next general rule, that it is improper to allow testimony of the defendant's refusal to take a polygraph examination, was upheld in *State v. Britt*[45] which is apparently the only South Carolina case involving the polygraph. The court found reversible error in allowing testimony of the defendant's refusal to take a polygraph test even though the testimony was struck and the jury instructed to disregard it. Finally, any reference to the offer or willingness of the defendant to submit to an examination is also prohibited by the courts.[46] In *Commonwealth v. Saunders*[47] the basis for prohibiting the defendant from showing his willingness to take a polygraph test was stated as follows: "Defendant's offer was merely a self-serving act or declaration which obviously could be made without any possible risk, since, if the offer were accepted and the test given, the result, whether favorable or unfavorable to the accused, could not be given in evidence."[48]

V. RELIABILITY AND ACCURACY

It is an obvious understatement to conclude that the courts have not been enthusiastic about the admissibility of polygraph test results. The reliability, accuracy and scientific acceptance of the polygraph technique will now be reviewed in order to evaluate the objections to the admissibility of these test results which have been expressed by the courts.

43. *Id.* at 244. The book cites a number of cases following this general rule.
44. 236 Minn. 209, 52 N.W.2d 458 (1952).
45. 235 S.C. 395, 111 S.E.2d 669 (1959); *accord*, Mills v. People, 139 Colo. 397, 339 P.2d 998 (1959).
46. F. INBAU & J. REID, *supra* note 27, at 246; *see, e.g.*, Commonwealth v. McKinley, 181 Pa. Super. 610, 123 A.2d 735 (1956).
47. 386 Pa. 149, 125 A.2d 442 (1956).
48. *Id.* at 157, 125 A.2d at 445-446.

The most crucial factor in obtaining accurate polygraph test results in the reliability of the examiner, inasmuch as he interprets and evaluates the polygraph chart (polygram) to determine whether the subject has given truthful or deceptive responses. Fred E. Inbau, Professor of Law at Northwestern University and a leading authority in the field of lie detection, has stressed the importance of the qualified examiner in these words: "Basic to all that has been said with regard to the utility and accuracy of the polygraph technique is the matter of examiner qualification."[49] Each polygraph examiner interviewed in researching this article agreed that the accuracy and validity of the polygraph is primarily dependent upon the skill, experience and integrity of the examiner.[50]

Exactly how much experience and training is needed to qualify as an expert may be open to question. Certainly the examiner must have considerable experience in administering tests in addition to specialized instruction in the polygraph technique. There are a number of schools in the United States offering this specialized instruction with complete courses ranging from six weeks to six months in duration.[51] A national organization of polygraph examiners known as the American Polygraph Association (organized in 1966) has set certain requirements for membership which include, among others, a college degree, specialized instruction in the polygraph technique from a school approved by the Association, and the administering of at least two hundred polygraph examinations.[52] In order to prevent the degrading of the polygraph technique by unqualified examiners it would seem more states should enact legislation requiring the licensing of polygraph examiners.[53] Illinois, Kentucky and New Mexico

---

49. F. INBAU & J. REID, *supra* note 27, at 235.

50. Interview with J. Frank Faulk, South Carolina Law Enforcement Division, in Columbia, South Carolina, March 2, 1968; Interview with Stephen F. Wyndham, South Carolina Law Enforcement Division, in Columbia, South Carolina, March 8, 1968; Interview with James A. Boggs, Carolina Investigating Agency, in Columbia, South Carolina, March 9, 1968.

51. Interview with J. Frank Faulk, South Carolina Law Enforcement Division, in Columbia, South Carolina, March 2, 1968.

52. AMERICAN POLYGRAPH ASSOCIATION CONSTITUTION art. III, § 1.

53. Fred Inbau stated before a congressional hearing in 1964 that 80 percent of the examiners conducting test were not sufficiently qualified to administer polygraph tests; *Hearings Before the Subcomm. on the Use of Polygraphs as Lie Detectors by the Federal Government of the House Comm. on Government Operations*, 88th Cong., 2nd Sess., pt. 1, at 8 (1964).

presently have such a licensing requirement.[54] Apparently, we do not have a problem with unqualified and undesirable examiners in South Carolina. There are only four polygraph operators (excluding those who work solely for private enterprise or the federal government) conducting tests in South Carolina, and they are all well qualified.[55]

The degree of test result accuracy obtained by expert polygraph examiners is extremely difficult to determine in statistical terms.[56] However, there are some statistics available from which an approximation of the polygraph's accuracy can be made. One of the first reports of polygraph accuracy, made by Dr. Dael Wolfe in 1941 for the armed services, revealed that correct judgments could be made in 80 percent of the cases, indefinite results would be obtained in 17 percent of the cases, and incorrect judgments would be made in 3 percent of the cases.[57] It is of interest to note that these are the identical figures cited by Professor McCormick in his hornbook on evidence.[58] In polygraph examinations conducted by the Chicago Scientific Crime Detection Laboratory more than 20 years ago, it was concluded that the results were 75 to 80 percent correct, 15 to 20 percent indefinite and the probable maximum error was 5 percent.[59] A study reported in *Lie Detection and Criminal Interrogation*,[60] involving 4,280 examinations, reported that definite results were obtained in 4,093 or 95.6 percent of the tests and that out of these, only 3 known errors were discovered. Thus the percentage of known error was .07 percent.[61] This particular study is one of the strongest in support of the proposition that polygraph test results are extremely reliable. In one of the most recent reports of poly-

54. Laymon, *Lie Detectors—Detection by Deception*, 10 S. DAK. L. REV. 1, 26 (1965).

55. The four polygraph operators in South Carolina and the number of years experience each operator has in the polygraph technique are as follows: J. Frank Faulk, South Carolina Law Enforcement Division, Columbia, South Carolina, 18 years' experience; Stephen F. Wyndham, South Carolina Law Enforcement Division, Columbia, South Carolina, 7 years' experience; James A. Boggs, Carolina Investigating Agency, Columbia, South Carolina, 14 years' experience; Earl L. Leggett, Truth Associates, Charleston, South Carolina, 10 years' experience.

56. F. INBAU & J. REID, *supra* note 27, at 234.

57. Cureton, *A Consensus as to the Validity of Polygraph Procedures*, 22 TENN. L. REV. 728, 729 (1953).

58. C. MCCORMICK, EVIDENCE § 174, at 372 (3d ed. 1954).

59. Wicker, *The Polygraphic Truth Test and the Law of Evidence*, 22 TENN. L. REV. 711, 713 (1953).

60. F. INBAU & J. REID, LIE DETECTION AND CRIMINAL INTERROGATION (3d ed. 1953).

61. *Id.* at 111.

graph accuracy in tests conducted by John E. Reid and Associates of Chicago, Illinois, the percentage of known error was less than 1 percent and no diagnosis could be made in 5 per cent of the cases.[62]

These statistics, however, have not escaped a certain degree of criticism. An article appearing in the American Bar Association Journal two years ago reported that the degree of polygraph accuracy as revealed by careful studies of physiological psychologists is closer to 70 percent instead of the 95 to 99 percent accuracy figure given by commercial polygraph operators.[63] Statistics supporting polygraph reliability have also been criticized by a congressional investigating committee because they do not reveal the percentage of findings that have been actually confirmed or verified as correct.[64] With the accuracy of some of the statistical reports in question, attention should be given to the specific issues that have been raised as to the polygraph's accuracy and reliability.

One of the first contentions appearing in the cases dealing with the polygraph and one which is always mentioned by laymen and those unfamiliar with the polygraph technique is that a highly sensitive person, who is afraid or nervous, may show a guilty response when taking a lie-detector test even though he may be entirely innocent. However, the authorities in the field of lie-detection maintain that the examiner can distinguish between a nervous response and a guilt response and that the skilled interpreter "will have no difficulty in differentiating the apprehensions of the innocent from the guilt complexes of the guilty."[65] To understand how this distinction is made would involve a greatly detailed study of the polygraph technique that would be beyond the scope of this article. But after observing numerous polygraph examinations and the resulting analyses conducted by Lieutenant Frank Faulk of the South Carolina Law Enforcement Division, the writer believes that this contention is valid.

Another objection frequently made against the polygraph is that the results of a test may not be valid if the subject has

62. F. INBAU & J. REID, *supra* note 27, at 234.
63. Burkey, *The Case Against the Polygraph*, 51 A.B.A.J. 855, 856 (1965).
64. *Hearings Before the Subcomm. on the Use of Polygraphs As Lie Detectors by the Federal Government of the House Comm. on Government Operations*, 88th Cong., 2d Sess., pt. 1, at 32 (1964).
65. Trovillo, *Scientific Proof of Credibility*, 22 TENN. L. REV. 743, 750 (1953); *accord*, F. INBAU & J. REID, *supra* note 60, at 66 to 71.

certain physical and mental abnormalities. Again the leading authority, Mr. Inbau, has maintained that this contention is not totally accurate and in one of his books stated that

> [a]s to the influence of physiological and mental abnormalities, it may be stated *as a general rule* that if the abnormalities, are sufficiently serious *to materially affect the results of the test,* they are usually recognizable as such, either in the type of recording they produce or else in the appearance and demeanor of the person being tested.[66]

There seems to be no disagreement with the assertion that a serious abnormality can make an accurate polygraph diagnosis impossible. This has been confirmed by a study conducted by a group of psychologists including Dr. H. C. Salzberg, Professor of Psychology at the University of South Carolina.[67]

In summary, the experiment conducted by these psychologists involved three groups of five subjects in each group. One group, the control group, consisted of five normal males, another group was composed of five non-delusional males who were under psychiatric care and diagnosed as psychoneurotic, and the third group was composed of five delusional males also under psychiatric care and diagnosed as psychotic. The subjects were put together into a hypothetical crime situation by an accusation against the group that one of them had stolen a twenty dollar bill. Four polygraph examiners were called in who did not know about the experiment and were asked to determine which one or ones in the entire group were guilty or innocent of the theft. The results were that all of the examiners agreed that none of the subjects in the control group were giving deceptive responses in answer to questions concerning the alleged theft. However, in the psychoneurotic group there was some difference of opinion among the examiners as to whether all the subjects were telling the truth. In the psychotic group there was even a greater difference of opinion as to the truthful responses of the subjects, and overall there was a markedly lesser degree of accuracy in the more emotionally disturbed group. There were no specific indications of psychiatric or emotional dis-

66. F. INBAU & J. REID, *supra* note 60, at 71.
67. Heckel, Brokaw, Salzberg & Wiggins, *Polygraphic Variations in Reactivity Between Delusional, Non Delusional, and Control Groups in a "Crime" Situation,* 53 J. CRIM. L.C. & P.S. 380 (1962).

turbances indicated by the polygraphic charts themselves. The study concluded that it was difficult to determine the subject's emotional disturbance by his demeanor or verbal comments alone and that the findings of the study tended to rule out the advisability of testing an emotionally disturbed subject to determine the presence or absence of guilt.[68]

This experiment seems to contradict the contention that a serious emotionally disturbed person can be recognized by a polygraph examiner by his demeanor or by the recordings on the polygraph chart. Certainly this is ample proof that polygraph test results are likely to be inaccurate when the subject has a serious emotional disturbance and the real issue is whether the expert examiner can identify these individuals and thus avoid the possibility of making an invalid diagnosis. Without question this is the most damaging argument which can be put forth in opposition to the judicial use of the polygraph.

Another matter which indirectly reflects the accuracy and reliability of the polygraph is the degree of scientific acceptance that the polygraph technique has received to date. The lack of such acceptance has been cited numerous times by the courts in holding polygraph test results inadmissible.[69] Even Mr. Inbau in an article appearing more than 20 years ago reported that courts which had considered the matter refused lie-detector evidence "for the very understandable reason that the test had 'not yet gained such standing and scientific recognition among psysiological and psychological authorities as would justify the courts in admitting expert testimony deduced from the discovery, development, and experiments thus far made.' "[70]

Research for this article has failed to reveal the exact degree of scientific acceptance that the polygraph technique enjoys at this time. Apparently, the only study made on the subject was conducted approximately 16 years ago and reported in the *Tennessee Law Review*.[71] In that particular report a number of questionnaires were sent out to psychol-

68. *Id.*
69. *See* People v. Davis, 343 Mich. 348, 72 N.W.2d 269 (1955); Henderson v. State, 94 Okla. Crim. 45, 230 P.2d 495 (1951); People v. Becker, 300 Mich. 562, 2 N.W.2d 503 (1942).
70. Inbau, *The Lie-Detector*, 26 BOSTON U. L. REV. 264, 271 (1946).
71. Cureton, *A Concensus as to the Validity of Polygraph Procedures*, 22 TENN. L. REV. 728 (1953).

ogists and polygraph examiners to obtain their opinions about the polygraph technique. Many detailed questions were asked in the survey, and briefly summarized, the results are as follows: (1) Of 199 examiners, 83 percent believed that the polygraph was highly valid for recording physiological reactions and 47 percent recommended court testimony by competent examiners. (2) Of 230 psychologists who had conducted or observed polygraph tests, 63 percent considered the polygraph highly valid for recording physiological reactions and 51 percent recommended court testimony. (3) Of the group of 35 psychologists, who were also examiners, 63 percent thought the polygraph was highly valid for recording physiological reactions and 60 percent recommended court testimony. (4) No significant proportion of any group considered the polygraph invalid or useless when used by a competent examiner.[72]

Certainly this study indicates that the polygraph technique is accepted by a substantial body of scientific opinion. While the above study reflects favorably upon the polygraph technique, a large scale and comprehensive survey of psychologists and polygraph examiners across the country would be extremely helpful in setting the record straight as to the general scientific acceptance of the polygraph.

Before suggesting what the legal role of the polygraph ought to be in the future, a final objection which does not go to the issue of reliability or scientific acceptance but which has been raised against the admissibility of polygraph evidence should be considered, namely, that polygraph test results are hearsay and the right of cross examination is impaired.[73] This objection overlooks the fact that this is also true with respect to x-rays and other medical instruments, yet expert testimony based on the results obtained by these methods is admissible in evidence.[74] The polygraph chart or polygram, is a recording of physiological reactions just as an electrocardiagram is a recording of heart action. There seems to be no substantial basis for the hearsay objection since the examiner would be subject to cross-examination on the witness stand.

72. *Id.* at 740.
73. *See* United States v. Stromberg, 179 F. Supp. 278 (S.D.N.Y 1959); State v. Lowry, 163 Kans. 622, 185 P.2d 147 (1947).
74. F. INBAU & J. REID, *supra* note 27, at 240.

VI. CONCLUSION

In considering what the role of the polygraph ought to be in our judicial system, a standard for its admissibility in evidence must first be determined. Dean Wigmore states that as to the requirements for the admissibilty of results obtained from tests conducted by psychologists, "[a]ll that should be required as a condition is the preliminary testimony of a scientist that the proposed test is an acceptable one in his profession and that it has a reasonable measure of precision in its indications."[75] Professor McCormick, a leading authority on the law of evidence concludes that "[i]f we thus deflate the requirement to the normal standard which simply demands that the theory or device be accepted by a substantial body of scientific opinion, there can be little doubt that the lie-detector technique meets the requirement."[76] From the one detailed survey available on the matter of scientific acceptance it certainly would seem that the polygraph technique has been accepted by a substantial body of scientific opinion and thus meets the standard for admissibility.[77] John E. Reid and Fred E. Inbau in their latest book, *Truth and Deception*[78] report that based on their experience in the examination, personally or in supervision of over thirty-five thousand subjects, that the polygraph has a very high degree of reliability and that "[i]t is our view . . . that the results of a competently conducted polygraph examination should be accepted as evidence."[79]

Of course, the polygraph is not 100 percent accurate but neither are many other forms of evidence procured by scientific techniques and presently admitted by the courts in evidence. For example, in the field of psychiatry many studies indicate that psychiatric diagnosis is very unreliable although expert opinion on the matter is allowed in evidence.[80] Most every lawyer has seen at some time medical doctors give opposing testimony in court concerning an individual's injuries or health or even contradicting opinions about x-rays. Nevertheless, expert opinion of this nature should not be kept out of the court room because in most instances it is helpful to

75. 3 J. WIGMORE, EVIDENCE § 990 (3d ed. 1940).
76. C. MCCORMICK, EVIDENCE § 174, at 369 (3d ed. 1954).
77. Cureton, *A Consensus as to the Validity of Polygraph Procedures*, 22 TENN. L. REV. 728 (1953).
78. *Supra* note 27.
79. *Id.* at 257.
80. *Id.* at 255-56.

the jury in reaching a fair verdict even though at times the expert opinion may be incorrect.

Although there has been a great clamor for judicial recognition of polygraph evidence, the courts have too often been closeminded in rejecting the polygraph without objectively assessing its potential value to our judicial system. Generally, as we have seen, the courts have taken an attitude similar to that of a congressional committee which investigated the use of the polygraph by the federal government almost four years ago.[81] This committee flatly condemned the use of the polygraph and recommended that the government prohibit the use of the polygraph in all but the most serious criminal and national security cases.[82] Clearly this investigation could not be considered a scientific study as a quick reading of the Committee Report will readily reveal.

However, our policy toward the admissibility of polygraph test results must be cautious in view of the fact that a polygraph test administered to an individual with a serious emotional disturbance is likely to produce an erroneous result and also because of the possibility that the test results might have an unusually great influence on the jury. Undoubtedly, the polygraph in competent hands is reliable, and somewhere between the extreme of total acceptance and total rejection, the polygraph should have a place in the court room. Admission of polygraph test results should be within the discretion of the trial judge, and he should be particularly careful in admitting polygraph test results in criminal cases because of the substantial probability that some of those individuals charged with criminal offenses who may take a polygraph examination have some kind of emotional disturbance. Polygraph test results should only be admitted in evidence in criminal prosecutions if there is a stipulation to that effect between the prosecution and the defense.[83] In addition, if there is any indication or likelihood that the individual tested has an emotional disturbance, the results should not be admitted. Of course, the judge should be able at his discretion to refuse the admission of the test results for other reasons such as the lack of a qualified examiner or a finding that the value of

81. H. R. REP. No. 198, 89th Cong., 1st Sess. 1 (1965).
82. *Id.* at 2.
83. The role of the prosecuting attorney is not only to prosecute the guilty but to protect the innocent; thus in most cases he would be amenable to allowing the defendant to submit to a polygraph examination.

the evidence does not outweigh the danger of prejudice, confusion, or loss of time.

Perhaps the greatest contribution could be made by the polygraph in civil cases since the probability of dealing with people who have serious emotional disturbances would not be as great as in the area of criminal law. As in the criminal area the trial judge should have full discretion in admitting polygraph test results in evidence, but there should be no requirement of a stipulation for admissibility in civil suits for the simple reason that the party in the wrong would seldom agree to allowing the other party to take a polygraph test and have the results admitted in evidence. If there is any indication or likelihood that the party submitting to the polygraph test has an emotional disturbance, the judge should not admit the test results in evidence. He should have full discretion to refuse the evidence because of the lack of a qualified examiner, the possibility of unfair prejudice, confusion, or waste of time. Whether the polygraph test results are admitted in a criminal or civil case, the judge should instruct the jury that they should consider the test results along with the other evidence, but that the opinion of the examiner as to whether the subject gave truthful or deceptive responses is not conclusive and should be only given whatever weight they think it deserves.[84]

The use of the polygraph could be extremely helpful, for example, in an automobile wreck case where both parties claim they were proceeding through an intersection under a green light. There are any number of circumstances in which the evidence would be equally divided between the parties so that a decision by the judge or jury would be nothing more than guesswork; certainly the polygraph is more accurate than a mere guess. Although the courts have taken an understandable stand against the polygraph and the technique which claims the ability to determine truth from falsehood in most cases, eventually they should recognize its value and accept the polygraph, with its limitations, as a fair and objective aid in arriving at the truth and in serving the ends of justice.

ARCHIE L. HARMAN

84. On cross examination the opposing attorney could carefully question the examiner concerning the reliability of the polygraph test to bring out the fact that the results of these tests are not 100 per cent accurate.