

[PUBLISH]

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

No. 96-9459

D. C. Docket No. CR196-19-01

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

versus

FRED EMERSON GILLIARD,

Defendant-Appellant.

Appeal from the United States District Court
for the Southern District of Georgia

(January 21, 1998)

Before ANDERSON and BLACK, Circuit Judges, and MOORE*, Senior
District Judge.

BLACK, Circuit Judge:

*Honorable John H. Moore, II, Senior U.S. District Judge for
the Middle District of Florida, sitting by designation.

The sole issue in this appeal is whether the district court erred when it excluded evidence of a polygraph examination offered into evidence by Appellant Fred Emerson Gilliard. The district court excluded the polygraph evidence under Fed. R. Evid. 702 and, alternatively, under Fed. R. Evid. 403. Gilliard contends that the district court's ruling constituted an abuse of discretion. We hold that the district court did not abuse its discretion, and affirm the judgment entered by the district court.

I. BACKGROUND

On March 8, 1996, a grand jury indicted Gilliard on 100 counts of submitting false claims to Medicare and Medicaid, in violation of 18 U.S.C. § 287, while he was chief executive officer of Penn-Teck Diagnostics, Inc. (Penn-Teck); 1 count of obstructing justice in violation of 18 U.S.C. § 1503 by influencing a witness to make false statements pertaining to the Medicare and Medicaid claim submissions; and 1 count of making false declarations to a grand jury in violation of 18 U.S.C. § 1623.

On June 24, 1996, Gilliard submitted to a polygraph examination administered by Charles R. Honts, Ph.D. (the Honts Polygraph).¹ Dr. Honts is an associate professor of psychology at Boise State University whose training is in

¹ Gilliard also submitted to an earlier polygraph examination on August 12, 1995, apparently in an attempt to avoid indictment. The district court's exclusion of evidence pertaining to that earlier polygraph is not at issue here.

psychophysiology, the science of how the mind and body interact. The Honts

Polygraph consisted of four relevant questions:

1. While you were employed by Penn-Teck, did you develop a scheme designed to defraud Medicare or Medicaid through the use of incorrect billing codes?
2. When the incorrect billings were filed with Medicare or Medicaid, did you know that they were incorrect?
3. While you were employed by Penn-Teck, did you deliberately cause incorrect billings to be filed with Medicare or Medicaid?
4. To the best of your knowledge, were the incorrect billings to Medicare and Medicaid made unintentionally?

Gilliard denied any wrongdoing. Dr. Honts scored the examination using two different methods, and concluded that the results indicated that Gilliard was not being deceptive when he answered the relevant questions. Gilliard notified the Government of the results of the Honts Polygraph. The Government never conducted its own polygraph examination of Gilliard, but instead moved for the exclusion of the Honts Polygraph evidence.

On July 11, 1996, the magistrate judge held an evidentiary hearing, and on August 14, 1996, he issued an order holding the Honts Polygraph evidence to be admissible. The Government appealed that ruling to the district court. The district court recognized that under this Court's en banc decision in *United States v.*

Piccinonna, 885 F.2d 1529 (11th Cir. 1989), polygraph evidence is no longer per se inadmissible. After performing the analysis required by our holding in *Piccinonna*, the district court sustained the Government's objection and held that the Honts Polygraph evidence was inadmissible under Fed. R. Evid. 702, as well as under Fed. R. Evid. 403.

The jury convicted Gilliard on all 102 counts of the indictment, and the district court sentenced Gilliard to imprisonment. Gilliard now appeals the exclusion of the Honts Polygraph evidence .

II. ANALYSIS

Prior to this Court's en banc decision in *Piccinonna*, polygraph evidence was per se inadmissible in this Circuit. *Piccinonna*, 885 F.2d at 1531-32. In *Piccinonna*, however, this Court concluded that the per se rule was unwarranted in light of the advances that had been made in the field of polygraphy and the lack of evidence that juries are unduly swayed by polygraph evidence. *Id.* at 1535. Specifically, we held that a district court can admit polygraph evidence in two circumstances: (1) when the parties stipulate in advance as to the circumstances of the test and as to the scope of its admissibility; and (2) to impeach or corroborate the testimony of a witness at trial. *Id.* at 1536. We were careful to note, however, that neither modification to the per se exclusionary rule “preempt[s] or limit[s] in any way the trial court’s discretion to

exclude polygraph expert testimony on other grounds under the Federal Rules of Evidence.” *Id.*

As the parties did not stipulate to the circumstances and admissibility of the Honts Polygraph, the issue here is whether the Honts Polygraph evidence should have been admitted to corroborate Gilliard’s trial testimony. There are three prerequisites to the admission of polygraph evidence for the purpose of corroborating the trial testimony of a witness: (1) “the party planning to use the evidence at trial must provide adequate notice to the opposing party that the expert testimony will be offered;” (2) the opposing party must be given a “reasonable opportunity to have its own polygraph expert administer a test covering substantially the same questions;” and (3) the polygraph administrator’s testimony must be admissible under the Federal Rules of Evidence governing the admissibility of corroboration testimony. *Id.* Again, however, even if a party satisfies these prerequisites, a district court can exercise its discretion to exclude the polygraph evidence under other applicable rules of evidence. *Id.*

In this case, the district court assumed that Gilliard satisfied the three prerequisites to the admission of the polygraph testimony for the purpose of corroborating Gilliard’s trial testimony.² The court concluded, however, that the

² The Government raised before the district court, and again raises before this Court, the argument that the Honts Polygraph evidence is not admissible as corroboration testimony under Fed.

evidence was not admissible expert testimony under Fed. R. Evid. 702 and, alternatively, that the evidence was inadmissible under Fed. R. Evid. 403.

A. Rule 702

1. Standard of Review

A district court's decision to admit or exclude expert testimony under Rule 702 is reviewed for abuse of discretion. *General Elec. Co. v. Joiner*, ___ U.S. ___, ___, 118 S. Ct. 512, 517 (1997).

2. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786 (1993), the Supreme Court set out a two-prong analysis for determining whether expert scientific testimony is admissible under Fed. R. Evid. 702: (1) whether the evidence constitutes scientific knowledge; and (2) whether the evidence is relevant, *i.e.*, whether it would “assist the trier of fact to understand the evidence or to determine a fact in issue.” *Id.* at 589-591, 113 S. Ct. at 2794-96. Factors relevant to the determination of whether a technique constitutes scientific knowledge include: (1) whether the technique can be and has been tested; (2) whether the technique “has been subjected to peer review and publication;” (3) “the known or potential rate of error;” (4) “the existence and maintenance of standards controlling the technique’s

R. Evid. 608. We hold that the district court's ruling based on Rule 702 and Rule 403 was correct, and therefore do not address the Government's Rule 608 argument.

operation;” and (5) whether the technique has attained general acceptance within the relevant scientific community. *Id.* at 593-94, 113 S. Ct. at 2796-97.

3. Polygraph Techniques

“[P]olygraphy is a developing and inexact science.” *Piccinonna*, 885 F.2d at 1535. Resolution of the issue presented in this case requires an understanding of the various techniques that can be used to administer a polygraph examination.³

a. Relevant/Irrelevant Technique

One method of conducting a polygraph examination is the relevant/irrelevant technique, in which the examiner asks both questions that are relevant to the purpose of the test and questions that are irrelevant to the purpose of the test. In theory, an individual will have a unique response associated with lying. The relevant/irrelevant technique generally has been rejected by the scientific community.

b. Concealed or Guilty Knowledge Technique

A second method of conducting a polygraph examination is the concealed or guilty knowledge technique. In this type of polygraph, an examiner tests the examinee's response to information that only the perpetrator of the crime would know. For example, if a ruby ring was stolen, the examiner would ask: Did you steal a

³ The information set forth in this opinion pertaining to the various techniques that can be used to administer a polygraph examination is culled from the testimony presented to the magistrate judge. The parties do not dispute the general nature of the various techniques.

diamond ring? Did you steal a sapphire ring? Did you steal a ruby ring? In theory, a guilty individual will recognize the critical item, or question, and will show a psychophysiological response to that item. The difficulty with using this technique is that the examiner must be sure that the information tested (*i.e.*, that the stolen ring was a ruby ring) is not known generally and would not be known by the individual being tested unless he was the perpetrator of the crime.

c. Control Question Techniques

Most polygraph examiners employ a control question format in conducting polygraph examinations. At least three different techniques fall within this general format. In a control question polygraph, the examiner generally asks questions relevant to the purpose of the examination and so-called control questions. The control questions address issues unrelated to the purpose of the examination. Depending on the particular technique used, the examinee will either be tricked into giving or directed to give a false answer to each control question. The premise underlying the control question format is that an innocent examinee will have a stronger physiological response to his false responses to the control questions than to his truthful answers to the relevant questions in which he denies wrongdoing, and that the reverse will be true for a guilty examinee.

Three control question techniques are pertinent to this case. The first, and

apparently the most tested and most widely used, is called the probable lie control question technique. The Government concedes that this technique, if properly utilized, has been recognized in the scientific community as being “good science.”⁴ In administering a probable lie control question polygraph, the examiner asks the examinee a question that is designed to elicit a probable lie about a matter unrelated to the matter under investigation. For example, the examiner might ask an examinee whether he ever did anything illegal, dishonest, or immoral prior to the incident at issue. The examiner “tricks” the examinee into denying any such conduct by conducting a pretest interview of the examinee such that during the examination the examinee will be too embarrassed to admit such conduct or will be unsure as to the truth of his answer. The premise is that virtually everyone has done something that could be considered to be illegal, dishonest, or immoral.

The second technique is the directed lie control question technique. The directed lie control question technique involves the examiner instructing the examinee

⁴ Although it is unclear what technique was used to conduct the polygraph examination in *Piccinonna*, the opinion and the studies cited in footnote 8 of that opinion strongly suggest that it was the probable lie control question technique. See, e.g., John A. Podlesny and David C. Raskin, *Effectiveness of Techniques and Physiological Measures in the Detection of Deception*, 15 *Psychophysiology* 344 (1978) (published laboratory study in which the probable lie control question technique and the guilty knowledge technique were used; authors concluded that although the accuracy rates for the control question technique and the guilty knowledge technique were similar, the control question technique was the “current method of choice in criminal investigations” due to the limited applicability of the guilty knowledge technique); Gordon H. Barland and David C. Raskin, *An Evaluation of Field Techniques in Detection of Deception*, 12 *Psychophysiology* 321 (1975) (published laboratory study involving the probable lie control question technique).

to give a false response to the control questions. In theory, the examinee will exhibit a physiological response to the control questions because the examiner has emphasized the questions by telling the examinee that it is important that he responds appropriately when he lies.

The third technique is a hybrid control question technique, in which the examiner uses both probable lie and directed lie control questions. Dr. Honts used a hybrid control question technique in examining Gilliard.

4. The Honts Polygraph

The polygraph examination that Dr. Honts administered to Gilliard consisted of four relevant questions, one probable lie control question, three irrelevant or neutral questions, and two directed lie control questions. Before the polygraph examination, Dr. Honts discussed the questions with Gilliard. During the course of the polygraph examination, Dr. Honts posed the questions to Gilliard in an order determined by the computerized polygraph machine. After Dr. Honts asked the questions one time through, he permitted Gilliard to take a break and he and Gilliard discussed the questions and Gilliard's responses. Dr. Honts asked the questions a second time, and he again permitted Gilliard to take a break and he and Gilliard again discussed the questions and Gilliard's responses. Dr. Honts then asked the questions one final time.

In scoring the examination, Dr. Honts looked at Gilliard's physiological responses to each relevant question in the five response areas measured by the polygraph machine, and compared those responses to the strongest control response for each of the five tested response areas.⁵

5. Analysis of *Daubert* factors

The evidence presented to the district court showed that the hybrid control question technique has been the subject of only one scientific study, a field study conducted by Dr. Honts and Professor David Raskin that was published in 1988. This 1988 field study included 25 subjects, 13 of whom were innocent and 12 of whom were guilty. The guilt or innocence of the individuals was confirmed by confession (by either the individual or another individual), physical evidence, or recantation by the alleged victim. Dr. Honts testified that his field study showed the hybrid technique to be 100% accurate with respect to detecting innocent subjects and 92% accurate with respect to detecting guilty subjects.

The Government, however, presented evidence suggesting that the addition of directed lie control questions would skew the results of a polygraph examination in favor of a guilty examinee. One of the Government's experts, Dr. Stanley Abrams,

⁵ Two channels measured Gilliard's respiration, one channel measured Gilliard's galvanic skin response, one channel measured Gilliard's blood pressure, and one channel measured Gilliard's pulse.

testified that he performed a study in which he compared the probable lie control question technique to the directed lie control question technique. Dr. Abrams found that people appeared more truthful under the directed lie control question technique than under the probable lie control question technique, and has concluded that the directed lie control question technique is substantially less than 90% accurate. Dr. Abrams testified that although using the directed lie control question technique reduced the number of false positives, *i.e.*, innocent people appearing to be lying, it increased the number of false negatives, *i.e.*, guilty people appearing to be innocent.

With respect to whether the hybrid technique has attained general acceptance within the relevant scientific community, Dr. Honts testified that the hybrid method is used by himself, Professor Raskin, the Arizona School of Polygraph, the Arizona State Police, and four other individual polygraphers. The Government, on the other hand, presented evidence that the hybrid technique is disfavored not only by the Government's experts, but also by federal government agencies. Dr. Abrams testified that the Internal Revenue Service and the Drug Enforcement Agency do not use the hybrid technique, and that according to the Department of Defense Polygraph Institute, none of the federal agencies are able to use it.

Considering the paucity of tests and published studies addressing the validity of the hybrid technique, and Gilliard's failure to show that the hybrid technique has

gained general acceptance within the relevant scientific community, the district court did not abuse its discretion in finding the Honts Polygraph evidence to be inadmissible under Fed. R. Evid. 702. Furthermore, due to the lack of corroboration by other studies and polygraphers, the district court did not err in declining to assign much weight to the rate of accuracy that Dr. Honts attributed to the hybrid technique.

B. Rule 403

1. Standard of Review

A district court's decision to exclude evidence under Fed. R. Evid. 403 is reviewed for clear abuse of discretion. *United States v. Taylor*, 17 F.3d 333, 338 (11th Cir. 1994). A trial court may exclude otherwise admissible evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury" Fed. R. Evid. 403. "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under Rule 403 of the present rules exercises more control over experts than over lay witnesses." *Daubert*, 509 U.S. at 595, 113 S. Ct. at 2798 (internal quotations and citation omitted).

2. Analysis

Although the district court held that the Honts Polygraph evidence was not admissible under Fed. R. Evid. 702, the district court also addressed the Government's

argument that, assuming the evidence was admissible under Fed. R. Evid. 702, it should nonetheless be excluded under Fed. R. Evid. 403. In performing the Rule 403 analysis, the district court's primary concerns centered around the amount of time it would have taken the parties to present evidence pertaining to the Honts Polygraph, the fact that the questions posed to Gilliard during the Honts Polygraph did not address all counts in the indictment, and the fact that a Government representative was not present during the administration of the Honts Polygraph.⁶ The district court concluded that the probative value of the Honts Polygraph evidence was substantially outweighed by the potential for unfair prejudice, confusion of the issues, and misleading the jury.

The district court was concerned about the amount of time it would have taken the parties to present evidence pertaining to the Honts Polygraph, and the way in which it would have affected the focus of the trial. Although the actual number of hours and minutes it would take to put on expert testimony should not ordinarily be a controlling factor, a court may consider whether the amount of time needed to present the evidence would shift the focus of a criminal trial from determining guilt or innocence to determining the validity of the scientific method at issue.

⁶ The district court also expressed concern about the scope of the questions that the Government could have asked had it conducted its own polygraph examination and the lack of a "need" for expert testimony in this "garden-variety" case.

In this case, the district court determined that the four-day trial would have taken an additional one-half to two days had both sides presented evidence pertaining to the Honts Polygraph. In light of the degree to which the validity of the hybrid technique was disputed, it was not unreasonable for the district court to assume for purposes of its analysis that the time needed would have been at least one day. The district court did not err in concluding that the devotion of so much time to the presentation of the Honts Polygraph evidence likely would have diverted the jury's attention from the real issue in the case, that of guilt or innocence, to the issue of the validity of polygraph evidence in general and the validity of the hybrid technique in particular.

The district court also expressed concern about the fact that the Honts Polygraph addressed only the false claims counts of the indictment. If the jurors heard one to two days of evidence on a polygraph examination pertaining to only one of the three categories of charges against Gilliard, they may have viewed the obstruction of justice and perjury charges as secondary in nature. Moreover, the three categories of charges in this case were so intertwined it is possible, if not probable, that if the jurors believed the Honts Polygraph evidence, they would have determined Gilliard also was not guilty of the obstruction of justice and perjury charges without looking at the evidence specifically addressing those two counts.

The district court expressed further concern with respect to the fact that a Government representative was not present during the administration of the Honts Polygraph. Although a party is not required to give an adverse party advance notice of, and the opportunity to be present at, a polygraph examination, the absence of such notice and opportunity may be a factor in determining whether admission of the polygraph evidence would unduly prejudice the adverse party. In this case, even though the Government had the opportunity to view a videotape of the Honts Polygraph examination, viewing a videotape is not the same as being present at the examination. The district court could reasonably have concluded that the unilateral nature of the Honts Polygraph hindered the Government's ability to cross examine Gilliard's experts and to have its own experts conduct an independent review of the Honts Polygraph results.

Based on these considerations of the danger of unfair prejudice, confusion of the issues, and misleading the jury, we conclude that the district court did not abuse its discretion in excluding the Honts Polygraph evidence under Fed. R. Evid. 403.

III. CONCLUSION

For the reasons set forth above, the district court did not abuse its discretion in excluding the Honts Polygraph evidence under Fed. R. Evid. 702 or under Fed. R. Evid. 403.

AFFIRMED.