

Present: Hassell, C.J., Keenan, Koontz, Kinser, Lemons, and Agee, JJ., and Russell, S.J.

MATTHEW EDWARD BILLIPS

OPINION BY  
SENIOR JUSTICE CHARLES S. RUSSELL  
November 2, 2007

v. Record No. 062180

COMMONWEALTH OF VIRGINIA

FROM THE COURT OF APPEALS OF VIRGINIA

In a case of first impression, this appeal questions the admissibility of opinion evidence based upon plethysmograph testing at a sentencing proceeding.

Facts and Proceedings

Matthew Edward Billips, then a juvenile, was charged with two counts of forcible sodomy of a child under the age of 13 years, and one count of soliciting a child to commit sodomy. The juvenile and domestic relations district court certified the case to the circuit court, where Billips was found guilty of all three offenses in a jury trial. The circuit court continued the case for a presentence evaluation. By the time of trial, Billips had attained his majority.

The circuit court, before sentencing, ordered a presentence report containing a psychosexual evaluation pursuant to Code § 19.2-300. At the initial sentencing hearing, defense counsel objected to the presentence report and to the testimony of a licensed clinical social worker who explained the report, on the grounds that the report was based

in part on inadmissible polygraph test results, and also was based in part on plethysmograph<sup>1</sup> testing. Defense counsel argued that the plethysmograph was "conceptually similar" to the polygraph in that both allow an operator to draw inferences from the body's physical responses to emotional stimuli. The court sustained the defense objection to any testimony based on polygraph testing, but not to plethysmograph testing. The court ordered a new risk assessment report excluding any consideration of polygraph testing, but ruled that the plethysmograph results could remain a part of the report.

At the final sentencing proceeding, the circuit court, over the defendant's objection, considered a revised risk evaluation report and heard the testimony of a licensed clinical social worker who had participated in preparing it. The report stated that Billips had been subjected to a "penile plethysmograph assessment" to evaluate the presence or absence of "deviant sexual arousal." The report further stated:

"Research has demonstrated that deviant sexual arousal is one of the best indicators of risk to sexually re-offend. As used by our agency, the penile plethysmograph is designed to measure sexual responsiveness to a variety of stimuli. Males and females ranging in age from infant to adult are

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<sup>1</sup> A "plethysmograph" is "an instrument for determining and registering variations in the size of an organ or limb and in the amount of blood present or passing through it." Webster's Third New International Dictionary 1740 (1993).

represented in the stimuli. Visual stimuli are accompanied by audio stimuli describing behavior across a range of different sexual activity."

The report concluded that Billips' responses to various scenarios, including those involving children, placed him "in the highest re-offense risk category."

Billips specifically objected to the report's continued inclusion of the plethysmograph test results and the witness's testimony in that regard by stating:

[U]nless the Commonwealth first establishes - unless the Court first makes a threshold finding of fact with respect to reliability of the scientific method used to support that based upon *Spencer vs. Commonwealth*, 238 VA 275[; t]here [has] been absolutely no evidence presented regarding the scientific methodology supporting that, its reliability.

The circuit court again overruled Billips' objection and then imposed sentences of life imprisonment for each of the sodomy convictions and five years confinement on the solicitation conviction. Billips appealed his sentences to the Court of Appeals, which affirmed the sentences in a published opinion, Billips v. Commonwealth, 48 Va. App. 278, 630 S.E.2d 340 (2006). We awarded him an appeal limited to his assignment of error concerning the admission of evidence based on plethysmograph testing.

## Analysis

In Spencer v. Commonwealth, 240 Va. 78, 393 S.E.2d 609 (1990), we adopted the following rule governing the admissibility of scientific evidence:

We have declined to adopt the "Frye test" in Virginia. When scientific evidence is offered, the court must make a threshold finding of fact with respect to the reliability of the scientific method offered, unless it is of a kind so familiar and accepted as to require no foundation to establish the fundamental reliability of the system, such as fingerprint analysis; or unless it is so unreliable that the considerations requiring its exclusion have ripened into rules of law, such as "lie-detector" tests; or unless its admission is regulated by statute, such as blood-alcohol test results.

Id. at 97, 393 S.E.2d at 621 (citations omitted).

The Court of Appeals held the Spencer rule inapplicable here because a "relaxed standard of admissibility [applies] at sentencing hearings" and concluded that, at the sentencing stage, all that is required is that the proffered evidence bear "some indicia of reliability." Billips, 48 Va. App. at 300, 305, 630 S.E.2d at 351, 354. The Court of Appeals found such indicia of reliability in the testimony of the probation officer and the licensed clinical social worker who had prepared Billips' presentence report. Neither witness qualified as an expert in the field of plethysmograph testing and the circuit court made no threshold finding of fact that the system was reliable. The Court of Appeals noted that

Billips had offered no evidence at the sentencing hearing to support his contention that the plethysmograph testing method was unreliable, and held that no threshold finding of reliability was necessary and that the admission of the evidence was within the circuit court's discretion.

We do not agree with the reasoning of the Court of Appeals. Although Spencer was a case in which scientific evidence was offered at the guilt phase of a capital murder trial, we said nothing there to limit the applicability of its rule to that phase alone. Rather, the Spencer rule applies to the use of scientific evidence in judicial proceedings generally. Advancements in the sciences continually outpace the education of laymen, a category that includes judges, jurors and lawyers not schooled in the particular field under consideration. Consequently, there is a risk that those essential components of the judicial system may gravitate toward uncritical acceptance of any pronouncement that appears to be "scientific," and the more esoteric the field, the more difficult it becomes for laymen to greet it with skepticism. That tendency has given rise to frequent complaints of "junk science" in the courts.<sup>2</sup> To guard against that risk, we continue to require a "threshold finding of fact with respect

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<sup>2</sup> See, e.g., Peter W. Huber, *Galileo's Revenge: Junk Science in the Courtroom* 206-09 (1991).

to the reliability of the scientific method offered," subject only to the exceptions in Spencer, quoted above. See Spencer, 240 Va. at 97, 393 S.E.2d at 621.

As with any evidence requiring a preliminary foundation, the burden of making a prima facie showing of that foundation rests upon the proponent of the evidence, subject to the opponent's opportunity for cross-examination and refutation. Here, the Court of Appeals erred in reversing that burden, requiring Billips to introduce evidence of unreliability instead of requiring that the Commonwealth first make out a prima facie case of "the reliability of the scientific method offered." The plethysmograph evidence, lacking foundation, was inadmissible in the sentencing proceeding.

The error is not harmless in this case. The record is devoid of any evidence of the reliability of plethysmograph testing and we cannot say with assurance that the trial court's sentencing decision was unaffected by the test results. We adhere to the United States Supreme Court's test for nonconstitutional harmless error in criminal cases: "[I]f one cannot say, with fair assurance . . . that the judgment was not substantially swayed by the error, it is impossible to conclude that substantial rights were not affected . . . . If so, or if one is left in grave doubt, the conviction cannot stand." Clay v. Commonwealth, 262 Va. 253, 260, 546 S.E.2d

728, 731-32 (2001) (quoting Kotteakos v. United States, 328 U.S. 750, 764-65 (1946)).

### Conclusion

For the reasons stated above, we will reverse the judgment appealed from, insofar as it pertains to sentencing, and remand the case to the Court of Appeals with direction to remand the case to the circuit court for resentencing consistent with this opinion.<sup>3</sup>

Reversed and remanded.

JUSTICE KINSER, with whom JUSTICE AGEE joins, concurring.

I concur in the result reached by the majority for two reasons. First, the Court of Appeals erred in placing on the defendant the burden of making a prima facie showing that the scientific method at issue is reliable. As the proponent of the evidence at issue, the Commonwealth had that burden in this case. Second, the Commonwealth failed to establish any indicia of scientific reliability for the penile plethysmograph testing. Thus, it was error to admit evidence concerning the results of such testing. That error, which was not harmless, requires that the judgment of the Court of Appeals be reversed and that this case be remanded to the

circuit court for a new sentencing hearing.\* In my view, it is therefore not necessary in this appeal to determine whether the rule established in Spencer v. Commonwealth, 240 Va. 78, 393 S.E.2d 609 (1990), governs the admissibility of scientific evidence in the sentencing phase of a bifurcated criminal trial.

The majority's holding is particularly troublesome to me because, in this case, we are concerned only with the admissibility of evidence contained in a pre-sentence report prepared in accordance with the provisions of Code §§ 19.2-299 and -300. Such a pre-sentence report is considered only by a trial court in its sentencing decision. See Code §§ 19.2-299, -300, and -301. The majority applies the evidentiary rule set forth in Spencer even though there is a relaxed standard governing admissibility of evidence contained in a pre-sentence report. See O'Dell v. Commonwealth, 234 Va. 672, 701, 364 S.E.2d 491, 508 (1988) (court may consider hearsay evidence contained in pre-sentence report). But, because I

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<sup>3</sup> The judgment of the Court of Appeals pertaining to Billips' guilt is not before this Court and is unaffected by our decision.

\* The Commonwealth should not be permitted to introduce evidence regarding the scientific reliability of the penile plethysmograph at the new sentencing hearing. See Richardson v. United States, 468 U.S. 317, 330 (1984) ("When the prosecution has failed to present constitutionally sufficient evidence, it cannot complain of unfairness in being denied a second chance [to present such evidence.]")



conclude that it is not necessary for the Court to decide the question whether Spencer applies either in the limited context of this case or in the sentencing phase of a criminal trial, I would leave both issues for another case in which those issues are necessary for resolution of the matters before the Court.

For this reason, I respectfully concur.