

STATE OF SOUTH CAROLINA  
IN THE COURT OF APPEALS

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Appeal from Anderson County

Honorable R. Scott Sprouse, Circuit Court Judge

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IN THE MATTER OF THE CARE AND  
TREATMENT OF JAMES L. WILLIFORD,

APPELLANT.

APPELLATE CASE NO. 2021-000733

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FINAL BRIEF OF APPELLANT

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**Jul 29 2022**

**SC Court of Appeals**

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## **STATEMENT OF ISSUE ON APPEAL**

Did the trial court err in admitting penile plethysmograph testimony and results where the examination did not meet the requirements of admissibility for scientific evidence pursuant to Rule 702, SCRE, because the test lacked: (1) standardization; (2) adequate publication and peer review; (3) quality control procedures to ensure reliability; and (4) a calculation of margin of error?

## **STATEMENT OF THE CASE**

The Attorney General initiated sexual violent predator commitment proceedings against appellant James L. Williford in Anderson County and on June 14, 2021, a bench trial was held before the Honorable R. Scott Sprouse. R. 1. Christopher Runyan and Suzanne Shaw represented the state. R. 2. Don Thompson represented appellant. R. 2. Judge Sprouse found appellant was a sexually violent predator and ordered him committed. Order.

This appeal follows.

## **STANDARD OF REVIEW**

“An abuse of discretion occurs when the trial court's ruling is based on an error of law or, when grounded in factual conclusions, is without evidentiary support.” *In re Gonzalez*, 409 S.C. 621, 628, 763 S.E.2d 210, 213 (2014) (internal quotations omitted).

## ARGUMENT

The trial court erred in admitting penile plethysmograph testimony and results where the examination did not meet the requirements of admissibility for scientific evidence pursuant to Rule 702, SCRE, because the test lacked: (1) standardization; (2) adequate publication and peer review; (3) quality control procedures to ensure reliability; and (4) a calculation of margin of error.

### **Relevant facts**

Before trial, defense counsel made a motion to suppress testimony related to the penile plethysmograph (PPG) test and results because it did not meet the “requirements of admissibility for scientific evidence.” R. 248; R. 21-28. Defense counsel asserted that testimony about the PPG test and the results were inadmissible because the test: (1); lacked standardization (2); had not been adequately published or peer reviewed (3); had no quality control procedures; (4) did not calculate a margin of error. R. 22-24. Defense counsel also argued that the prejudicial effect of the PPG test evidence far outweighed any probative value that it had. R. 28, ll. 1-5

The state proffered testimony regarding the PPG test through its expert Dr. Emily Gottfried from The Medical University of South Carolina (MUSC).<sup>1</sup> R. 30, l. 1-31, 1.2. Gottfried became involved in this case when the Attorney General’s office asked her for a second opinion in the pre-commitment evaluation of Williford. R. 95, ll. 1-10. Gottfried explained that the PPG test is a physiological test given to an individual to test their arousal. She explained that the examinee sits in a private room and places a gauge, a thin flexible stretchy band, on his penis. Then the examinee is presented with a series, a trial, of audio or visual stimuli of sexual situations. The test measures the changes of circumference in response to the stimuli. R. 38, ll. 3-17. Gottfried insisted

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<sup>1</sup> Gottfried’s proffered testimony about the PPG test was incorporated by reference because this was a bench trial and the court had already heard the testimony. R. 93, ll. 1-14.

throughout her testimony that the PPG test was just one data point to consider, but she also stated, “sexual arousals due to nonconsensual or abusive stimuli is a strong predictor of future sexual recidivism.” R. 35, ll. 10-13.

Gottfried testified that her lab uses two different stimulus sets. One, developed by Bill Marshall, called the Marshall Test. The Marshall test set is audio descriptions of sexual stimuli and neutral stimuli. The other, developed by Bill Burke, called Real Child Voices (RCV). RCV consists of visual slides and audio which includes children’s voices and women’s voices. R. 54-55.

Gottfried admitted there were problems with standardization of the PPG test because it was used for different things and acknowledged that it was hard to know what every lab that conducts this test does. R. 42, ll. 8-10; 73, ll. 1-5. Gottfried also recognized that some literature said that offenders do not show expected arousal patterns on the PPG. R. 50, ll. 19-22. She said that she was working with a group of individuals to address some of the issues with standardization. R. 43, 3-7; 50, ll. 13-18. Gottfried acknowledged that there are ways to manipulate the test to show false positives and false negatives. R. 73-74.

Gottfried testified that she had both published articles specific to the PPG test and presented at conferences about it. R. 32-33. She contended that it had been peer reviewed and that there had been “at least a hundred publications” about the PPG test specific to abusive or illegal sexual behaviors. R. 36, ll. 12-23. The state’s attorney asked Gottfried to read two sections from the Diagnostic Statistical Manual of Mental Disorders<sup>2</sup> where the PPG test is mentioned. R. 46-47.

Limestone Technology is a Canadian Company that makes the hardware used in the PPG

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<sup>2</sup> American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> ed. 2013).

test and some of the software used in the test. R. 69, ll. 2-3. Gottfried testified that she and the technicians at her lab are trained in the PPG. Gottfried said she was certified in the PPG test as a “licensed technologies certified clinical analyst” and her clinic and lab were certified by Limestone Technologies as both a clinical and research laboratory. R. 34-35; 39, ll. 15-20. She also testified that each examinee is given a new gauge which is calibrated on a five-step program before the test starts. R. 39, ll. 21-23. The countermeasures Gottfried described using were as follows: (1) a soundcheck, (2) monitoring the temperature and humidity of the room, and (3) standardized instructions. R. 40, ll. 2-10.

Gottfried testified that there are twenty-seven trials in the Marshall set and twenty-four in the RCV set and both were given to Williford. She said that they do not conduct multiple PPG tests on an individual. R. 75, ll. 6-10. She explained that the lab at MUSC uses a “very conservative cut score,” which is a “clinical decision made about what is significant and what isn’t significant.” R. 41, ll. 12-17. When asked if there had ever been a margin of error calculated on the PPG test Gottfried responded that specificity and sensitivity account for the margin of error. R. 75. Gottfried explained that sensitivity is a “true positive,” someone who is aroused by certain stimuli and the PPG test shows that they are aroused by that same stimulus. Specificity is a “true negative,” where a person is not aroused by a specific stimulus and the PPG test shows that they are not aroused by those stimuli. R. 52, l. 17-53, l. 1.

Gottfried stressed that the PPG test should not be used as the sole criterion for any decisions and said it would be unethical to test someone who had never been charged or convicted of a sexual offense. She stated that the PPG test does not tell you anything other than what the examinee is aroused to that day in the lab. R. 44-45.

The court denied the motion to suppress finding that the PPG testimony would assist the

court as the trier of fact in understanding the evidence, which involved scientific issues outside the realm of the ordinary knowledge of a lay person. R. 89, l. 22-90, l. 4. The court found that the PPG test had been subject to peer review and “numerous publications.” R. 90, ll. 11-19. The court found that, although the testimony indicated there were different standards in some countries, there was a standard application of the test in the United States, based on Gottfried’s testimony. R. 90, l. 20-91, l. 4. The court found the standard for quality control procedures was met. R. 91, ll. 5-13. Lastly, the court found that the standard for “consistency and method with recognized scientific laws and procedures,” was met where Gottfried used the standard instructions provided by the manufacturer of the test and testified that there were methods to prevent manipulation of the test. R. 91, l. 14-92.

Williford was given both the Marshall stimulus set and the RCV stimulus set. R. 59, ll. 5-10; 122, ll. 16-18. Gottfried said that recently the lab began tailoring the RCV set to the “offending pattern” of the examinee, but Williford’s examination was not tailored. R. 56, ll. 1-10. Gottfried testified that Williford showed “clinically significant arousal” to trials involving coercion or sexual violence of an adult woman; coercion of a female child; violence against a female child or infant; consensual sexual behavior with an adult woman, and persuasion of a male child. R. 122, l. 25-123, l. 6. Gottfried testified that the data from the PPG test factored into her ultimate opinion regarding Williford. R. 121, l. 24-122, l. 1.

## **Discussion**

The trial court abused its discretion in admitting Dr. Gottfried’s testimony about the PPG test and results from the test given to Williford because it lacks scientific reliability and validity. *See generally Matter of Bilton*, 432 S.C. 157, 162, 851 S.E.2d 442, 444 (2020) (Stating “[t]he test

is controversial and has been criticized for a lack of standardization and for being subject to manipulation.”).

“When admitting scientific evidence under Rule 702, SCRE, the trial judge must find the evidence will assist the trier of fact, the expert witness is qualified, and the underlying science is reliable.” *State v. Council*, 335 S.C. 1, 20–21, 515 S.E.2d 508, 518 (1999). The trial court should apply the *State v. Jones*, 273 S.C. 723, 259 S.E.2d 120 (1979), factors to determine reliability. *Id.*

The *Jones* factors, include: (1) the publications and peer review of the technique; (2) prior application of the method to the type of evidence involved in the case; (3) the quality control procedures used to ensure reliability; and (4) the consistency of the method with recognized scientific laws and procedures. *State v. Ford*, 301 S.C. 485, 392 S.E.2d 781 (1990).

The court erred finding Gottfried’s testimony about the PPG test was admissible under the *Jones* factors. While the PPG test has long been written about at least one publication that Gottfried mentioned specifically was not relevant to its use in this case.<sup>3</sup> R. 37-38. Additionally, much of Gottfried’s testimony regarding this factor was that she had written about the test and had given presentations about the test at different conferences. However, her testimony lacked any detail about specifically what her presentations and publications discussed about the PPG test.

The court erred finding there was standard application based on Gottfried’s testimony. While Gottfried testified that PPG testing was being used in over fifty labs across the country, she specifically admitted that standardization was a problem that had not been resolved. Her testimony regarding Williford’s test reflected those very problems as she admitted that Williford was given the entire RCV set although his offending pattern was against adult women and did not include

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<sup>3</sup> Gottfried mentioned a peer reviewed paper published in Nature on June 8, 2021. She stated that the paper “noted that the PPG may be useful as a non-invasive potential technique to evaluate penile erection in men’s health.” R. 37, ll. 1-11.

children. Gottfried said that she has recently begun tailoring the tests for each examinee, which demonstrated that even her lab lacked sufficient standardization regarding how the test was administered.

The court erred finding that the standard for quality control procedures was met. Gottfried's testimony about quality control procedures was sparse and mainly revolved around the procedures used at the MUSC lab but again she was unable to testify regarding how the test is administered in other labs around the country.

"[I]f the evidence is admissible under Rule 702, SCRE, the trial judge should determine if its probative value is outweighed by its prejudicial effect. Rule 403, SCRE. Once the evidence is admitted under these standards, the jury may give it such weight as it deems appropriate." *Council* at 20-21; 515 S.E.2d 518 (1999).

Any probative value of the PPG test was substantially outweighed by its prejudicial effect. Williford had a bench trial, however, that does not significantly lessen the prejudicial effect of Gottfried's testimony about the PPG test chiefly, the prejudicial effect of the results. Williford was given the entire RCV set although his offending pattern is not against children. The results from Williford's test showed that he had a response to stimuli involving young children. This is greatly prejudicial, even to the court. This Court should reverse.

CONCLUSION

For the foregoing reasons, this Court should reverse appellant's commitment and grant him a new trial.



Sarah E. Shipe  
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ATTORNEY FOR APPELLANT

This 29<sup>th</sup> day of July, 2022.

CERTIFICATE OF COUNSEL FOR APPELLANT

Counsel for appellant certifies that this Final Brief of Appellant complies to the best of my ability with Rule 211 (b), SCACR, and the April 15, 2014 order from the South Carolina Supreme Court entitled "Revised Order Concerning Personal Identifying Information and Other Sensitive Information in Appellate Court Filings."

Respectfully Submitted,



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