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**Apr 19 2021**

**SC Court of Appeals**

STATE OF SOUTH CAROLINA

IN THE COURT OF APPEALS

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Appeal from Charleston County

Honorable Deadra L. Jefferson, Circuit Court Judge

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IN THE MATTER OF THE CARE AND  
TREATMENT OF RONALD MJ GREGG,

APPELLANT.

APPELLATE CASE NO. 2019-001954

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FINAL BRIEF OF APPELLANT

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**STATEMENT OF ISSUE ON APPEAL**

Whether the trial court erred in admitting evidence regarding a penile plethysmograph test administered to appellant with a stimulus set that did not meet the threshold reliability requirement for purported scientific evidence?

## **STATEMENT OF THE CASE**

The State brought this action under the Sexually Violent Predator Act seeking appellant Ronald M. J. Gregg's confinement in a secure facility and on November 18, 2019, appellant was tried in Charleston County before the Honorable Deadra L. Jefferson and a jury. Nov. 18, 2019, R. 1. Jim Bogle, Jr. represented the State. Nov. 18, 2019, R. 2. James Falk represented appellant. Nov. 18, 2019, R. 2. The jury found appellant was a sexually violent predator and Judge Jefferson ordered him committed. R. 537, l. 14 – 21. This appeal follows.

## **STANDARD OF REVIEW**

The evidentiary issue in this case is reviewed under the abuse of discretion standard.

State v. Adams, 354 S.C. 361, 378, 580 S.E.2d 785, 794 (Ct. App. 2003).

## ARGUMENT

The trial court erred in admitting evidence regarding a penile plethysmograph test administered to appellant with a stimulus set that did not meet the threshold reliability requirement for purported scientific evidence.

The first psychologist to evaluate appellant for commitment into the SVP program was Dr. Marie Gehle. R. 434, l. 24 – 439, l. 9. Dr. Gehle has been the chief psychologist at the Department of Mental Health for ten years. R. 434, l. 24 – 439, l. 9. Since 2012, she has performed pre-commitment SVP evaluations full-time. R. 434, l. 24 – 439, l. 9. Dr. Gehle determined that appellant did not meet the criteria for commitment. R. 459, l. 2 – 18.

The State sought a second opinion from Dr. Emily Gottfried at MUSC in Charleston. R. 248, l. 6 – 254, l. 4. She opined that appellant was a sexually violent predator. R. 373, l. 19 – 375, l. 24. The State pays MUSC per case, but Dr. Gottfried said she earns a salary that is not contingent on the results of her evaluation. R. 251, l. 15 – 252, l. 3.

Both experts agreed that appellant has antisocial personality disorder. R. 371, l. 3 – 9. Dr. Gottfried opined that appellant also has paraphilic coercive disorder, which means he is sexually aroused by non-consensual sex. R. 368, l. 21 – 369, l. 3. Dr. Gottfried's opinion about appellant's coercive disorder was based largely on inadmissible results of a penile plethysmograph ("PPG") test. R. 334, l. 1 – 20.

Both parties filed written motions regarding the admissibility of the PPG. R. 541. The trial court conducted an extensive pretrial hearing regarding the reliability of the PPG test administered by Dr. Gottfried. R. 94, l. 16 – 206, l. 3. Judge Jefferson made a preliminary ruling that the PPG would be admitted, but stated she would need to hear a proffer again during

the trial. R. 212, l. 24 – 220, l. 3. After hearing the proffer, the court stood by its preliminary ruling and allowed the PPG into evidence. R. 338, l. 11 – 15.

Dr. Gottfried explained at the pretrial hearing how a PPG works:

So a PPG works by an examinee sits in a private room by themselves. They are covered up and they put a strain gauge, that can either be done with mercury or indium/gallium, on their penis. They put it mid shaft to the base, in that area. They then sit in a comfortable chair. They listen to audio or verbal scenarios describing sexual situations with children, teenagers and adults and they compare those responses to that individual's arousal or millimeters of change of the circumference of the penis for consenting adults and stimuli.

R. 102, l. 1 – 10. Appellant underwent two PPG exams totaling approximately thirteen hours in the “comfortable chair” with a strain gauge around his penis. R. 117, l. 11 – 24.

Appellant’s motion to exclude the PPG testing focused on the unreliability of the stimulus set used by Dr. Gottfried. R. 541. The stimulus set used was called “Real Child Voices.” R. 101, l. 20 – 24. Dr. Gottfried said that between “40 to 85 labs” out of 126 labs using the hardware from this case use the Real Child Voices stimulus sets. R. 104, l. 9 – 18.

Dr. Gottfried opined that the PPG—in general—is reliable and was the subject of at least 100 articles. R. 108, l. 1 – 8. However, she admitted that the Real Child Voices stimulus set had never been subjected to a published peer review article. R. 120, l. 2 – 121, l. 14. She claimed that MUSC was on the verge of publishing its data, but had not yet been submitted for peer review. R. 120, l. 2 – 121, l. 14. She also testified about presentations at conferences with “peer reviewed abstracts. R. 133, l. 19 – 136, l. 9. During argument after Dr. Gottfried’s testimony, the attorney for the State said, “I’ll concede she did not specifically represent peer review for the Real Child Voices, but she did represent peer review and multiple articles on the general acceptance of the PPG, the concept as a whole, the fact that it shows arousal.” R. 162, l. 9 – 14.

Appellant called Dr. Gehle as a witness concerning the PPG at the pretrial hearing and she testified that she had never used a PPG in ten years of doing precommitment evaluations for the Department of Mental Health. R. 90, l. 6 – 8. DMH has a PPG machine available, but Dr. Gehle does not use it because of her concerns about its reliability and validity of the results. R. 89, l. 25 – 90, l. 11.

Dr. Gehle explained “there is a lack of research supporting the reliability and validity of the stimulus sets.” R. 77, l. 23 – 78, l. 4. She also testified that the tests lack standardization, were subjective, and there were differences in how the tests are administered and interpreted. R. 77, l. 23 – 78, l. 4. She was familiar with the Real Child Voices stimulus set and knew its creator, Dr. Burke from Summerville. R. 78, l. 18 – 80, l. 11. Regarding the Real Child Voices set, Dr. Gehle testified, “There has been no research studies published in peer reviewed articles.” R. 80, l. 12 – 15. Until such research was done, Dr. Gehle said “we don’t know if what he says he’s measuring he’s actually measuring.” R. 80, l. 16 – 25. She cited the work of an early developer of the PPG, William Marshall, who no longer recommends use of the PPG because of the lack of standardization. R. 81, l. 19 – 82, l. 13. Because of the lack of standardization, particularly among stimulus sets, if a person was sent to two different labs they could get different results. R. 84, l. 2 – 20.

Dr. Gehle explained that the research shows that the large variability in what people find arousing makes it difficult to determine whether specific claims of arousal can even be valid. R. 85, l. 5 – 86, l. 12. As she explained, “the more arousing the stimuli set is, the harder it is to differentiate what they’re actually getting aroused to.” R. 85, l. 5 – 86, l. 12. An example given was that a person could be aroused by the mention of the word “breasts” regardless of whether the subject was six years old or sixty years old. R. 86, l. 5 – 12.

During the trial, Dr. Gottfried admitted in camera that no peer reviewed studies had been done on the Real Child Voices stimulus set regarding its ability to accurately predict whether people have coercive paraphilic disorder. R. 330, l. 4 – 8. Nor did she know whether another stimuli set used during appellant’s test had been connected with coercive paraphilic disorder in any peer reviewed research. R. 330, l. 9 – 24. Dr. Gottfried could not quantify how much of her diagnosis of coercive paraphilic disorder was based on the PPG test given to appellant. R. 334, l. 1 – 20. Judge Jefferson found Dr. Gottfried more credible than Dr. Gehle regarding the PPG, ruled that it was reliable, and allowed the State to introduce it into evidence.<sup>1</sup> R. 213, l. 17 – 220, l. 3. R. 338, l. 11 – 15. Dr. Gottfried told the jury that appellant had “clinically significant arousal” to eight scenarios featuring coercion or sexual violence. R. 353, l. 11 – 13.

The trial court erred in finding appellant’s PPG results admissible because the Real Child Voices stimulus set is unreliable. When determining the admissibility of scientific evidence after its reliability has been challenged, a trial court should consider (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, and (4) the consistency of the method with recognized scientific laws and procedures. Watson v. Ford Motor Co., 389 S.C. 434, 449-50, 699 S.E.2d 169, 177 (2010); State v. Council, 335 S.C. 1, 515 S.E.2d 508 (1999). The stimulus set here failed this test for reliability.

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<sup>1</sup> The trial court’s basis for finding Dr. Gottfried more credible than Dr. Gehle was Dr. Gottfried’s greater experience using the PPG and Dr. Gehle’s lack of “first-hand experience.” R. 218, l. 20 – 220, l. 3. This finding is problematic and illogical. It discredits Dr. Gehle because she refuses to use a test she considers unreliable. This type of reasoning would find a phrenologist more credible than a neurologist because a neurologist does not practice phrenology.

The State’s lawyer admitted the Real Child Voices stimulus set had never been subjected to peer review, which agreed with Dr. Gehle’s testimony. Dr. Gottfried could not cite any peer reviewed publication that specifically tested the accuracy of the Real Child Voices set for paraphilic coercive disorder. Except for MUSC’s own use, which had not been published, there was no data on the prior application of the Real Child Voices set to the type of evidence presented in this case.

While the trial court credited Dr. Gottfried’s testimony about the quality control procedures, these procedures were designed to prevent persons from cheating on the test. The quality control here did not apply to Dr. Gehle’s central concern—whether the subjects are aroused to what the stimulus set claims is the focus of the arousal. This central concern about the stimulus set is captured by the fourth factor which is whether the stimulus is consistent with recognized scientific laws and procedures. As Dr. Gehle explained, human arousal is so poorly understood that saying a person is aroused to coercion in a particular stimulus set is too difficult. The arousal could be the result of a huge number of variables in any particular stimulus set, which Dr. Gottfried agreed that each part was “like a little play.” R. 351, l. 9 – 10. The State failed to meet its burden as the proponent of the Real Child Voices stimulus set and the trial court erred in admitting it under its gatekeeping role. See State v. Phillips, 430 S.C. 319, 334-35, 844 S.E.2d 651, 659 (2020).

“Evidence regarding the results of a polygraph test or the defendant's willingness or refusal to submit to one is inadmissible.” State v. Pressley, 290 S.C. 251, 252, 349 S.E.2d 403, 404 (1986). While Dr. Gottfried took great pains to try to distinguish a PPG from a polygraph, a PPG is simply a more specific type of polygraph. R. 114, l. 16 – 115, l. 16. Like a polygraph, it measures fluctuations in a person’s body in an attempt to read their mind. The PPG uses

“countermeasures” as described by Dr. Gottfried that are like those of a polygraph—measuring respiration and a pad that measures movement on a seat. Tellingly, when trying to describe what must be a control group for the PPG (if such a thing could exist), she talked about using the polygraph on “super normals” to verify the results of a PPG, describing it as “the best way to do it.” R. 333, l. 13 – 22. If the reliability of the PPG must be verified by a polygraph—which has already been held to be unreliable and inadmissible—then a PPG cannot also be admissible as human arousal is a far more complicated thing to attempt to measure and understand than deception.

Other jurisdictions have held the PPG as a whole to be inadmissible. “Courts generally have held [the PPG] inadmissible to show the presence or absence of pedophilia.” David H. Kaye, David E. Bernstein and Jennifer L. Mnookin, The New Wigmore: Expert Evidence, § 8.8.2 at n. 21 (and cases cited therein). In United States v. Powers, 59 F.3d 1460, 1470-71 (4<sup>th</sup> Cir. 1995), the Fourth Circuit held the PPG did not meet the scientific standards for admissibility. The court noted the “extensive, unanswered evidence weighing against the scientific validity of the penile plethysmograph test.” Id. at 1471. Here, questions about the reliability of the Real Child Voices stimulus set were unanswered because of the lack of any peer review.

The Virginia Supreme Court held that an expert’s report that relied on PPG testing was inadmissible, even at a sentencing hearing. Billups v. Commonwealth, 652 S.E.2d 99, 101-02 (Va. 2007). The Billups court approached PPG testing with a critical eye and ultimately concluded it was inadmissible:

Advancements in the sciences continually outpace the education of laymen, a category that includes judges, jurors and lawyers not schooled in the articular 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. To guard against that risk, we continue to require a “threshold finding of fact with respect to reliability of the scientific method offered. . . .”

Id. at 101-02. “Esoteric” and “junk science” both are accurate descriptions of PPG testing. See also United States v. Medina, 779 F.3d 55, 65 (1<sup>st</sup> Cir. 2015) (discussing reliability problems with PPG testing); Doe ex rel. Rudy-Glanzer v. Glanzer, 232 F.3d 1258, 1266 (9<sup>th</sup> Cir. 2000) (“In fact, courts are uniform in their assertion that the results of [PPG] are inadmissible as evidence because there are no accepted standards for this test in the scientific community.”); Gentry v. State, 443 S.E.2d 667, 669 (Ga. Ct. App. 1994) (“Given the rejection of [PPG] evidence by other states, and particularly the uncertainty within the scientific community of its reliability, we hold that it is inadmissible in Georgia.”).

The Real Child Voices stimulus set for the PPG used in this case lacked reliability and the court erred in admitting it. The error was highly prejudicial because of the risk noted by the Billups court that laymen, especially jurors, would gravitate toward uncritical acceptance of the PPG when confronted with such a foreign and unusual trial like an SVP case. Dr. Gottfried urged the jury in this direction, telling them that the PPG was “an objective way” to measure arousal. R. 348, l. 16 – 349, l. 1. Referring to the PPG, the State told the jury in closing argument, “So he might say one thing, but his body can’t lie.” R. 504, l. 13 – 505, l. 2. The PPG was one of the main bases for her diagnosis of paraphilic coercive disorder. The admission of this highly prejudicial evidence warrants reversal.

**CONCLUSION**

For the foregoing reasons, appellant's commitment should be reversed and this matter remanded for a new trial.

s/David Alexander  
Appellate Defender

ATTORNEY FOR APPELLANT

This 19th day of April, 2021.

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**SC Court of Appeals**

CERTIFICATE OF COUNSEL

The undersigned certifies that to the best of my ability this Final Brief of Appellant complies 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.”

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This 19th day of April, 2021.