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16-P-1654

Appeals Court

COMMONWEALTH vs. LUCAS ORTIZ.

No. 16-P-1654.

Plymouth. January 8, 2018. - June 13, 2018.

Present: Blake, Neyman, & Ditkoff, JJ.

Sex Offender. Evidence, Sex offender, Expert opinion, Scientific test. Practice, Civil, Sex offender. Witness, Expert.

Civil action commenced in the Superior Court Department on November 20, 2012.

The case was tried before Robert C. Cosgrove, J.

James J. Cipoletta for the defendant.

Christina L. Crowley, Assistant District Attorney, for the Commonwealth.

DITKOFF, J. Following a Superior Court jury trial on the Commonwealth's petition pursuant to G. L. c. 123A, § 12(b), the defendant, Lucas Ortiz, was found to be a sexually dangerous person (SDP) as defined by G. L. c. 123A, § 1, and was ordered

committed to the Massachusetts Treatment Center. On appeal, the defendant claims that the trial judge improperly excluded the results of a penile plethysmograph (PPG) exam conducted by his retained expert. Concluding that the PPG was subject to assessment for reliability under Commonwealth v. Lanigan, 419 Mass. 15, 26 (1994), and that the judge acted within his discretion in finding that the defendant failed to show that the absence of deviant arousal on the PPG as conducted by the examining expert is a reliable basis for diagnosis or predictions of future sexual dangerousness, we affirm.

Background. At the time of trial, the defendant was thirty-nine years old. In 1992, when the defendant was seventeen years old, he was a member of a Boy Scout troop. During this time, he committed sexual offenses against four younger Boy Scouts who were between the ages of eleven and thirteen years old. During each of the offenses, the defendant told the child that he had a son who was taken by kidnappers and that his son's release would be facilitated by the child having sexual intercourse with the defendant. In one of the offenses, the defendant threatened the boy with a knife. In 1993, the defendant committed an additional sexual offense against a twelve year old boy using the ruse of conducting a physical exam of the child as a condition to becoming a member of a gang.

As a result of these offenses, the defendant was convicted of multiple counts of rape of a child and indecent assault and battery on a child, and one count of assault by means of a dangerous weapon. He was incarcerated for two years, and in 1995 he was released on probation. As a condition of his probation, the defendant was ordered to have no unsupervised contact with individuals under the age of eighteen.

Within six months of his release from incarceration, the defendant befriended a fifteen year old boy. While alone in a car with the boy, the defendant demanded that the boy perform oral sex on him, and threatened him at knifepoint.<sup>1</sup> The defendant was found to have violated his probation on the earlier offenses, and ultimately was convicted of indecent assault and battery, assault and battery, and assault by means of a dangerous weapon. The defendant continued to be incarcerated through 2012, at which time the Commonwealth filed the instant petition in anticipation of his release from custody.

Pursuant to G. L. c. 123A, § 13(a), the defendant was examined by two qualified examiners. Each of the examiners prepared reports opining that the defendant was sexually

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<sup>1</sup> There was also evidence that the defendant was in the unsupervised presence of a thirteen year old child during this period of time.

dangerous pursuant to the statute and likely to reoffend sexually. The qualified examiners each diagnosed the defendant with pedophilia, as well as other sexual and personality disorders relevant to his likelihood of reoffending.

The defendant was also examined by two experts retained by him. A psychologist specializing in neuropsychology examined the defendant and opined that he suffered from no diagnosable mental illness. A second psychologist, Dr. Joseph Plaud, opined that the defendant could not be diagnosed with a sexually-based mental disorder or personality disorder.

Dr. Plaud's opinion relied in part on his examination of the defendant using a PPG. He reported that when examined, the defendant displayed sexual arousal to adult consensual sexual scenarios, and did not display deviant arousal to children.

Prior to trial, the Commonwealth filed a motion to exclude from evidence the results of the PPG test conducted by Dr. Plaud, arguing that the test was not reliable and that, regardless, the Commonwealth had not received timely notice of the evidence.<sup>2</sup> The trial judge conducted a Daubert-Lanigan hearing midtrial.<sup>3</sup>

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<sup>2</sup> The defendant gave notice to the Commonwealth of the PPG test and its results approximately two weeks prior to trial, and provided Dr. Plaud's full report four days prior to trial.

<sup>3</sup> See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993); Lanigan, 419 Mass. at 26.

At the hearing, the defendant presented only the testimony of Dr. Plaud. Dr. Plaud testified that the PPG is a device designed to measure an individual's pattern of arousal in response to different sexual stimuli. The device acts by using a mercury and rubber band to measure changes in the tumescence of the penis. When Dr. Plaud conducts testing, the device is applied by the individual being tested, without his supervision.

The stimuli used in the exam are not standardized, and Dr. Plaud testified that he had developed his own set. Although many treatment programs use solely auditory stimuli, Dr. Plaud uses both auditory and visual stimuli. Dr. Plaud conceded that the test was subject to manipulation by intentional failure to pay attention to the stimulus, but indicated that he had devised certain measures to avoid this, such as requiring a subject to respond to dots appearing on the screen at random intervals. Dr. Plaud indicated that medications could affect test results as well.

Dr. Plaud agreed that false positives and false negatives are an issue with the PPG, and had previously written in an article that the PPG has a false positive error rate of about thirty-five percent. About one-third of sexual offenders show no arousal pattern in response to the exam, and "the vast majority of rapists" show no deviant arousal according to the exam. Although Dr. Plaud testified that studies have correlated

deviant arousal as measured by the PPG with increased levels of recidivism, he was not aware of any studies demonstrating that lack of deviant sexual arousal was correlated with the absence of reoffense.

Dr. Plaud testified that there are "thousands and thousands and thousands" of studies using the PPG. During the hearing, however, the defendant did not submit any scholarly articles in evidence. Neither the machine itself nor photographs of it were submitted to the court during the hearing, nor were the stimuli Dr. Plaud used with the defendant. Dr. Plaud testified that he administered the PPG to the defendant using fifteen stimulus images. He was not aware of whether the defendant took any medication that would affect the test results.

After the hearing, the judge excluded the PPG evidence, issuing a written memorandum after the conclusion of the trial. The defendant was permitted to call Dr. Plaud to testify without discussing the PPG, and references to the PPG examination were redacted from his written report.<sup>4</sup>

The defendant now argues that, in the circumstances of this case, the Daubert-Lanigan standards are inapplicable in considering the admissibility of the PPG evidence, and that,

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<sup>4</sup> Although Dr. Plaud ultimately testified at trial, the portion of the transcript containing his testimony was omitted from the record submitted to this court on appeal.

even if such standards applied, the PPG evidence was improperly excluded.

Discussion. 1. Standard of review. "The judge serves as a gatekeeper on the admission of expert opinion testimony." Hicks's Case, 62 Mass. App. Ct. 755, 760 (2005). In making a determination of whether expert testimony is sufficiently reliable to be admitted before a trier of fact, a judge must conduct "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Lanigan, 419 Mass. at 26, quoting from Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-593 (1993). See Mass. G. Evid. § 104(a) (2018) ("The court must decide any preliminary question about whether . . . evidence is admissible").

Under Daubert-Lanigan, a judge "initially considers a nonexclusive list of . . . factors [including] 'whether the scientific theory or process (1) has been generally accepted in the relevant scientific community; (2) has been, or can be, subjected to testing; (3) has been subjected to peer review and publication; (4) has an unacceptably high known or potential rate of error; and (5) is governed by recognized standards.'" Commonwealth v. Camblin, 478 Mass. 469, 475-476 (2017), quoting

from Commonwealth v. Powell, 450 Mass. 229, 238 (2007). See Mass. G. Evid. § 702 (2018).

Daubert-Lanigan analysis must be flexible, and "[d]iffering types of methodology may require judges to apply differing evaluative criteria to determine whether scientific methodology is reliable." Canavan's Case, 432 Mass. 304, 314 n.5 (2000). A trial judge has "broad discretion to determine how to assess the reliability of expert testimony." Palandjian v. Foster, 446 Mass. 100, 111 (2006). "[I]f the process or theory underlying an expert's opinion lacks sufficient reliability or an expert cannot provide a reliable factual basis for his conclusions, the trial judge must exclude the opinion from reaching the trier of fact." Commonwealth v. DiCicco, 470 Mass 720, 729 (2015), citing Lanigan, 419 Mass. at 25-26.

"We review a judge's determination to admit or exclude expert testimony under Daubert-Lanigan for an abuse of discretion." DiCicco, 470 Mass. at 729. The proponent of expert testimony, here the defendant, has the burden to establish the reliability of the proffered testimony. Ibid., citing Commonwealth v. Sliech-Brodeur, 457 Mass. 300, 328 n.41 (2010).

2. Automatic admissibility. Citing G. L. c. 123A, § 14(c), the defendant argues that the PPG evidence here at issue should not have been subject to a Daubert-Lanigan analysis



in the first instance, as it was automatically admissible as a portion of an expert report in an SDP case. We disagree.

To date, the Supreme Judicial Court has declined to consider the reliability and admissibility of PPG testing, and our decisional law has not yet addressed the question. See, e.g., Doe, Sex Offender Registry Bd. No. 15606 v. Sex Offender Registry Bd., 452 Mass. 784, 795 (2008). Because the PPG is "not expressly made admissible by statute, nor . . . an essential part of the qualified examiners' evaluation as set out in the statute," evidence regarding it "must be independently admissible." Gammell, petitioner, 86 Mass. App. Ct. 8, 15 (2014). See ibid. (PPG testing not per se admissible pursuant to SDP statute). Thus, it "must undergo an assessment under the standards of Daubert-Lanigan." Esteraz, petitioner, 90 Mass. App. Ct. 330, 335 (2016). See id. at 334-335 (determination as to admissibility at trial of actuarial tool used to estimate probability of reoffense required Daubert-Lanigan hearing).

3. Application of Daubert-Lanigan. After a thorough review of the record, we conclude that the judge did not abuse his discretion in determining that the defendant failed to establish the reliability of the PPG as used by Dr. Plaud.

First, we discern no error in the judge's finding that, although the PPG appears to be commonly used as a tool in the treatment of sex offenders, it is not generally accepted in the

clinical community for use in diagnosis. "In determining whether experts generally accept the reliability of [scientific] evidence, we may properly consider not only the testimony of experts in the record before us but also articles written by experts and the conclusions of other courts." Commonwealth v. Kater, 388 Mass. 519, 527 (1983), citing Commonwealth v. Vitello, 376 Mass. 426, 431 (1978).

Although Dr. Plaud conceded that opinions among experts conflict as to the reliability of the PPG, he testified that the test is nevertheless generally accepted and that there are "thousands and thousands and thousands of studies utilizing the PPG." After Dr. Plaud indicated that he could provide a bibliography of research establishing the validity of the PPG, the defendant asked for leave to provide it at a later time. Although he was given permission to do so, the defendant submitted neither the bibliography, nor any studies or other scholarly literature.<sup>5</sup> A judge is not required to "admit opinion

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<sup>5</sup> Among the few studies Dr. Plaud referenced by name during the hearing was the "Hanson Bussière meta-analysis," which he characterized as a significant study finding that the single greatest predictor of sexual recidivism was deviant sexual arousal, purportedly defined by the study as a sexual response to children measured by PPG testing. The study was not introduced by either party during the hearing, nor was this aspect of Dr. Plaud's testimony challenged by the Commonwealth. In future cases, parties should provide judges conducting Daubert-Lanigan hearings with the studies principally relied upon by their experts. To the extent that Dr. Plaud's testimony was intended to reference Hanson & Bussière, Predicting Relapse:

evidence that is connected to existing data only by the ipse dixit of the expert." Kumho Tire Co. v. Carmichael, 526 U.S. 137, 157 (1999), quoting from General Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997). Accord Canavan's Case, 432 Mass. at 315.

The defendant contends that reference made to the PPG in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (5th ed. 2013) (DSM-V) also establishes the general acceptance of the test among clinicians. The DSM-V's description of the PPG, however, falls short of endorsing its use for diagnosis, specifically cautioning that the exam's "sensitivity and specificity of diagnosis may vary from one site to another." Id. at 699. On the whole, the DSM-V's language is not inconsistent with the proposition that general acceptance of the test is limited to its treatment applications.

A review of decisional law in other jurisdictions is not to the contrary. Many courts have expressed serious concern as to the reliability of the PPG. See, e.g., United States v. Powers, 59 F.3d 1460, 1471 (4th Cir. 1995) (trial court did not

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A Meta-Analysis of Sexual Offender Recidivism Studies, J. Consult. & Clin. Psychol. 66(2): 348-362 (1998), it is evident that the judge would have benefitted from comparing Dr. Plaud's characterization of the meta-analysis with the text of the study and would also have benefitted from viewing the 2004 update of the meta-analysis. See Hanson & Morton-Bourgon, Predictors of Sexual Recidivism: An Updated Meta-Analysis (Public Works & Government Services Canada 2004).

abuse its discretion when it excluded PPG results because of the test's failure to satisfy the "scientific validity" prong of Daubert); Doe v. Glanzer, 232 F.3d 1258, 1266 (9th Cir. 2000) (though useful in treatment, "courts are uniform in their assertion that the results of [PPG]s are inadmissible as evidence because there are no accepted standards for this test in the scientific community"); United States v. Weber, 451 F.3d 552, 564-566 (9th Cir. 2006) (detailing serious concerns as to the accuracy and reliability of PPG, while acknowledging its potential value in treatment); Kirk v. State, 520 S.W.3d 443, 462-463 (Mo. 2017) (trial court did not abuse its discretion in excluding PPG in sex offender civil commitment trial based on lack of reliability and subject's ability to manipulate results); North Carolina v. Spencer, 119 N.C. App. 662, 667-668 (1995) (trial court did not abuse its discretion in excluding PPG based on reliability); Mitchell v. State, 420 S.W.3d 448, 452-454 (Tex. Ct. App. 2014) (endorsing the potential value of PPG for treatment purposes, but expressing concern as to its evidentiary reliability due to subject manipulation and lack of uniform standards). The appellate cases cited by the defendant, by contrast, are either largely inconclusive, see In re Detention of Halgren, 156 Wash. 2d 795, 806 (2006) ("PPG examination has not been accepted as, by itself, a predictor of recidivism"), or inapplicable to our analysis based on diverging

State rules on the admissibility of scientific evidence. See State v. Fullwood, 22 So. 3d 655, 656-657 (Fla. Dist. Ct. App. 2009) (declining to assess the reliability of PPG testing); In re Commitment of Sandry, 367 Ill. App. 3d 949, 969-970, 976 (2006) (stating that "State courts that have rejected PPG testing have done so due to problems with the test's reliability," but allowing expert's opinion testimony as to likelihood of recidivism, based in part on consideration of PPG test results, as Illinois courts do not follow Daubert and their judicial review of scientific evidence "does not include reliability"); State v. Gallegos, 220 P.3d 136, 145 (Utah 2009) (merely finding that, at trial on charges of enticing a minor, defendant's pedophilia or lack thereof was relevant, without deciding scientific validity of PPG test).

A lack of general acceptance does not end our inquiry into reliability. The judge conducted a more generalized reliability inquiry to determine whether the test has been shown "reliable or valid through other means." Ready, petitioner, 63 Mass. App. Ct. 171, 174 (2005). We find ample support in the record for the judge's conclusion that the defendant did not establish the reliability of the PPG using alternate methods.

At the outset, the PPG's lack of a standard set of stimuli or agreed-upon standards for the testing creates, as the judge found, a "major problem." For a test such as this, the stimuli

used are by definition intrinsic to the result produced. With no standardized guidelines for either the content or even the mechanism of stimulus (audio or visual), the reliability of the procedure appears inherently dubious. See Ready, 63 Mass. App. Ct. at 176-177 (variance in stimuli used in Abel Assessment for Sexual Interest test studies eroded validity of the studies). Indeed, the test has a significant error rate, according to Dr. Plaud, with false positives above thirty-three percent, and potential false negatives amongst "the vast majority of rapists." See id. at 178 (judge found test's error rate of twenty-one to thirty-two percent unacceptable).

Of similar concern is the test's vulnerability to manipulation by the subject, who may opt to direct his thoughts or attention elsewhere than intended by the examiner. Although Dr. Plaud testified that he takes measures to avoid certain types of test manipulation, the defendant did not present any evidence suggesting that these measures have been studied, that they have been determined to be effective, or that they are generally accepted as effective by others in the clinical community.

Finally, as the judge noted, the defendant did not offer any evidence suggesting the PPG's value in proving a negative proposition: that an absence of deviant response on the PPG is correlated with an absence of sexual recidivism. He similarly

offered no evidence on the correlation between absence of deviant response and absence of a relevant diagnosis.

Based on our review of the record before the judge, we conclude that the judge did not abuse his discretion in excluding the PPG examination results; it has not been established that use of the PPG exam to show the likelihood of sexual reoffense is generally accepted in the clinical community or that a review of the Daubert-Lanigan factors favors admission of evidence based on such an exam.

Judgment affirmed.