

IN THE COURT OF APPEALS OF THE  
STATE OF OREGON

STATE OF OREGON,  
*Plaintiff-Respondent,*

*v.*

WILEY JOSEPH BROWN,  
*Defendant-Appellant.*

Deschutes County Circuit Court  
MI142800; A160980

Alta Jean Brady, Judge.

Submitted June 30, 2017.

Ernest G. Lannet, Chief Defender, Criminal Appellate Section, and Erin J. Snyder Severe, Deputy Public Defender, Office of Public Defense Services, filed the briefs for appellant.

Ellen F. Rosenblum, Attorney General, Benjamin Gutman, Solicitor General, and Shannon T. Reel, Assistant Attorney General, filed the brief for respondent.

Before Tookey, Presiding Judge, and Egan, Chief Judge, and Hadlock, Judge.

TOOKEY, P. J.

Conviction for driving under the influence of intoxicants reversed and remanded; otherwise affirmed.

**TOOKEY, P. J.**

In this criminal case, defendant appeals a judgment convicting him of one count of driving under the influence of intoxicants (DUII), ORS 813.010. He argues that the trial court erred in concluding that a police officer was qualified to offer expert testimony that a person who had nystagmus<sup>1</sup> as a result of a traumatic brain injury would not exhibit all six “clues” on the horizontal gaze nystagmus (HGN) test. We agree with defendant that the officer lacked the expertise necessary to testify as he did regarding the relationship between traumatic brain injury and HGN, and we conclude that the trial court’s error was not harmless. Accordingly, we reverse and remand.

We summarize all the evidence relevant to the trial court’s admission of the officer’s testimony under OEC 702, and we review the court’s ruling for legal error. *State v. Hazlett*, 269 Or App 483, 494, 345 P3d 482 (2015). City of Bend Police Officer Poole was the only witness at trial. Poole testified that he stopped defendant, who was driving a Jeep, after observing defendant improperly take the right of way at a stop sign and intentionally skid during a turn on a slushy, icy road. During the stop, Poole observed that defendant’s head was lolling against the door of the Jeep; his speech was slurred; his movements were slow; his eyelids were droopy; and his eyes were bloodshot and “glossed over.” In response to Poole’s request for defendant’s driver’s license, registration, and insurance information, defendant told him an unrelated story, became confused, and asked what Poole wanted. Defendant agreed to perform field sobriety tests. After he got out of his vehicle, he stumbled, and Poole smelled a strong odor of alcohol on his breath. Before beginning the tests, Poole asked defendant a series of “pretest questions” and, during that exchange, defendant informed Poole that he had suffered a traumatic brain injury but did not have speech problems as a result. Later in the series of questions, defendant explained that he had a past head injury. Later in

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<sup>1</sup> “Nystagmus is a physiological phenomenon, which has been defined as ‘an involuntary rapid movement of the eyeball.’ Richard Sloane, *The Sloane-Dorland Annotated Medical-Legal Dictionary* 504 (1987).” *State v. O’Key*, 321 Or 285, 294, 899 P2d 663 (1995).

the stop, Poole learned that, as a result of being hit by a car, defendant had a prosthetic leg.

As described in more detail below, Poole conducted the HGN test and defendant scored six out of six possible points, which, Poole testified, indicated that defendant was impaired. After defendant fell on a snow berm, Poole decided to arrest him rather than attempt to conduct more field sobriety tests in the icy conditions. When he was arrested, defendant became angry and aggressive. Throughout the rest of the encounter, defendant had erratic mood swings. In addition to swearing at Poole, defendant stated that he had been drinking wine. Although Poole testified that defendant had consented to take a breath test, no breath test results were introduced.

On direct examination, Poole testified that the HGN “test is basically an eye test. It’s—we look for involuntary jerking of the eyes. Whenever a person’s under the influence of alcohol, it causes an involuntary jerking of the eyes.” Poole explained that, before beginning the test, he makes sure “that their pupils are consistent in size; that there’s no resting nystagmus,” that is, no jerking of the eyes while they are resting; “and that they’re able to look and focus on the tip of my pen.”

Then Poole explained that, during the test, he looks for a lack of smooth pursuit, distinct and sustained nystagmus at maximum deviation, and onset of nystagmus before 45 degrees. To score the test, Poole gives one point for each of those “clues” exhibited in each eye, for a total of six possible points. When he conducted the test on defendant, defendant scored six points, which, Poole testified, indicated impairment.

On cross-examination, defense counsel questioned Poole about his experience with traumatic brain injuries and his understanding of their relationship to nystagmus:

“Q. And have you had experience with people who have traumatic brain injuries?”

“A. Yes. I’ve talked to people, but not like—I haven’t evaluated them or anything.

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“Q. Now, you mentioned that you had had some interaction with people who have traumatic brain injuries.

“A. Uh-huh.

“Q. In your experience, isn't it typical that they can get confused more easily than others?

“A. My experience of folks with traumatic brain injury, they're pretty serious, so they're already confused as it is a lot of time. Not really able to speak very well. Most of them can't walk, that kind of thing.

“Q. But it would probably depend on the degree of injury, just on—

“A. I would assume so, yes.

“Q. So you would agree, then, that they might need to concentrate a little bit more on their actions?

“A. Possible.

“Q. Would it surprise you that someone with a traumatic brain injury and a prosthetic leg may have some difficulty walking through those winter conditions?

“A. It wouldn't surprise me, no.

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“Q. The questions you ask individuals prior to initiating the [HGN] test, those are meant to gauge, well, potential injuries they might have that would interfere with the test?

“A. Yes, sir.

“Q. And you testified that you were trained pursuant to the National Highway Traffic Safety [Administration (NHTSA)] standards, correct?

“A. Yes, sir.

“Q. You ask those questions because head trauma, for instance, that can potentially give a false-positive for an HGN?

“A. (No audible response.)

“Q. Someone with any sort of brain injury, that can also lead them to having nystagmus, correct?

“A. I would assume that depends on the brain injury. But yes, there is training that—

“Q. Isn’t it correct that your—

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“Q. —training manual for [NHTSA] teaches you that a brain injury can cause someone to have nystagmus?

“A. Yes.

“Q. And there’s more than just one form of nystagmus, correct?

“A. Yes.

“Q. There’s physiological nystagmus, for instance?

“A. Yes.

“Q. Optokinetic nystagmus?

“A. I’m not familiar with that term, but yes, I would assume there is.

“Q. Are you familiar with fatigue nystagmus?

“A. Uh-huh.

“Q. So simply put, there’s a lot of different forms of nystagmus?

“A. There can be. Yes, sir.

“Q. So after you learned that Mr. Brown had that traumatic brain injury, you weren’t surprised that he had nystagmus?

“A. Not because of the brain injury.

“Q. Officer Poole, are you a neurologist?

“A. No.

“Q. Are you a registered nurse?

“A. No.

“Q. Optometrist?

“A. No.

“Q. Do you know the names of the muscles that control eye movement?

“A. No.

“Q. How many muscles control eye movement? Do you know?

“A. A lot.

“Q. How far does the eye need to jerk to display nystagmus?

“A. How far?

“Q. How far does it need to jerk?

“A. Not very far.

“Q. How many times does it need to jerk?

“A. It’s consistent. That’s why it’s called distinct and sustained. If it just bounces and then stops, that’s not nystagmus. Distinct and sustained is where you see a noticeable jerking and it continues.”

On redirect examination, the prosecutor elicited testimony from Poole to suggest that the result of the HGN test was accurate despite defendant’s traumatic brain injury:

“Q. What indications would you look for with someone with traumatic brain injury to make—to prevent, you know, the—a false clue?

“A. The first thing that I would look for is—is resting nystagmus. So if I looked at him and when I’m looking at his eyes, if his eyes were going like this, that’s indicative of some sort of brain injury or other neurological disorder. And then if that had been present, I wouldn’t have continued to test, because I’d be able to tell that there’s no way I’d be able to know if he had nystagmus or not.

“Q. And—sorry. Just going to pause right there. And did you see that?

“A. No.

“Q. Okay. What else?

“A. And then unequal pupil size is consistent with, like—so if one [eye] has a larger pupil than the other, that’s indicative [of] concussion, brain injury, those kind of things.

“Q. And did you see that in this case?

“A. No. No. Both \*\*\* pupil sizes were equal.

“Q. What other—for somebody who has nystagmus resulting from some kind of trauma, are there any other things that you would notice about that nystagmus that would differentiate between that nystagmus and the nystagmus caused by alcohol?

“A. Now, *alcohol* nystagmus, you get the six clues. With the *brain* type of nystagmus, you would—you wouldn’t get that many. You’d get one type or the other. It wouldn’t be consistent all the way throughout the test as indicated by alcohol.”

(Emphasis added.)

At that point, defense counsel objected: “I don’t believe he’s qualified as a medical expert for this.” In response, the prosecutor elicited more detailed information about Poole’s training. Poole explained as follows:

“The [NHTSA], their standard test teaches you about nystagmus, why it’s caused, how it’s caused and to tell whether—like the false positives and things that you’re talking about, the brain injuries that go behind it, all those. It’s a—it’s about a 24-, 36-hour course in how to detect not just nystagmus, but the other indicators of alcohol. And then the advanced recognition course, which goes further into drugs that impair driving, drugs that cause nystagmus, lack of convergence with your eyes. Drugs that cause dilated or constricted pupils. Those kinds of things. So...

“Q. And the information about different indicators of nystagmus that you were talking about today, that came from that training?

“A. From the standard NHTSA training, correct.”

Based on that foundation, the trial court overruled defendant’s objection that Poole was not qualified as an expert to testify that a person with “the brain type of nystagmus” would not exhibit all six clues on the HGN test and that, in that circumstance, “[y]ou’d get one type or the other” and “[i]t wouldn’t be consistent all the way throughout the test as indicated by alcohol.” Poole further testified that, if someone has a traumatic brain injury, he would expect to see the resulting nystagmus all the time; “[i]t doesn’t go away.”

He also testified that, from the distance from which he had observed defendant during the trial, he had not observed any nystagmus.

The jury found defendant guilty of DUII, and he appeals the resulting judgment.<sup>2</sup> He argues that the trial court erred in determining that Poole was qualified to testify that, unlike a person who has nystagmus as a result of alcohol consumption, a person who has nystagmus as a result of a brain injury will not exhibit all six clues on the HGN test.<sup>3</sup> The state first responds that defendant's assignment of error was not preserved. We reject that argument without further discussion. The state also contends that Poole was qualified to testify as an expert on traumatic brain injuries and nystagmus and that, in any event, any error was harmless.

OEC 702 permits “a witness qualified as an expert by knowledge, skill, experience, training or education” to testify to “scientific, technical or other specialized knowledge [that] will assist the trier of fact to understand the evidence or to determine a fact in issue.” To qualify as an expert, a witness need not have a particular educational or professional degree. *State v. Rogers*, 330 Or 282, 316, 4 P3d 1261 (2000); *Hazlett*, 269 Or App at 494. Rather, an expert on a given subject is a person who “‘has acquired certain habits of judgment based on experience or special observation’ that enables him or her to draw from the facts inferences that are uniquely beneficial to the jury” on that subject. *Mall v. Horton*, 292 Or App 319, 324, 423 P3d 730 (2018) (quoting *State Highway Com. v. Arnold et al*, 218 Or 43, 64, 341 P2d 1089 (1959)); see also *State v. Althof*, 273 Or App 342, 345, 359 P3d 399 (2015), *rev den*, 358 Or 550 (2016) (explaining that the question is whether the person has expertise sufficient to allow him or her to provide helpful testimony regarding the particular topic “about which the person is asked to make his statement” (internal quotation

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<sup>2</sup> Defendant was acquitted of reckless driving, and our decision does not disturb the judgment as it relates to that acquittal.

<sup>3</sup> Defendant also assigns error to the trial court's refusal to allow defense counsel to cross-examine Poole with a version of the NHTSA manual that was newer than the one on which Poole was initially trained. Our disposition obviates the need to address the second assignment of error.



marks omitted)). Expertise, and, in particular, the expertise necessary to testify helpfully about a complex subject, requires more than general familiarity with the subject. *See State v. Dunning*, 245 Or App 582, 591, 263 P3d 372 (2011) (expertise does not consist of what “any literate person with access to a library or an Internet connection” can learn about a subject “over one long weekend”; “[o]ur standards are higher”); *State v. Ohotto*, 261 Or App 70, 76, 323 P3d 306 (2014) (officer’s extensive training and experience conducting 1,000 DUII investigations did not qualify him to present scientific evidence “that required a complex understanding of how defendant’s BAC would have changed over time”).

In *State v. O’Key*, 321 Or 285, 297, 899 P2d 663 (1995), the Supreme Court held that testimony about the administration and result of the HGN test is scientific expert testimony. Then the court considered the scientific validity of the HGN test by conducting an extensive review of the validity of the test’s underlying scientific principles and concluded that the scientific principles and, consequently, the test results, are sufficiently reliable to be admitted as evidence of impairment. *Id.* at 308-19, 322-23. Consequently, to testify regarding the administration and result of the HGN test, as Poole did in this case, an officer need not have expertise in the scientific principles underlying the test. *See id.* at 289 (scientific testimony about the administration and result of the HGN test is admissible to establish that a person was impaired “subject to a foundational showing that the officer who administered the test was properly qualified, that the test was administered properly, and that the test results were recorded accurately”).

In the course of its analysis in *O’Key*, the court noted the potential for false positives on the test—it explained that “about three percent of the population suffers from non-alcohol-induced nystagmus”—and stated that the defense is free to question the reliability of the test results under the specific circumstances of the case: “[T]hrough cross-examination and rebuttal evidence, opposing counsel can show that there are numerous causes of nystagmus other than the use of alcohol. As with other field sobriety tests, the results of the HGN test may be attributable to physical and/or mental conditions other than the ingestion of alcohol.”

*Id.* at 312, 322 n 46. However, the court did not evaluate any of the scientific principles underlying possible causes of false positives—for example, principles explaining how traumatic brain injuries are related to nystagmus.

Thus, under *O'Key*, an officer who has been trained in proper administration of the HGN test has sufficient expertise to testify about a subject's performance on it, that is, the way the officer administered the test, including the precautions the officer took to avoid false positives; the number of clues the officer observed; and whether that score indicates impairment.

However, *O'Key's* reasoning is limited to testimony about administration of the HGN test and a subject's performance on the test; it does not address testimony about scientific principles that underlie false positives or excuse a police officer testifying on that subject from qualifying as an expert under OEC 702.

As an initial matter, we note that, in light of *O'Key*, Poole—a properly trained officer—had sufficient expertise to testify as he did before the testimony to which defense counsel objected: His training in proper administration of the test qualified him to testify about how he administered the test, including the signs of traumatic brain injury that he looked for before administration to avoid false positives (resting nystagmus and unequal pupil size); that defendant scored six out of six points; and that a score of six out of six indicates impairment.

By contrast, under *O'Key*, Poole's training in how to properly administer the test did not qualify him to give scientific expert testimony about the relationship between traumatic brain injury and nystagmus and how that relationship would affect performance on the HGN test because *O'Key* did not address those subjects.

The disputed testimony—an assertion about how a person who has nystagmus as a result of a traumatic brain injury will perform on the HGN test—was scientific because it drew its power to persuade the jury that defendant's traumatic brain injury did not cause him to fail the HGN test from Poole's purported understanding of the physiology of

nystagmus. See *State v. Henley*, 363 Or 284, 301, 422 P3d 217 (2018) (expert evidence “is ‘scientific’ under OEC 702 when it draws its convincing force from some principle of science \*\*\* or implies a grounding in the methods and procedures of science and would likely be perceived by the jury as imbued with the persuasive appeal of science” (internal quotation marks omitted)). That is, an accurate prediction of how a person with traumatic brain injury will perform on the HGN test relies on scientific principles to explain the differences between the effect of alcohol and the effect of a traumatic brain injury on the underlying physiological processes. Thus, Poole’s testimony was scientific expert testimony, and, *O’Key* did not provide a foundation of scientific validity for it.

We turn to whether Poole was qualified as an expert on the relationship between traumatic brain injury and nystagmus and how that relationship would affect performance on the HGN test. See *Althof*, 273 Or App at 345 (the question is whether the witness has expertise on “the topic about which the person is asked to make his statement” (internal quotation marks omitted)). We conclude that, on this record, Poole lacked the “knowledge, skill, experience, training or education” necessary to allow him to provide the jury with helpful inferences about the cause of defendant’s score on the HGN test—that is, to help the jury determine whether defendant had nystagmus because of alcohol consumption or because of brain injury. OEC 702.

First, we note that Poole lacked any relevant experience. Our opinion in *Althof* demonstrates how experience contributes to expertise. There, the defendant was charged with sexual abuse, and the state presented expert testimony from the investigating detective listing reasons that the victim might have delayed reporting the abuse:

“(1) [T]he victim does not have faith in the law enforcement system because of past experience with it or because the victim does not trust the particular law enforcement officer with whom the victim is working; (2) the victim may have been bribed or threatened by the abuser; (3) the victim may fear that he or she will not be believed by law enforcement; (4) the victim is too young to be aware of or understand the abuse; (5) there is not, in fact, anything for the victim

to disclose; and (6) the victim may have financial ties to the abuser that the victim does not want to jeopardize by reporting.”

*Althof*, 273 Or App at 345.

On appeal, the defendant contended that the detective lacked the required expertise to testify about reasons for delayed reporting. We first explained that the detective’s testimony was “narrow in scope” and “not scientific in nature.” *Id.* at 345 & n 2. We explained that the witness had “nine years of experience in law enforcement” and “had been a detective for a little over a year.” *Id.* In that time, he “had investigated 10 sexual abuse cases, half of which had involved delayed reporting. In the same time period, he assisted other more senior detectives in multiple investigations that were not his own to learn more about such matters.” *Id.* at 346. In addition, “[i]n the years before he became a detective, he investigated domestic violence cases that involved delays in the disclosure of abuse to authorities.” *Id.* We explained, “That experience gave him the opportunity to observe the different reasons why someone might delay reporting.” *Id.* That experience, along with training in child abuse investigations that addressed delays in reporting, provided the detective with the in-depth knowledge necessary to support his testimony “as to the different reasons why a victim of abuse might not report it to authorities immediately.” *Id.*

Here, Poole had “talked to people [with traumatic brain injuries], but not like—I haven’t evaluated them or anything.” Unlike the officer in *Althof*, whose years of experience with abuse victims “gave him the opportunity to observe the different reasons why someone might delay reporting,” *id.*, Poole had no experience administering the HGN test to or otherwise evaluating people with traumatic brain injuries. *Cf., e.g., State v. Woodbury*, 289 Or App 109, 115, 408 P3d 267 (2017) (nurse’s care and observation of 20 patients with traumatic brain injuries over the course of 10 years qualified her to testify that the defendant’s behaviors were consistent with the behavior of people with traumatic brain injuries). Because he had no experience administering the HGN test to or otherwise evaluating people with

traumatic brain injuries, Poole lacked any observational knowledge of whether people with traumatic brain injuries generally exhibit nystagmus and, if they do, whether they exhibit only some of the six “clues” on the HGN test.

That leaves us with the question whether Poole’s training, alone, gave him “certain habits of judgment \*\*\* that enable[d] him \*\*\* to draw from the facts” the inference that defendant’s HGN test result was not the result of his traumatic brain injury. *Mall*, 292 Or App at 324 (internal quotation marks omitted). As set out above, Poole testified that, during a 24- or 36-hour NHTSA training course, he learned about nystagmus, how to detect it, and also “the other indicators of alcohol.” That course informed him “about nystagmus, why it’s caused, how it’s caused and to tell whether—like the false positives and things that you’re talking about, the brain injuries that go behind it, all those.” He stated that “the information about different indicators of nystagmus” to which he testified—including his testimony that defendant’s traumatic brain injury would not have caused him to score six points on the HGN test—came “[f]rom the standard NHTSA training.”

The relevant part of Poole’s training—the part of the course addressing the relationship between the HGN test and traumatic brain injury—was short. The whole course was 24 or 36 hours long; it lasted less than one week. During that time, Poole testified, he learned about all the indicators of alcohol consumption, basic information about nystagmus, and how to detect nystagmus—that is, how to administer the HGN test. During that time he also learned about all of the reasons for false positives, of which traumatic brain injury is only one. See *O’Key*, 321 Or at 312-13 (discussing numerous causes of nystagmus other than alcohol). Poole’s testimony on cross-examination confirmed the limited nature of his understanding of traumatic brain injuries and their relationship to the HGN test. It showed that he lacked knowledge of the physiology of nystagmus and lacked expertise in traumatic brain injuries or their symptoms.

Under these circumstances, the amount of training that Poole received matters only insofar as it suggests—and, as explained above, the record confirms—that he

lacked in-depth knowledge of the relationship between traumatic brain injury and nystagmus and how that relationship would affect performance on the HGN test. Poole had much less training than other witnesses whose education or training has weighed significantly in the analysis of whether they are qualified to testify as experts under OEC 702. *See, e.g., Rogers*, 330 Or at 317 (Ph.D. in physiological psychology who did postdoctoral work in neuroscience and took advanced workshops, taught neuroanatomy at universities, and wrote a treatise on neuroanatomy, among other qualifications, was qualified to testify about possible causes of frontal lobe dysfunction); *Mall*, 292 Or App at 321-22, 326 (expert in biomechanical engineering and accident reconstruction had two certificates in biomechanical engineering, each of which required successful completion of several courses, and certificate in accident reconstruction “that required 160 hours of crash investigation training, 80 hours of crash reconstruction training, and a passing score on an eight-hour examination”); *Hazlett*, 269 Or App at 486-87, 490 (expert on drug-induced dementia had advanced degrees in pharmacology and had researched psychopharmacology and published an article about drug-induced dementia and legal intent). As Poole testified, “there is training” that made him familiar with the idea that traumatic brain injury can cause nystagmus, but the record reveals nothing suggesting that the training, and, consequently, his knowledge, encompassed the relevant scientific principles.

In sum, the record does not demonstrate that Poole had anything more than general familiarity with the relationship between traumatic brain injury and nystagmus. Although he could testify that his training had familiarized him with the fact that traumatic brain injury can cause nystagmus, he lacked the in-depth knowledge necessary to inform the jury that the result of defendant’s HGN test was attributable to alcohol consumption and not traumatic brain injury. That circumstance-specific scientific determination required more in-depth understanding than Poole had; it required expertise in the physiology of traumatic brain injury. Accordingly, the trial court erred in concluding that Poole was qualified to testify as he did.

As noted above, the state contends that the error was harmless, because “defendant did not offer any evidence to support his theory that his impairment was caused by a traumatic brain injury” and defendant admitted that he had been drinking wine. We must affirm a judgment notwithstanding evidentiary error if “there was little likelihood that the error affected the verdict.” *State v. Davis*, 336 Or 19, 33, 77 P3d 1111 (2003); *see also* Or Const, Art VII (Amended), § 3; OEC 103.

In this case, as the state points out, there was ample evidence from which the jury could find that defendant was intoxicated when he drove. However, contrary to the state’s argument, that, alone, does not demonstrate that there was little likelihood that the erroneously admitted testimony affected the verdict.

The defense theory of the case was, as counsel stated in closing argument that, “this isn’t a case of drunk driving. It’s about traumatic brain injury.” Relying on defendant’s statement to Poole that he suffered a traumatic brain injury in the same accident in which he lost part of his leg, the defense contended that Poole mistook defendant’s appearance, behavior, and movements for signs of intoxication when they were really results of his traumatic brain injury and prosthetic leg. *See* OEC 801(4)(b)(A) (a party’s own out-of-court statement offered against the party may be admitted for its substance). That theory, if the jury accepted it, could have made the state’s evidence significantly less probative on the question whether defendant was intoxicated. In response to that defense argument, the prosecutor specifically relied on Poole’s erroneously admitted testimony that, if a person suffers from traumatic brain injury, the person will not exhibit all six clues on the HGN.

In short, the erroneously admitted testimony “went directly to the heart” of defendant’s theory of the case. *Davis*, 336 Or at 34. The error was not harmless.

Conviction for driving under the influence of intoxicants reversed and remanded; otherwise affirmed.