

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA**

MELISSA RIVERA, ET AL

CIVIL ACTION

VERSUS

NO: 18-14005

JENNIFER ROBINSON, ET AL

SECTION: "S" (4)

ORDER AND REASONS

IT IS HEREBY ORDERED that defendants' *Daubert Motion* to limit the testimony of Sergeant Christopher McClelland, Sr. (Rec. Doc. 155) is **GRANTED**;

IT IS HEREBY ORDERED that defendants' *Daubert Motion* to exclude or limit the testimony of James Evans (Rec. Doc. 160) is **DENIED**.

BACKGROUND

This matter arises out of a motor vehicle accident that occurred on August 25, 2018 in Covington, Louisiana. Plaintiffs' son, Ricardo Silva, Jr., died from injuries sustained in the accident when the motorcycle he was driving collided with defendant Jennifer Robinson's SUV. Plaintiffs allege the accident was caused by Robinson's negligence; defendants contend that Silva's speed at the time of the accident caused or contributed to the accident. The accident was investigated by the Louisiana State Police. As part of the investigation, Louisiana State Trooper Sergeant Christopher McClelland, Sr. provided a four-page report concerning Silva's speed at the time of the accident. Defendants, while they do not challenge McClelland's qualifications, have filed the instant motion seeking to exclude McClelland's opinion testimony concerning the type of braking used by Silva, and the loss of velocity after he began braking, arguing that his opinion

testimony is not reliable and thus not helpful to the trier of fact. Defendants have also moved to limit or exclude the testimony of plaintiffs' retained accident reconstruction expert, James Evans.

DISCUSSION

Federal Rule of Evidence 702 provides that:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In Daubert v. Merrell Dow Pharm., 509 U.S. 579, 589 (1993), the Supreme Court of the United States held that Rule 702 requires the district court to act as a gatekeeper to ensure that “any and all scientific testimony or evidence admitted is not only relevant, but reliable.” To perform its gatekeeping function, the court must first determine whether the proffered expert testimony is reliable. The party offering the testimony bears the burden of establishing its reliability by a preponderance of the evidence. See Moore v. Ashland Chem. Inc., 151 F.3d 269, 276 (5th Cir. 1998). The reliability inquiry requires the court to assess whether the reasoning or methodology underlying the expert’s testimony is valid. See Daubert, 509 U.S. at 592-93. The goal is to exclude expert testimony that is based merely on subjective belief or unsupported speculation. See id. at 590. Next, the court must determine whether the expert’s reasoning or methodology “fits” the facts of the case and whether it will assist the trier of fact to understand the evidence, i.e. whether it is relevant. See id. at 591.

1. Testimony of Sergeant McClelland

Defendants do not challenge McClelland's credentials but argue that his opinion should be excluded because it is not reliable, because it is based on speculation (due to the fact that he assumed from the road markings, without any scientific basis, that Silva first used only his rear brake and then used both his rear and front brakes), and based on a faulty assumption (that the velocity at impact was zero). Defendants also complain that during his deposition, McClelland admitted the calculation included in his report was erroneous, but he did not definitively identify his initial error.

Sergeant McLelland was initially tasked with looking at the skid mark to see if he could determine the speed of the motorcycle.¹ However, the formula used to calculate that number, the vehicle initial velocity formula, requires that the person doing the calculation know the ending velocity.² McClelland did not know the ending velocity or how to determine it, so he used zero for that value in his calculations, acknowledging the limitations of that result, specifically, that his calculation would yield only velocity lost over the skid, not initial velocity.³ Using the zero ending velocity, McClelland determined in his report that the motorcycle's loss of velocity was 62-64 miles per hour.⁴ This supports an inference that at the time he applied the brakes, Silva was driving above 62 miles per our. Assuming that all of the other inputs and calculations were

¹ McClelland Depo, Rec. Doc. 155-2, Depo. p. 93:21-24.

² Id. at 134:1-4.

³ Id. at 134:23-135:5.

⁴ McClelland Report, Rec. Doc. 155-2, p. 55.

correct (which was not the case, as discussed *infra*), the use of the zero value for ending velocity by itself does not necessarily invalidate McClelland's findings.

However, the court finds that other issues render the opinion unreliable. The skid mark at the scene measured 127 feet in a relatively straight line, with the first 50 feet being a dark gray color, and the latter 77 feet much darker. McClelland opined that the lighter section of the skid mark was caused by applying only the rear brake, and the darker by braking with both the front and rear brakes. He also testified that when a rear brake only was applied, he would expect to see the skid mark in an S-curve pattern.⁵ Thus, the portion of the skid mark that McClelland attributes to rear braking only is inconsistent with his testimony that he would expect to see an S-curve at the point.

To confuse matters further, in determining the velocity loss, McClelland performed two calculations, one for the lighter portion of the skid mark, and one for the darker. He added these together to determine a total velocity loss of 62-64 miles per hour. However, it appears that his calculations for the rear tire mark portion are incorrect. His report states:

Rear tire mark portion
Using:
d= 50 feet
f= .356 (<i>half of high range from skid tests</i>)
a= -11.47 fps ²
$v_i = \sqrt{59.8^2 - 2(-11.47)(50)}$
$v_i = \sqrt{1206}$
$v_i = 34.73$ fps
S = 23.6 mph

However, the above calculation is erroneous. In calculating the value for $v_i = \sqrt{(59.8^2 - 2(-$

⁵ McClelland Depo, Rec. Doc. 155-2, Depo. p. 39:9-16, 41:18-21.

11.47)(50)), McClelland reduced the equation to $vi = \sqrt{1206}$, when in fact the correct equation should be $vi = \sqrt{4723.04}$, yielding a $vi = 68.7$ fps, which converts to a speed of 46.9 mph, not 23.6 mph as stated in the report. A similar error is present in the second calculation for the rear tire mark portion, in which the report calculates a speed of 23.25 mph but it appears it should actually be 46.75 mph, based on a vi of $\sqrt{4723.04}$ rather than the $\sqrt{1168}$ used in the report.

While these errors are arithmetical, and thus do not invalidate the entire methodology, in his testimony McClelland went on to undermine his methodology. Specifically, after McClelland performed an alternate calculation during his deposition, it was revealed that his 62-64 mph determination could not be correct (because it would mean that Silva accelerated rather than decelerated as he braked), and McClelland agreed that his initial finding must have been faulty. Upon reviewing his initial calculation, McClelland determined that the error occurred because he had added the two velocity values for the light and dark portion of the skid. He stated: "the error is, I added the speed from the front portion of the mark and the second portion of the mark into one combined speed instead of using vi [initial velocity], so I made an error in my calculations." However, he does not expand on how he would have used the " vi " instead. McClelland also did not explain the significance of or relation between the two (rear and rear+front) measurements, if they are not to be added together. He did not provide a revised report with corrected calculations. Accordingly, the court finds that this witness has failed to apply the "the principles and methods reliably to the facts of the case," and as such, his testimony would not assist the trier of fact. FED. R. EVID. 702. Sergeant McClelland may not provide expert testimony at the trial of this matter.

2. Testimony of James Evans

James Evans is plaintiffs' retained expert in accident reconstruction. Defendants do not challenge Evans' qualifications,⁶ however, they contend Evans' opinion is unreliable. Specifically, they argue that Evans' calculation of post-impact speed is not reliable, taking issue with Evans' use of SAE Paper 950197 to estimate the coefficient of friction, because it employed a method different from the precise way the accident occurred in this case. According to defendants, the example in SAE Paper 950197 was based on a motorcycle sliding only (vs. tumbling and sliding, which occurred here), sliding on asphalt only (vs. sliding on pavement and dirt), and that he based his calculation on a span of 45 feet instead of 50 feet.

Regarding Evans' opinion on speed at impact, defendants contend that Evans' use of photographs to assess crush damage to the Acura, and analyzing this crash using SAE Paper 2012-01-0103, was flawed because that paper involved different vehicles, different motorcycles, and different angles of impact from those in this crash.

Finally, defendants argue that Evans's calculations of pre-impact braking are unreliable, because he relied on SAE Paper 2012-01-0610 for his drag factor, and did not perform his own test at the accident scene.

The court has reviewed Evans' report and deposition, and finds that it is sufficiently

⁶ Evans has worked as an accident reconstructionist for 18 years, holds a degree in mechanical engineering technology, is accredited by the commission for Traffic Accident Reconstruction, has extensive specialized training in crash investigation, traffic track reconstruction, crash data retrieval, and vehicle dynamics, and is a regular lecturer on investigating motor vehicle accidents at the Texas A&M University Forensic and Investigative Sciences Program. He was first accepted as an expert witness in 2012, and has rendered an expert report in crashes involving a sport motorcycle striking a left-turning motorist in at least ten cases, and testified in numerous cases.

reliable and will assist the trier of fact. At base, defendants' objections amount to a complaint that in performing his analysis, Evans did not use comparators from the technical papers that exactly matched the circumstances of the present accident. However, it would be impossible for any expert to find an identical accident on which to base an opinion. Out of necessity, an expert synthesizes and extrapolates from similar situations, applying his or her own knowledge and expertise. Challenges to the methodology chosen, or “questions relating to the bases and sources of an expert’s opinion[,] affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury’s consideration.” United States v. 14.38 Acres of Land, 80 F.3d 1074, 1077 (5th Cir. 1996) (quoting Viterbo v. Dow Chem. Co., 826 F.2d 420, 422 (5th Cir. 1987)). They are more properly the subject for cross-examination at trial rather than for exclusion.

As for defendants' contention regarding Evans' use of a 45-foot rather than 50-foot distance for the length the motorcycle tumbled and/or slid before coming to rest, as addressed in his affidavit, Evans' rationale for choosing the figure is due to his choice of methodology, not inaccurate measurement.⁷ Finally, the mere fact that Evans used photographs in conjunction with other sources for his assessment does not render it unreliable; again, it goes to weight to be given to the testimony. Accordingly,

IT IS HEREBY ORDERED that defendants' *Daubert Motion* to limit the testimony of Sergeant Christopher McClelland, Sr. (Rec. Doc. 155) is **GRANTED**;

IT IS HEREBY ORDERED that defendants' *Daubert Motion* to exclude or limit the

⁷ Evans Affidavit, Rec. Doc. 200-2, ¶ 25.

testimony of James Evans (Rec. Doc. 160) is **DENIED**.

New Orleans, Louisiana, this 5th day of August, 2020.

A handwritten signature in black ink, reading "Mary Ann Vial Lemmon". The signature is written in a cursive style with a long horizontal flourish at the end.

MARY ANN VIAL LEMMON
UNITED STATES DISTRICT JUDGE