

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

KATHLEEN PAINE, as Guardian of the
Estate of CHRISTINA ROSE EILMAN,
a Disabled Person,

Plaintiff,

v.

OFFICER JEFFREY JOHNSON, OFFICER,
RICHARD CASON, OFFICER ROSENDO
MORENO, LIEUTENANT CARSON
EARNEST, SERGEANT DAVID BERGLIND,
DETENTION AIDE SHARON STOKES,
OFFICER TERESA WILLIAMS, DETENTION
AIDE CYNTHIA HUDSON, DETENTION
AIDE CATONIA QUINN, OFFICER
DEBORAH MABERY, OFFICER PAMELA
SMITH, OFFICER BENITA MILLER,
OFFICER PAULINE HEARD, and CITY OF
CHICAGO, a municipal corporation,

Defendants.

Case No. 06 C 3173

Judge Virginia M. Kendall

MEMORANDUM OPINION AND ORDER

Plaintiff Kathleen Paine ("Paine"), as Guardian of the Estate of Christina Rose Eilman ("Eilman"), filed this suit against the City of Chicago and various members of the Chicago Police Department (collectively, "Defendants"), alleging violations of Eilman's constitutional rights and violations of federal and Illinois law. As more fully set forth in this Court's Memorandum Opinion and Order dated February 22, 2010, Paine brings this suit on behalf of Eilman, her daughter, for injuries that Eilman incurred after the Chicago Police Department released her from custody. Paine has now moved to exclude all or parts of the proposed testimony of eight expert witnesses. Defendants have moved to exclude all or parts of the proposed testimony of seven expert witnesses. The Court held a hearing regarding the testimony of proposed expert David Dix. For the reasons

set forth herein, Paine’s Motion to Bar [the] Opinion Testimony and Report of David Dix is granted.

STANDARD OF REVIEW

The admissibility of expert testimony is governed by Federal Rule of Evidence 702 (“Rule 702”) and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and its progeny. *See Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007). Rule 702 states: “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.” The Seventh Circuit has developed a three-step admissibility analysis for expert testimony under Rule 702 and *Daubert*. *See Ervin*, 492 F.3d at 904. First, “the witness must be qualified ‘as an expert by knowledge, skill, experience, training, or education.’” *Id.* (quoting Fed.R.Evid. 702). Second, “the expert’s reasoning or methodology underlying the testimony must be scientifically reliable.” *Id.* (citing *Daubert*, 509 U.S. at 592-93). Courts are, however, granted “broad latitude when [they] decide[] how to determine reliability.” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 142 (1999). Finally, the expert’s testimony must be relevant, or “assist the trier of fact to understand the evidence or to determine a fact in issue.” *Ervin*, 492 F.3d at 904.

DISCUSSION

I. Paine’s Motion to Bar the Expert Testimony of David Dix

David Dix (“Dix”) is a licensed professional engineer in the State of Illinois who proposes to testify about an automobile accident in which Eilman was involved in February 2005. Dix’s report opines that Eilman’s vehicle was traveling between 41 and 52 miles per hour at the time of

its impact with an electric power pole, that the impact was similar to that of a crash test conducted by the Insurance Institute for Highway Safety, that the vehicle continued to rotate and flipped airborne following the collision with the electric pole until striking another pole, that the vehicle eventually landed on its roof, and that the airbag of the vehicle deployed during the frontal collision with the power pole. Paine moves to bar his proposed testimony as irrelevant. The Court held a hearing on Paine's motion, including testimony from Dix, on January 27, 2010.

A. Qualifications

Although neither party has provided the Court with Dix's Curriculum Vitae, his deposition testimony reveals extensive experience in the fields of mechanical engineering and accident reconstruction in a variety of different contexts. (*See* R. 553, Ex. B, Deposition Testimony of David Dix, at 5-12.) (hereinafter "Dix Dep.") Paine does not challenge Dix's qualifications to testify as to his reconstruction of the February 2005 automobile accident, and the Court finds him to be so qualified. *See Smith v. Ford Motor Co.*, 215 F.3d 713, 719-20 (7th Cir. 2000) (experts with engineering credentials and practical experience in the field of automobile accident reconstruction qualified as accident reconstruction experts).

B. Methodology

Dix's report reflects that his case review and accident reconstruction was based upon a variety of relevant information, including the California traffic collision report, photographs of the vehicle after the accident, photographs of the accident site, and extensive mechanical and structural information about Eilman's car and the objects with which it collided during the accident. These types of materials are appropriate foundations upon which an expert in mechanical engineering may reconstruct an accident. *See Ford v. Nationwide Mut. Fire Ins. Co.*, 62 Fed. App'x 6, 9-11 (1st Cir.

2003) (upholding expert accident reconstruction testimony based on circumstantial evidence and equations similar to those used here).

At hearing, Paine's attorneys presented two challenge to Dix's methodology that were not raised in her formal Motion to Bar. The first of these new challenges is that Dix erred by basing certain of his calculations on crash data collected from an offset barrier crash involving a different model year than Eilman's vehicle, rather than crash test data using Eilman's precise vehicle and measuring a crash against a power pole. (*See Mot. Hr'g Trans.*, David Dix, at 63-65, Jan. 27, 2010.) (hereinafter "Hr'g Trans.") The second new challenge is that he erred in failing to consider Eilman's medical records from the time immediately following the accident, and that by virtue of this omission he failed to confirm his calculations of the speed at which the vehicle was traveling by reference to available extrinsic data. (*See Hr'g Trans.* at 89.)

When considering a challenge to an expert's scientific methodology, courts are to consider four key factors: 1) whether the theory is based on scientific knowledge and can be tested; 2) whether the theory has been subjected to peer review or publication; 3) whether there is a known or potential rate of error and whether clear standards control the theory's operation; and 4) whether the methodology or technique used by the expert is generally accepted in the relevant scientific community. *See Clark v. Takata Corp.*, 192 F.3d 750, 757 n.3 (7th Cir. 1999), *citing Daubert*, 509 U.S. at 593-94.

Here, the bulk of Dix's testimony regarding his reconstruction of the accident relies upon his extensive calculations "following the basis fundamental principles of physics." (Hr'g Trans. at 82.) Defendants do not challenge these formulae, which have been published, discussed, and accepted in the context of motor vehicle accident reconstruction for decades. (*See Hr'g Trans.* at

82.) Instead, they challenge the validity of Dix's underlying data, because he did not utilize crash test data involving the same vehicle and its impact with a wooden pole similar to that involved in the accident at issue here. Dix testified that data of this precisely comparable nature would be "the best way to analyze" the impact of Eilman's car into the power pole, but that he was not aware of such data existing. (Hr'g Trans. at 68-69.) He also explained, however, that he found the crash test data upon which he did rely to be applicable here because the vehicles were similar, the type of crash was similar, and the rotation of the car caused by the impact was similar. (See Hr'g Trans. at 45-46.) Moreover, he applied formulae that had been developed for use in the pole crash context to reach his determinations of the speed at which the vehicle had been travelling before the impact. (See Hr'g Trans. at 32.)

The Court concludes that Dix's methodology, which relied in primary part upon calculations rooted in the fundamental laws of physics, is not rendered inadmissibly unreliable by virtue of his using only comparable, instead of precisely identical, crash test data. Considering the totality of the facts presented at hearing, and in light of Dix's careful attempts to account for variance between the data available to him and the facts of this case, the Court finds that the data differentiation is a fact that goes to the weight of Dix's testimony, and not to its admissibility.

Paine also challenges the conclusion that Dix reached as to the speed of the vehicle prior to impact with the telephone pole on the grounds that he did not verify this conclusion by referring to Eilman's injuries or lack thereof. However, Dix testified that he has not previously used the post-accident medical records of a vehicle occupant in order to verify his accident reconstruction speed estimates. (Hr'g Trans. at 57-58.) Moreover, he is not aware of any expert in the field of accident reconstruction who uses post-accident injury records in this way. (Hr'g Trans. at 58.) The method

that Paine proposes as more reliable and more admissible than Dix's, therefore, itself fails to meet *Daubert's* criterion that an expert's methodology be widely accepted in the relevant scientific community. As a challenge or critique of Dix's conclusions as to the vehicle's speed, his failure to refer to Eilman's medical records is again a factor that goes to the weight of his conclusion, and not to its admissibility. Dix's testimony will therefore not be limited on the basis of his failure to confirm his calculations against the records showing that Eilman's injuries were not as severe as a layperson might expect them to be in light of the speed at which Dix calculates the vehicle to have been travelling. (*See Hr'g Trans.* at 93-94.)

C. Relevance

Although based upon relevant data and reached through a reliable methodology, Paine challenges the admissibility of Dix's opinions on the grounds that they are irrelevant because the events, and effects, of Eilman's February 2005 car accident have no relation to her conduct, or to the conduct of the Defendants in this case, in Chicago more than a year later. Defendants respond that Dix's opinions are critical to an alternative theory of causation, namely, that Eilman's behavior during her time in police custody was not caused by a mental illness. Dix's report lays the foundation for this alternative theory because, as he testified during his deposition, Eilman's head would have made contact with the vehicle's airbag during the accident. (*See Dix Dep.* at 71.) On the basis of that observation, Defendants seek to utilize the testimony of a separate expert witness, Dr. Alexander Obolsky, to establish that Eilman did not actually have bipolar syndrome, as Paine alleges, but rather suffered an organic brain injury during the car accident.

The critical issue here is whether Defendants' theory of alternative causation is relevant, that is, whether it will "make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Fed. R. Evid. 401.

The key issues in this litigation are whether the CPD violated Eilman's constitutional rights, or her statutory rights under the ADA, in their conduct towards her during her time in CPD custody.

1. Relevance to Paine's Claim of Constitutional Liability

The jury's analysis on the issue of constitutional liability would not be affected by the presentation of evidence concerning potential alternative causes for Eilman's medical needs. As the Court has previously explained, Paine's Fourteenth Amendment due process claims are to be evaluated by a test of the objective reasonableness of an officer's conduct in the medical needs context, considering whether the officer had knowledge of the medical need, the seriousness of the need, the scope of the requested treatment, and other relevant police factors. See *Williams v. Rodriguez*, 509 F.3d 392, 403 (7th Cir. 2007); *Sides v. City of Champaign*, 496 F.3d 820, 828 (7th Cir. 2007). The objective reasonableness test does not take into account extrinsic explanations for a detainee's behavior that may minimize her medical need when later revealed. That is, whether Defendants' handling of Eilman's medical needs was objectively reasonable can be measured only by what they knew at the time, and not by theories of alternative causation that were unknown and only developed much later during this litigation. Cf. *Graham v. Connor*, 490 U.S. 386, 396 (1989) (explaining that the objective reasonableness of an officer's use of force "must be judged from the perspective of a reasonable officer on the scene, rather than with the 20/20 vision of hindsight").

Officers who came into contact with Eilman during her time in custody neither knew, nor had reason to know, that she had hit her head during a car accident more than a year previously. In contrast, there is ample evidence in the record to support both that Eilman exhibited behaviors that reasonable officers would have known to be symptoms of mental illness, and that at least some of the Defendant officers may have had actual knowledge of Eilman's mental health issues from her family's calls to the detention facility. Because the reasonableness of the Defendants' conduct could not have taken into account an alternative theory of causation for her behavior that was unknown

and unknowable, presentation of this alternative theory will not aid the jury in determining any fact of consequence to the ultimate issue of whether Defendants violated Eilman's constitutional rights.

2. Relevance to Paine's Claim of Liability under the ADA

As to Paine's ADA claims, the jury must decide whether the CPD treated Eilman in "a safe and appropriate manner consistent with [her] disability." *Gorman v. Bartch*, 152 F.3d 907, 913 (8th Cir. 1998). The Court does not decide here any substantive issues related to Paine's ADA claim, which are reserved for the Court's Order on Defendants' Motion for Summary Judgment as to the ADA claim. The only issue addressed here is whether the alternative theory of causation for which Dix's testimony lays a foundation is relevant to the Defendants' liability under the ADA.

Under the ADA, an individual with a disability is defined as having either 1) "a physical or mental impairment that substantially limits one or more major life activities of such individual" or 2) "a record of such an impairment" or 3) is "regarded as having such an impairment." 42 U.S.C. § 12102(1). Paine alleges that Eilman had a record of bipolar disorder (under the second prong of the definition) and her bipolar disorder and its effects substantially limited one or more of her major life activities (under the first prong of the definition). (*See* R. 432, Third Am. Comp., ¶¶ 476-79.) Defendants do not contest that Eilman was actually diagnosed with bipolar disorder following the car accident, and that she thus had a record of such an impairment. Therefore, in order for Dr. Dix's and Dr. Obolsky's opinions as to the potential brain damage incurred in the 2005 accident to be relevant to the ADA claim, they must in some way affect the jury's decision as to whether Eilman, during her time in Chicago, had an impairment that substantially limited her major life activities.

Defendants argue that the first definition of disability requires a plaintiff to show both that she suffers from a physical or mental impairment, and that her impairment substantially limits one or more major life activities. (*See* R. 652 at 2.) If this is so, then if Defendants persuade the jury

that Eilman's behavior was not caused by her bipolar disorder but by a traumatic brain injury, she will not have shown that she had a specific impairment that substantially limited her life activities.


In support of this position, however, Defendants cite only cases in which the existence of a specific impairment was undisputed, and the only question remaining was whether the plaintiff had shown a substantial limitation. *See, e.g., Cassimy v. Bd. of Educ. of Rockford Pub. Schs.*, 461 F.3d 932, 936 (7th Cir. 2006) (depression can constitute a disability under the ADA "depending on its severity"); *Krocka v. City of Chicago*, 203 F.3d 507, 512 (7th Cir. 2000) (severe depression diagnosed by a medical professional is an "impairment" within the ADA's meaning). Indeed, ADA defendants rarely present evidence that an ADA plaintiff does not have the impairment that she had been medically diagnosed as having.¹ Instead, litigants and courts focus on the "critical question" in determining whether someone is disabled under the ADA: "the effect of the impairment on the life of the individual." *Cassimy*, 461 F.3d at 936. As explained by the ADA's implementing regulations: "The determination of whether an individual has a disability is not necessarily based on the name or diagnosis of the impairment the person has, but rather on the effect of that impairment on the life of the individual." App'x to Part 1630–Interpretive Guidance on Title I of the Americans with Disabilities Act, 29 C.F.R. 1630.2(j).

When properly focused on the effects of Eilman's mental impairment, the analysis of whether Defendants can be liable for failure to accommodate her is not altered by alternative theories as to the cause of that impairment. *See* 29 C.F.R. 1630.2 (a mental impairment is "any

¹ In one exception to this rule, ADA defendants alleged that the plaintiff's reproductive impairment was not caused by a physiological disorder within the ADA's meaning, but by age and stress. *See Zatarain v. WDSU-Television, Inc.*, 881 F.Supp. 240, 243 (E.D. La. 1995). The plaintiff's doctors were unable to make a specific diagnosis of the cause of her reproductive impairment, but thought it "unlikely that the causes are stress or age." *See id.* The court accordingly declined to find that the plaintiff did not have a qualifying impairment as a matter of law, but proceeded to find that reproduction alone did not qualify as a major life activity and that the plaintiff had not shown a substantial limitation on her ability to work. *See id.* at 243-44.

mental or psychological disorder.”) Even if the jury were to find that Eilman’s behavior in Chicago was caused by, or related to, brain injuries sustained in the February 2005 accident, rather than by her diagnosed mental illness, that determination would not affect whether Eilman had a mental impairment that limited one or more of her major life activities, and thus would not affect whether she was disabled within the meaning of the ADA. Therefore, this proposed alternative theory of causation is not relevant to any fact of consequence with respect to the jury’s determination of Defendants’ liability under the Americans with Disabilities Act.

Because Dix’s reconstruction of the automobile accident in February 2005 does not provide a foundation for any relevant theory of alternative causation, and he offers no additional opinions or testimony that would be helpful to the jury in determining a fact at issue, Paine’s Motion to Bar [the] Opinion Testimony and Report of David Dix is granted.



Virginia M. Kendall
United States District Court Judge
Northern District of Illinois

Date: February 25, 2010