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THE VALUE OF LIFE AND LOSS OF ENJOYMENT OF LIFE DAMAGES FROM AN ECONOMIST'S PERSPECTIVE*

M. BRIAN MCDONALD**

I. PRESENTATION

I notice that our last speaker had a Master's in Economics.¹ As an economist in a pit of lawyers, I have to be courageous here. What I'd like to do this morning is talk about loss of enjoyment of life. That's how plaintiffs in New Mexico explain it. Defense attorneys explain it as hedonic damages. I think they like the connotation of hedonism.

As Professor Occhialino noted,² New Mexico is ahead of the pack in many ways when it comes to loss of enjoyment of life damages. First of all, New Mexico allows loss of enjoyment of life as a category of damages, noneconomic damages, and then, secondly, New Mexico allows an economic expert, such as myself, to testify at trial, to provide some assistance to the jury in their deliberation on putting a number for a specific plaintiff on loss of enjoyment of life damages.

I'd like to start just by reviewing briefly the legal case history in New Mexico as a background. Prior to 1994, in the terminology of Ted Occhialino,³ loss of enjoyment of life damages were in the category of harm. This was true not only here in New Mexico, but around the country. There was a lot of debate going on about whether loss of enjoyment of life should be recognized as a specific category of noneconomic damages. And in New Mexico, the first case that moved it into the category of injury was the *Romero v. Byers*⁴ case, which is a wrongful death case. It recognized in New Mexico, for the first time, loss of enjoyment of life as a separate category of noneconomic damages.⁵ A year later, in a personal injury case called *Sena v. New Mexico State Police*,⁶ that precedent was applied to personal injury cases. Also in that case, it established that a properly qualified economist could testify before the jury on the loss of enjoyment of life damages for the plaintiff.⁷

Now, the *Sena* case left that latter issue somewhat clouded, because it left it up to the judge's discretion, basically, whether or not to allow an expert economist to testify on loss of enjoyment of life damages.⁸ And my experience in that time period was that maybe half the judges in New Mexico would allow an economist to testify,

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1. James F. Blumstein, *Making the System Work Better: Improving the Process for Determination of Noneconomic Loss*, 35 N.M. L. REV. 401 (2005).

2. M.E. Occhialino, *Examining the Spectrum of Noneconomic Harm: An Introduction*, 35 N.M. L. REV. 391 (2005).

3. *Id.*

4. 117 N.M. 422, 872 P.2d 840 (1994).

5. *Id.* at 424-27, 872 P.2d at 842-45.

6. 119 N.M. 471, 892 P.2d 604 (Ct. App. 1995).

7. *Id.* at 478, 892 P.2d at 611.

8. *See id.*

and half would not; they would basically let the jury decide the issue without expert testimony.

And it stayed that way until 2002, when in a case called *Couch v. Astec Industries, Inc.*,⁹ which was a personal injury/product liability case, the court allowed an economist, who happened to be myself, to testify on loss of enjoyment of life damages to provide some assistance to the jury in making that determination. Now, that testimony is not a specific dollar amount for this specific identifiable plaintiff. It's more along the lines of what the economic research on the value of a statistical life is, how economists do those studies, what economic information is there in certain transactions that talk to us about a trade-off between money and life, and what are the results of those studies primarily as a guideline, or benchmark, to the jury.

But in the end, it's up to the jury to decide the specific damages for a specific plaintiff. And so in the *Couch* case, what it did is it further defined what an economic expert could testify about, and there were really two areas.¹⁰ One is to explain to the jury from an economic point of view what it is you're compensating for when you award loss of enjoyment of life damages.¹¹ The second thing was to talk about the economic research that economists have done for years on the value of a statistical life, although the *Couch* case did not allow an economist to testify to an opinion of a specific dollar amount for a specific plaintiff. That was still the province of the jury,¹² although interestingly in the *Couch* case, the court allowed an economist to mention numbers.¹³ For example, the average value of a statistical life, based upon the economic research today, is in the range of five to six million dollars, so an economist could mention some numbers. Now, I mention that because I want to divert just a little bit to the federal courts in New Mexico. The previous discussion concerned New Mexico state courts.

In federal cases in New Mexico, it's a little different, and the main difference came out of a decision called *Smith v. Ingersoll-Rand Co.*¹⁴ The federal courts in New Mexico do allow recognition of loss of enjoyment of life damages, but there's more restriction on what an economist, an economic expert, can testify before a jury. Principally, the expert is restricted to just providing a definition of loss of enjoyment of life damages for the injury—what it is the jury is awarding; but, the economist is not allowed to mention any numbers, whether it's the results of these value-of-life studies that economists do or some other—any other—thing that would involve mentioning a dollar amount.¹⁵

So the federal courts in New Mexico have that one additional limitation on expert testimony. Now, let me turn to the definition of loss of enjoyment of life damages, at least from an economic perspective: that is, monetary compensation for the impact of the injury or death on the plaintiff's activities of daily living, the impact on their

9. 2002-NMCA-084, 52 P.3d 398.

10. *See id.*

11. *Id.* ¶¶ 17–18, 52 P.3d at 403.

12. *Id.* ¶¶ 19–20, 52 P.3d at 403.

13. *Id.* ¶ 18, 52 P.3d at 403.

14. No. CIV 94-1083, 1997 U.S. Dist. LEXIS 234433 (D. N.M. Nov. 14, 1997).

15. *Id.* at *6.

leisure, ability to pursue their leisure, their hobbies, their recreational activities, their ability to choose an occupation—realizing that people get more value from their work than what they get paid. It recognizes there's more value to a person's life simply than what they earn or what the value of their household services is. Those are the typical compensatory damages.

For example, we look at leisure. How do we value leisure? We know that there are some ways that people exhibit information about how they value their leisure. Workers who get paid overtime, for example, they're looking at a trade-off between work and leisure; and, to work overtime, we pay workers time and a half. You have to pay people more to give up their leisure, recreational activities.

Those who have enough economic resources can sort of signal how they value their recreation. I'll give you an example. I'm a fly fisherman. You can pay a lot of money to go to Alaska or Patagonia and stay at a lodge and hire a guide to fly fish, and that's one expression of how you value fishing as a recreation. If you don't have the income to do those sorts of things, you can go fish public water on your own. Who's to say someone fishing on their own without a guide doesn't get more value from the fishing than someone who's able to go to Patagonia and pay for guides and lodges? It realizes that there are values to these things.

If someone's injured or harmed, it impacts the ability to pursue those things. I noticed our last speaker addressed this also.¹⁶ I frequently get asked, "How are loss of enjoyment of life damages different from pain and suffering? Aren't they the same thing?" And I think my answer—I answer a little differently but come to the same conclusion—that in my view, they are different. Loss of enjoyment of life damages is compensation for something that the plaintiff has lost, that they had before they were injured, and that the injury took away from them. They lost their ability to pursue leisure, to pursue recreation. Pain and suffering is damages for something that a plaintiff has to newly endure because of the injury. They have pain or suffering, whether it's physical or mental pain, but it is something they newly have to endure. So in my mind, pain and suffering and loss of enjoyment of life are separate and distinct categories of damages.

Let me turn now to the economic research on the value of a statistical life and go into more detail about how economists do this research and the results of it. And I point out, first of all, that we're talking about what we call a statistical life. It's not the life of any specific individual. The perspective of these value of life studies is how we, as a society, value life. What economists have done really, for over forty years, is they've conducted studies where they're looking at certain actual market transactions where there's economic information about a trade-off between money and life. For example, economists will study labor markets to try to explain wage differentials. The research hypothesis is that in order to get workers to work in a more risky occupation, "more risky" meaning there's a greater probability of fatality, you have to pay them a higher wage.

Now, economists can use their statistical or econometric techniques to measure, to either prove or disprove that research hypothesis. They'll gather up data on thousands of workers in different occupations with different education, different

16. See Blumstein, *supra* note 1.

years of experience, and then, statistically, they try to analyze whether the differences in, say, the probability of a fatality on the job, can explain some wage differences, everything else being equal. In this analysis, it's a multivariate analysis, they try to control for other things that explain wage differences: years of experience, education, gender, region of the country, union, non-union. They also include in the analysis the occupation of the worker, or the industry of the worker, and the probability of fatality on the job. The statistical analysis, in most cases, suggests that you do have to pay workers a wage premium to accept a greater degree of fatality on the job. In a sense, workers are being paid money to have a probability that their life expectancy will be shortened.

The other type of study that economists look at I'll call consumer willingness to pay. Economists will study certain products that consumers buy where the primary reason you buy the product is to reduce the probability that you will die. I'll use the example of a smoke detector. People buy a smoke detector primarily to reduce their probability of dying in a house fire. You can go out and study that statistically you've got 100,000 houses with smoke detectors and 100,000 without smoke detectors. You can measure the probability of dying if you have a smoke detector. Economists look at what people typically pay for a smoke detector, and those studies then say that's what people reveal from buying those products—how they value lengthening their life expectancy. If they have a smoke detector, they'll reduce their probability of dying in a house fire.

Now, how do you get from these studies to a value of a statistical life? And I think in the simplest explanation—let me go back to workers. Let's say you do a study, and you find that you have to pay each worker \$500 to accept a one in 10,000 chance that they'll die on the job that year. Now, that one in 10,000 chance comes from actual data, actual experience in the industry or in that occupation, that out of 10,000 workers each year, one worker will die. We don't know which worker. And you have to pay those 10,000 workers \$500 each, which is five million dollars, if I did the math right. That group of 10,000 workers is being paid five million dollars to accept the outcome that one of them will die. We don't know which one. That's why these studies are frequently called statistical anonymous life studies. That is basically how you get from the results of these studies to a value for a statistical life.

Again, it's the perspective of what we, as a society, are willing to pay for a life. In this case, that a life will be lost, or in the case of consumer studies, that we'll save a life. If 100,000 households buy a fifty dollar smoke detector and save one life a year, that's five million dollars. So we, as a society, have revealed through those transactions that we put a five million dollar value on the life. Now, I meant to mention early on that these economic studies on the value of life were never conducted to be used at trial, in any way, for measuring the loss of enjoyment of life. The primary motivation for the economic research was for cost-benefit analysis for either federal or state regulations. For many regulations—air quality regulations, water quality regulations—it is fairly easy to estimate what it will cost industry or a water company to clean up water or to clean up the air—what it will cost them in hard dollars. But the benefits of these regulations are typically lives saved. If we have less arsenic in the water, we have fewer deaths. If we have cleaner air, we have fewer deaths.

The Reagan Administration, back in the early 1980s, made it a requirement that any major regulation have a cost-benefit analysis done. To do the cost-benefit analysis where the benefit is lives saved, you have to place a dollar amount for the lives saved. So, for most of these federal regulations, where a cost-benefit analysis is done, the federal government relies heavily on the economic studies of the value of a statistical life. Just to give you an example, the U.S. Department of Transportation—and this was back in 2001—when it does some sort of traffic improvement, highway improvement studies, they look at how to allocate scarce resources. They try to identify those improvements that will reduce traffic accidents and save lives, and they assigned three million dollars to the value of a life that is saved through, say, highway improvements. The federal EPA, in 2001, in their arsenic standard for drinking water, assigned \$6.1 million to the value of a life saved. I mention this because these are examples where value of life studies have been used in another policy context.

I know, from my experience, that these value of life studies have been subject to the *Daubert*¹⁷ standard in terms of their acceptability, published in peer review, which I'm not going to get into. I'd certainly be happy to talk about it if you want. I think the fact that the federal government and state government—the State Highway Department—uses the value-of-life studies, uses them in their public policy decisions—I think it's important in terms of showing the acceptability of these studies.

Now, the final topic I'd like to address is the value of life—going from the value of life research to loss of enjoyment of life damages. As I mentioned earlier, the value of life studies that economists do were not done to put a value on loss of enjoyment of life; and so, the issue is how are these value of life studies of assistance to the jury. And, if you look at, very generally, the role of any expert in a judicial proceeding, you look at the language in some of the case law, it says: By virtue of education, training, and experience, provides specialized knowledge to assist the jury in the determination of a fact. Now, in this case, the fact is loss of enjoyment of life damages, and in the case of loss of enjoyment of life damages, the jury is being asked to put a dollar value on an intangible, what we call life or enjoyment of life. I don't think anybody would argue that laypersons who make up a jury do not possess any specialized knowledge on how to place a dollar value on an intangible we call life. Now, the economic research that economists do, I think, does provide some specialized knowledge on how we, as a society, value life. Life is more than just what you earn or what the value of your household services is. So, from that perspective, I think it does provide assistance to the jury; although ultimately, and this is true for any expert, a jury can ignore or reject any expert testimony. My position has always been, in the end it's the jury that ultimately decides the loss of enjoyment of life damages. As an economist, as an expert, I'm simply providing some specialized knowledge of how economists value this intangible that we call life, how they do that, and the results of those studies as a context or perspective for the jury. In New Mexico, this whole issue of “is the

17. *Daubert v. Merrel Dow Pharm. Inc.*, 509 U.S. 579 (1993). The “*Daubert* standard” refers to those standards set forth for the admissibility of expert testimony under *Daubert*. See *id.*

economic research on the value of life proper assistance to a jury” has really been answered. The answer is “yes.” And so at this point, if you disagree with that notion you would have to take it up with the courts. But New Mexico courts have clearly said that the value-of-life type research is of some assistance to the jury in this area of damages.

Now, the final thing I’d like to talk about is an economic rationale for loss of enjoyment of life damages. And here, I looked to a study by an economist named Kip Viscusi, who is the leading economic scholar in the area of value-of-life studies. He’s an economist now at the Harvard Law School. He wrote an article back in 1990—has an interesting title—which I think piques the interest of many defense attorneys: *The Value of Life: Has Voodoo Economics Come to the Courts?*¹⁸ It’s published in the *Journal of Forensic Economics*. Don’t let the title fool you. In it, he provides an economic basis or rationale for awarding loss of enjoyment of life damages. Now, he does restrict it to product liability cases, and Viscusi’s argument is that injury awards should provide what he calls “deterrence values.”¹⁹ There should be deterrent values in jury awards. Earlier, Professor Occhialino talked about deterrents and punishment.²⁰ Viscusi sees loss of enjoyment of life damages as falling in the deterrent area. In the product liability case, Viscusi argues that the appropriate loss of enjoyment of life damages sends an economic signal to, say, manufacturers, to do product improvement. If we establish the proper amount of loss of enjoyment of life damages, or the value of life, that will send the right economic signal to a manufacturer to optimally invest in product safety. Manufacturers can invest millions and millions of dollars to make cars safer and safer. There’s a question in a cost/benefit sense: How much product improvement is optimal? Viscusi argues that loss of enjoyment of life damages will provide that economic signal to manufacturers to make optimal product safety improvements.²¹

And then, Viscusi argues, value-of-life studies, based upon the economic research, are an appropriate way to provide some guidelines for what the level of loss of enjoyment of life damages should be.²² I’ll just quote one thing out of his article: “Juries currently have no guidelines for setting the damages needed to establish...safety incentives [that’s the deterrent value], and the value-of-life methodology establishes this basis.”²³

Now, Viscusi was mainly talking about product liability cases. We had a recent case here in New Mexico, a wrongful death case, which I think I can certainly see extending Viscusi’s argument from product liability to this wrongful death case—a very infamous case of a BIA employee who had multiple DWIs, driving a BIA truck, drove the wrong way in New Mexico, ran into two couples from Nebraska, killed all four of them.²⁴

18. W. Kip Viscusi, *The Value of Life: Has Voodoo Economics Come to the Courts?*, J. FORENSIC ECON., Fall 1990, at 1.

19. *Id.* at 3.

20. Occhialino, *supra* note 2.

21. Viscusi, *supra* note 18, at 3.

22. *Id.* at 8–12.

23. *Id.* at 15.

24. *Beller v. United States*, 221 F.R.D. 674, 675 (2003).

Again, I have to say that what I know about it is what I've read in the media, but apparently this BIA employee had a long history of DWI, had license revocations. The BIA knew he had this problem. They still provided him a BIA truck. And it seems to me in that type of case you need to send the same kind of economic signal, in this case to the federal government, that Viscusi is arguing needs to be sent to manufacturers to make product safety improvements. But we need these economic signals to defendants in this case to restrict employees, who have DWI records, access to company vehicles.

I see my time is almost up, and I wanted to save a few minutes at the end for questions.

II. SUMMARIZED QUESTIONS AND ANSWERS

DR. FELDMAN:²⁵ You used an interesting phrase. You said, well, those studies give us a lot of information how we, as a society, value a life. And I thought, yes, that's exactly what they do, but of course they've been penetratingly criticized because of all of the societal biases that the methodology reflects. If you used these studies, I think I could easily take them apart in front of a jury by showing the methodological flaws that are rather intuitive. Does that happen?

MCDONALD: The earlier studies of what I will call wage-risk study had relatively small sample sizes, and the quality of, say, the fatality data wasn't as good. More recent studies have gotten better, and they're using much larger samples. I mean thousands and thousands of workers. There is now better data on occupational fatality and industry fatality. I know some of the earlier criticisms of the value of life studies were that you could find a study that said a value of life was a million dollars and find one that said it was fifteen million. You had these broad ranges of outcomes. Part of the reason you had the variation was because some of the sample sizes were more focused, say, on people who were risk averse or risk takers. If you sample a bunch of firemen who are basically risk takers, under the methodology of the wage-risk studies, they're going to put a low value on life under the methodology. Their compensation for risk is the risk itself. You don't have to pay them money to take the risk; they get compensation from the risk itself. If you analyze a sample of people who are risk averse, again, under the methodology, you have to pay them a lot of money to take a risk. They're going to have a large dollar value on life. I think more recent studies have larger sample sizes, better data, better specification of the statistics, and so on. But I don't know if that answered the question.

DR. RUSTAD:²⁶ This term "hedonic damages" kind of reminds me of the value of going to a clothing-optional resort. Is that the issue, the fact that "hedonic" itself connotes this kind of concept that juries are uncomfortable with? Maybe it's an unfortunate term. Hedonic damages are not recognized in many jurisdictions. Loss of enjoyment of life, as you phrased it, may be a better way of looking at it. That may be more inclusive and another way of tying in the thoughts and social relations.

25. Heidi Li Feldman, *Loss*, 35 N.M. L. REV. 375 (2005).

26. Michael L. Rustad, *Heart of Stone: What Is Revealed About the Attitude of Compassionate Conservatives Towards Nursing Home Practices, Tort Reform, and Noneconomic Damages*, 35 N.M. L. REV. 337 (2005).

Also, I thought there was a big disconnect in the concept of loss of pleasure of life. What does the database of even the best data have to do with pleasure of life?

MCDONALD: On the issue of hedonics, economists use that term “hedonic” in other research, but mainly to refer to quality difference. Economists do hedonic price indexes of automobiles. When you say, “What’s the price?”, you have to adjust for quality differences: how much horsepower, does it have cruise control, air conditioning? Economists have used the word hedonic for quality adjustments of certain data. As I said early on, most defense attorneys like to refer to it as hedonic damages because of the implication of hedonism, and, to me, it’s just a semantic thing.

And then on your second question, I mean, what is life? Well, to an economist, you work, you get income, and then you take that income and spend it, and you pursue your leisure and your recreation, and that adds up to life. So these value-of-life studies are an attempt to look at, using some economic information, where there’s a trade-off between money and life.

Clearly, it’s not a trade-off between money and a whole life—it’s at the margin. But, it’s really an issue of whether you think that the economic research on the value of a statistical life is helpful to a juror. It goes back to the point Professor Occhialino made.²⁷ It’s now gone from harm to injury. How do you even measure it? It’s difficult to measure loss of enjoyment of life damages for a specific individual, and I’m not willing to do it—the jury does that. But in terms of giving the jury some context to make that decision, I think these value-of-life studies are useful to the jury.

PROFESSOR LIND:²⁸ I think you said a lot of interesting things. One of the things that strikes me the most is your methodology; one can take something that looks like a nonquantifiable, intangible loss and translate it in complex ways into market terms, thereby making these damages more concrete.

I agree that there are many, many methodological objections you can make to them. One of the reasons I think they’ve been so unsuccessful in terms of actually being used in court cases is because they would suggest that tort law, in general, is undercompensatory across the board. I wish I had brought the book with me, which is Doug Laycock’s book on remedies.²⁹ He cited a study in his discussion about nonpecuniary loss of the average and median tort recoveries across the country. And I think in about the year 2000, maybe it was 2002, for all tort cases in general, the average tort recovery was \$32,000. When you go to medians, which, of course, picks up the effect of very large recoveries at the top end of the scale, it was about \$300,000.

Even when you go into the category of medical malpractice, the higher range figure was about \$450,000. This would indicate to me that even in hard pecuniary terms, the notion that somehow we’re paying too much money to tort plaintiffs across the board, from an empirical perspective, is not borne out by whatever expert

27. Occhialino, *supra* note 2, at 391–92 (discussing the difference between harm, injury, and damages).

28. JoEllen Lind, *Valuing Relationships: The Role of Damages for Loss of Society*, 35 N.M. L. REV. 301 (2005).

29. DOUGLAS LAYCOCK, *MODERN AMERICAN REMEDIES* (3d ed. 2002).

economic testimony you might be able to bring into an actual deliberation. Do you have any opinion about that?

MCDONALD: Well, I don't know what I have to respond to that. One thing you did bring up, let me comment on. In other jurisdictions, loss of enjoyment of life damages are not recognized. Early on, back in—I think it was back in the federal courts in Illinois—the Midwest, there was an economist named Stan Smith. He first started testifying on this. Stan Smith, in my view, made a major strategical error. He was willing, at trial, to give a specific number for a specific plaintiff. That really upset a lot of judges. And I read some of those decisions, and he really upset a federal judge. Reading the judge's decision, I know you can't sue federal judges, but I'd sue them for libel.

PROFESSOR OCCHIALINO:³⁰ Before you get in trouble—there might be a federal judge in here—let's take a five-minute break.

30. Occhialino, *supra* note 2.