

Different Methods Used to Derive Hedonic Damages in Litigation

Thomas R. Ireland, PhD

Over the past dozen years, I have become the “go to” person to oppose hedonic damage testimony that is proffered by economic experts. My position has consistently been that no form of hedonic damage testimony has any validity as a dollar measure of anyone’s loss of enjoyment of life or anyone’s loss of society resulting from an injury or death. Before me, Thomas Havrilesky of Duke University was that “go to” person to argue that hedonic damages testimony lacked validity. NAFE’s first symposium issue regarding hedonic damages in December 1989 was organized by Thomas Havrilesky, who died in 1996. NAFE’s second symposium issue on hedonic damages in the year 2000 was dedicated to Tom Havrilesky. Thomas Havrileski was, as I become, the primary person whose name attorneys shared among each other when confronted by hedonic damages testimony. My first exposure to hedonic damages testimony was on December 12, 1988 when “The Price of Pleasure: New Legal Theorists Attach a Dollar Value to the Joys of Living” by Paul Barrett appeared on the front page of the *Wall Street Journal*. My consulting involvement with the hedonic damages issue became a significant part of my consulting practice after about 1996 and has continued through the present.

Surprisingly little has been published about the specific methods that were and are being used to provide hedonic damages testimony. The intent of this paper is to record methods used by economic experts currently offering testimony relevant to placing dollar values on either “loss of enjoyment of life” or “loss of love and affection/loss of society/loss of relationship.” The paper will necessarily be limited to methods I have seen in the reports of experts proffering hedonic damages testimony and in the limited discussion that appears in legal decisions regarding hedonic damages. The paper will reference the limited discussion that has been published, but will rely primarily on reports that are not generally available in published form. This approach poses several disadvantages. First, I have not seen reports from what I assume are many economic experts who have prepared such reports. Indeed, I cannot discuss one of the most interesting methods that I have seen because reports were sealed by the judge in that case.

Second, the significance I have attached to methods of specific practitioners depends on my own personal experiences rather than some broader determination of the practices of individuals proffering hedonic damages testimony nationally.

The term “hedonic damages” is used in several ways in litigation. As used in this paper, it will refer to either loss of enjoyment of life or loss of love and affection, also called loss of society or loss of relationship. In some legal decisions, the term “hedonic damages” also includes “pain and suffering” or “grief and bereavement” and any other psychologically based harms that an individual might experience as the result of a personal injury or wrongful death. In still other treatments, the term “hedonic damages” has been limited to methods of valuation of loss of enjoyment of life and loss of love and affection/loss of society that begin with the Value of Life literature in economics. Concepts such as the “whole time ap-

proach” that specifically value lost time of injury victims and decedents but without specifically measuring lost enjoyment of life would be excluded under that definition. Whole time methods would be included in this paper to the extent that such methods were represented in reports or testimony as measuring loss of enjoyment of life, loss of relationship, or loss of life damages.¹

A number of papers have been published indicating reasons why hedonic damage testimony in any of its forms has no validity and misuses economic science. Those arguments will not be repeated in this paper. For an introduction to arguments for and against hedonic damages testimony, see Ireland and Ward (1996) and Ireland, Horner and Rodgers (1998)² and Martin (2008).³ This paper will also not focus on errors made in calculations by proffers of hedonic damages testimony. There are problems, for example, with the mathematics of how the hedonic damages of Jack Doe were calculated by Stan Smith in Brookshire and Smith (1990) and with the method used by Robert Johnson to derive one of the numerical values in his range from the Miller (1990) study. These kinds of issues are considered in defense reports, but are not relevant to the purposes of this paper. Purely mechanical mistakes can be repaired and mistakes of that sort do not invalidate the basic methods within which the mistakes were made. The purpose of this paper is to explain the basic methods themselves, not to point out mechanical mistakes with the methods that could be repaired.

The first use of the term “hedonic damages” was apparently made by Stan V. Smith in the case of *Sherrod v. Berry* in 1985. Immediately prior to the decision, the terms “lost enjoyment of life” and “loss of love and affection/society/relationship” were used to refer to the losses involved. See, for example, *Bell v. City of Milwaukee* (1984), the decision many writers regard as leading up to the *Sherrod* decision. What distinguished *Sherrod* from *Bell* was the fact that the plaintiff presented Stan Smith as an economic expert to place dollar values on both Ronald Sherrod’s lost enjoyment of life and Lucien Sherrod’s loss of relationship with Ronald Sherrod. In his testimony, Stan Smith described those losses as “hedonic damages.” After the Barrett story on the front page of the *Wall Street Journal* in 1988, the term “hedonic damages” caught on as a new term of art in the legal community, usually for “loss of enjoyment of life” or “loss of relationship,” but sometimes for all intangible damages and thus also including “pain and suffering” and “grief and bereavement.” In personal injury matters, individual venues have also used terms like “loss of the ability to perform life’s usual functions” as appropriate synonyms for “hedonic damages.” See, for example, the *Fantozzi v. Sandusky Cement* (1992) decision of the Ohio Supreme Court.

No clear indication of the number of forensic economists who were willing to provide hedonic damages testimony existed before 1999, when members of the National Association of Forensic Economics were asked two questions regarding hedonic damages testimony in the NAFE Survey conducted in that year. Those questions were repeated in the 2003 Survey and the 2009 survey, with results that were summarized in Brookshire, Luthy, and Slesnick (2009). On both of those surveys, respondents were asked question #35:

A plaintiff’s attorney asks you to calculate lost enjoyment of life in an injury case. Would you be willing to calculate such damages?

In 1999, 23.59% answered “yes” and 76.41% answered “no.” In 2003, 17.82% answered “yes” and 82.18% answered “no.” In 2009, 16.2% answered “yes” and 83.8% answered “no.”

In 2009 Respondents were also asked question #37:

A defense attorney asks you to critique an economist's report that has calculated lost enjoyment of life (hedonic damages) allegedly suffered by an injured plaintiff. Would you be willing to critique such a report?

In 1999, 81.67% answered "yes" and 18.33% answered "no." In 2003, 71.84% answered "yes" and 28.16% answered no. In 2009, 82.2% answered "yes" and 17.8% answered "no."

The number of persons who answered yes to Question #35 in the 2003 survey and 2009 surveys appears to have remained constant at 31, which is 17.82% of 174 respondents in the 2003 survey and 16.2% of 191 respondents in the 2009 survey. In the course of my consulting practice, I have seen reports containing hedonic damages calculations from 19 or more individuals who held themselves out as economic experts. Many of those persons have not continued to do so and will not be considered in this paper. Of those I have seen, the largest number of reports by a significant margin have been prepared by Stan V. Smith. The second largest number have been prepared by Robert Johnson. The third largest number has been by Brian McDonald. The number of reports I have seen from any other economic expert has been much smaller. On that basis, the next four sections of this paper will be concerned with the methods of Stan Smith, Robert Johnson, Brian McDonald, and "Others."

In each section, I will begin with a history of methods that I have observed for determining values for use in death cases, followed by discussions of methods used in personal injury and loss of relationship cases. At the end of the paper, a summary table is provided to indicate the major methods in use.

Stan V. Smith

It was Stan Smith's use of the term "hedonic damages" in *Sherrod v. Berry* in 1985 that led to that term being added to the lexicon of legal terms in the United States. The methods used by Stan Smith have changed significantly over the years. In *Sherrod*, Stan Smith apparently testified to a "central tendency" of \$1.5 million in 1985 dollars as a number that could be used by the jury to place a value on Ronald Sherrod's enjoyment of life and on Lucien Sherrod's loss of relationship with Ronald Sherrod. As described by Barrett (1988), Smith presented testimony showing a range of numbers from the Value of Life literature, but expressed the opinion that \$1.5 million was a reasonable figure for the jury to use in that case.

As of February 29, 1988, Smith expressed the opinion in *Adams v. O'Leary* (1988) that Randy Adams lost enjoyment of life had a low value of \$10,000 per year and a high value of \$60,000 per year, but provided no explanation for how he determined that range. Smith reported total losses for Randy Adams of between \$450,000 and \$1,620,000.

In a book co-authored with Michael Brookshire (1990), Smith published a description of how the hedonic damages of Jack Doe might be calculated. In that account, Smith described determining that \$3.5 million was the "central tendency" of the Value of Life literature as of 1990. Smith assumed that the human capital of an average person was \$800,000, which he subtracted from \$3.5 million to determine that the present value of lost life enjoyment was \$2.7 million. He then divided 2.7 million by an average life expectancy of 45 years to find an annual value for life enjoyment of \$60,000. He projected the value of \$60,000 per year for Jack Doe's life expectancy of approximately 38.7 years, growing at a real growth rate of 1.29% and discounted to present value at a real interest rate of

3.13 percent. On this basis, Smith reported an hedonic loss for Jack Doe of \$1,709,842.

In depositions explaining his reports from 1992 until about 1996, Smith described his methods for deriving hedonic damages somewhat differently. He explained that he had found a “central tendency” for the value of life of \$3.1 as of the fall of 1987, but for the year 1988. He testified that he subtracted \$800,000 for human capital to find a net present value for loss of enjoyment of life as of 1988 of \$2.3 million. Using a real growth rates and real discount rates similar to the values in his 1990 book, Smith determined that the annual value of life in 1988 was \$60,000. He then added both real growth and cost of living adjustments to values after 1988 to arrive at appropriate annual rates for years until the end of the plaintiff’s life expectancy.

As of about 1996, Smith stopped projecting that the annual value of life was increasing at a real growth rate. Instead, he began increasing the value of life by increases on the Consumer Price Index only, but otherwise did not change his method of calculation for another two or three years. His annual values of life during this period were increased only for changes in the Consumer Price Index.

As of 1999, Smith changed from increasing the annual value life enjoyment by the Consumer Price Index from \$60,000 in 1988 to increasing the present value of the average person’s life enjoyment of \$2.3 million by the Consumer Price Index. From that point forward, he determined the annual value of life from the CPI-adjusted present value of \$2.3 million as of 1988. This had the effect of increasing his annual enjoyment of life by 42 percent between his deposition testimony in *Wright v. Von’s Industries* on May 24, 1999 to his report in *Tonsgard v. State of Alaska* in January 2000. Smith described this change in his deposition in the *Tonsgard* case on June 12, 2000.

Stan Smith’s current method for determining the lost enjoyment of life of a decedent as of 2009 can be described as follows:

Step One. In the fall of 1987, Smith claims to have reviewed the then existing value of life literature and concluded that a figure of \$3.1 million was the “central tendency” for the value of life literature when all past studies were converted to 1988 dollar values. (This step will not be described in his report.)

Step Two. Smith also determined that as of 1988, the human capital value of the average person then alive was \$800,000. (This step will not be described in his report.)

Step Three. Smith subtracted \$800,000 from \$3.1 million to arrive at a net figure for enjoyment of life for the average person alive in 1988 of \$2.3 million. (This figure will appear Smith’s report, but appears only as an example of how a value of life is determined.)

Step Four. Dr. Smith increased the \$2.3 million as of 1988 to \$4.2 million as of 2009. (The \$4.2 million figure will appear in Smith’s report.)

Step Five. Dr. Smith assumed that the average person alive in 2008 had a life expectancy of 45 years and that \$4.2 million was the present value of the life enjoyment of a person with 45 years of life expectancy as of 2009. (This step will not described in Smith’s report.)

Step Six. Using a real discount rate of 1.60 percent (the figure in the most recent report that I have seen), Dr. Smith determined what starting life enjoyment value a person with 45 years of life expectancy had to have in 2009 in order to have a present value for life enjoyment of \$4.2 million as of 2009. In other words, what annual value was needed to produce a present value of

\$4.2 million in 2009 for a person with a 45 year life expectancy. [I published a paper with Michael Brookshire (1994) showing how to determine that starting value, but one can find the answer fairly quickly “iterating” with a spreadsheet set up with 45 years and a 1.60% real discount rate. “Iterating” is a fancy word for using a “trial and error” approach. The easy way to do this is to set up the spreadsheet and adjust the starting number until the present value is \$4.2 million at the end of 45 years.]

When Dr. Smith performed these six steps, he found a whole value for life enjoyment of an average person of \$129,544 per year as of 2009.

Smith Personal Injury Adjustments

Smith described his original method for calculating personal injury damages in a paper co-authored by Edward A. Berlá and Michael Brookshire (1990). For purposes of that paper, it was assumed that the annual value of an average person’s whole life enjoyment as of 1990 was \$50,000. The authors do not explain how that value was determined, but provide a seven point “Lost Pleasure of Life (LPL) Scale” that is described as follows:

The Lost Pleasure of Life (LPL) Scale is similar to those used by mental health professionals to assess the degree of functioning and the severity of stress in individuals (Diagnostic and Statistical Manual of Mental Disorders, pp. 11, 18-19). Using this scale, the mental health professional assigns a value for 0 to 10, with reference to the four areas of functioning [defined in the scale].

According to the authors, the percentages can change for future years, but the mental health professional must assign a specific percentage to each future year. Those percentages are then multiplied by the projected annual value for life enjoyment in those years to determine future amounts that should be reduced to present values in determining losses.

In recent years, however, Smith has handled this by stating assumed lower and higher percentages that a jury might feel was appropriate. For example, Smith might provide one set of hedonic loss calculations based on the assumption that the injured plaintiff has lost 50% of her ability to enjoy life or 75% of her ability to enjoy life. Smith would then multiply 50% times \$129,544 in 2009 to determine his lower estimate and 75% times \$129,544 in 2009 to determine his upper estimate. These annual figures are then reduced to present value at Smith’s real interest rate in the same way as whole life values are reduced in death cases.

Smith Loss of Relationship Adjustments

Smith’s original method for calculating loss of society was the same as his method for calculating loss of enjoyment of life. He calculated Lucien Sherrod’s loss of relationship with Ronald Sherrod to have the same \$1.5 million value that Ronald Sherrod allegedly lost. In 1996, Smith (1996) described his loss of relationship calculations as similar to his loss of enjoyment of life for decedents at that time. By 2000, however, Smith had begun applying an assumed percentage loss to the annual ability to enjoy life of the average person. For example, if a father with a living spouse and two children was a decedent, Smith would now provide loss of relationship values for the spouse at about 40% and each child at about 20% of the \$129,544 annual value for the ability to enjoy life in 2009. In his current reports, Smith treats these losses as permanent without adaption such that even though the decedent father had a shorter life expectancy than his spouse or either child, their losses would continue at the assumed percentage rates for the remainder of their life expectancies, not his life expectancy. When

questioned, Smith has referred to this assumption as his “theory of prematurity.” According to this theory which is exclusive with Smith, it is not the death of the father that causes the loss, but the “prematurity” of the death. The “prematurity” of the death functions like a permanent injury such that the loss of life enjoyment of the survivor continues even after the father would normally have died at the end of his normal life expectancy.

Robert Johnson

Robert Johnson is the hedonic damages “expert” I confront second most frequently. His approach is similar to the original approach taken by Stan Smith in the case of *Sherrod v. Berry* in 1985, but Johnson offers two values instead of the single value of \$1.5 million that Smith offered in the *Sherrod* case. The justification for this method to the extent that such a justification is offered in the literature is provided in a 1990 book *Hedonic Damages: Proving Damages for Lost Enjoyment of Living* (Palfin and Daninger 1990). The book explains the nature of the Value of Life literature and how that literature can be used in testimony as evidence to be presented to a jury. Neither Palfin nor Daninger have offered hedonic damages testimony in recent years, but Robert Johnson continues to do so. Johnson’s method as early as 1990 was to present two values from the Value of Life literature, with adjustments for changes in the Consumer Price Index from the date of publication of the papers from which those values were taken to the year of Johnson’s report. No information is provided in his reports to explain why he considers the two values of life he has chosen to be better than other values of life he could have chosen from the Value of Life literature.

The only change Johnson has made in his methodology was to switch from a value taken from a paper by Moore and Viscusi (1988) to value taken from another paper by Viscusi (2004). That change was made at some point between May 5, 2004 and May 22, 2006. I have no reports from Robert Johnson between those dates, but all reports before May 5, 2004 relied upon Moore and Viscusi (1988) and all reports after May 22, 2006 have relied upon Viscusi (2004). In other respects, Johnson has followed a consistent methodology through all of his reports that I have seen. The change from the 1988 paper to the 2004 paper did not make a large change in the range being offered by Johnson in his reports. His range in his report for *Barden v. Griffiths* on May 5, 2004 was between \$2.8 million and \$9.6 million. His range in his report for *Burfening v. Robins* on May 22, 2006 showed a range from \$3.0 million to \$10.8 million.

The method used by Johnson in the most recent report I have seen (from 2010) indicates that Johnson used a value for “the intangible Human Value of Life” of \$1.8 million from 1988 in the Miller Study and a 1997 value of \$8.9 million from the Viscusi study to arrive at Consumer Price Index adjusted values in 2010 of \$3.3 million and \$11.9 million.

Johnson Adjustments for personal injury

In a personal injury case, Johnson offers the same range of values he offers in death cases, but makes it clear that this number should be adjusted downward by the jury for persons still living.

Johnson Loss of Society Adjustments

Johnson offers the same range of values for loss of society by survivors with a decedent that he offers for the loss of life enjoyment by the decedent.

Brian McDonald

Brian McDonald is the hedonic damages expert I have confronted third most often. McDonald's reports have been confined to the State of New Mexico and his methods are and have been heavily influenced by legal decisions in New Mexico. McDonald (2007) provides an account of the legal decisions that guide his testimony. The New Mexico Supreme Court held in *Romero v. Byers* (1994) that hedonic damages testimony by an economist could be admitted in a wrongful death case in New Mexico (which uses a loss to the estate of a decedent standard for damages). This was subsequently extended to personal injury cases by the New Mexico Court of Appeals in *Sena v. New Mexico State Police* (1995). In those decisions, it was not made clear what form hedonic damages testimony might take.

McDonald's own testimony has recently been shaped by legal decisions in *Smith v. Ingersoll-Rand* (2000) and *Couch v. Astec Industries* (2002). In older reports, McDonald talked about the Value of Life literature generally, but then provided a present value for a *per diem* calculation based on \$50,000 per year for a wrongful death and a smaller figure in the range of \$20,000 to \$30,000 per year for permanent personal injuries. He acknowledged in his reports that the *per diem* amount were not derived from the Value of Life literature, but argued that the Value of Life literature provided a conceptual framework consistent with his *per diem* amounts. In recent reports, McDonald has stopped including any *per diem* calculation of present values. He has limited himself to describing the Value of Life literature and making the claim that the literature has concluded that the appropriate average value of life falls into the \$5 million to \$6 million range. No specific number that is related to the plaintiff is offered.

The apparent intent of this approach is to suggest that a range from \$5 million to \$6 million is a starting point from which a jury might derive its own figure based on the age of the plaintiff at time of injury or death and other factors a jury would consider to be relevant to valuing the lost enjoyment of life of the decedent or injury victim. In *Smith v. Ingersoll Rand*, the 10th Circuit upheld a decision of Judge Vasquez, a federal judge for the District of New Mexico, to allow Stan Smith (not the plaintiff) to explain the difference between loss of enjoyment of life and pain and suffering, but did not allow Smith to present dollar figures. The New Mexico Court of Appeals made a similar decision in *Couch v. Astec Industries*, but allowed McDonald to present values from the Value of Life literature generally as long as it was not adjusted to specific circumstances of the plaintiff. Why an economist was assumed in these decisions to be better able than a judge or attorneys to explain the legal distinction between loss enjoyment of life, on the one hand, and pain and suffering, on the other hand, was not explained in those decisions. At this point, describe McDonald's approach can best be described as explaining the nature of the Value of Life literature and suggesting that the literature itself agrees that the appropriate value of life falls between \$5 million and \$6 million. No explanation is offered for how McDonald reached the opinion that the literature agrees that numbers in the \$5 million to \$6 million range are the best and most appropriate values in a literature that includes thousands of values of life.

The current approach used by McDonald has similarities with the approach used by Robert Johnson. Where Johnson has chosen two specific values from the Value of Life literature and adjusted those values by the Consumer Price Index to 2008 equivalents, McDonald claims that the range of reasonable values in the Value of Life literature is between \$5 million and \$6 million. Johnson's range from \$3.1 million to \$11.1 million is a wider range than McDonald's range of between \$5 million and \$6 million, but the underlying testimonial purpose is simi-

lar. The purpose is to provide a jury with a starting point from which to determine an appropriate value, but not to be more specific than the range provided in terms of the adjustments a jury would have to make.

McDonald Adjustments for Personal Injury

In his earlier approach to hedonic damage testimony, McDonald used a smaller per diem figure in the \$20,000 to \$30,000 range for personal injury circumstances compared with \$50,000 per year for a wrongful death. With his current approach, there is no difference between wrongful death and personal injury circumstances. McDonald's testimony in both circumstances is to explain the nature of the Value of Life literature and to claim that the literature is agreed that the best values of life fall between \$5 million and \$6 million.

McDonald Loss of Relationship Adjustments

Because New Mexico uses a loss to the estate of the decedent standard for wrongful death, survivors of a decedent cannot claim their losses of relationship with the decedent. McDonald therefore does not offer any loss of relationship calculations.

Other Hedonic Damages Experts and Concluding Observations

Other economic experts whose approach to hedonic damages testimony I have seen have used approaches similar to either Smith, Johnson or McDonald. Among persons I believe to still be offering hedonic damages testimony of the Stan Smith variety, but with different annual figures for the enjoyment of life are George Carter, Joseph Perry, David Channel, Michael Brookshire, and G. Richard Thompson. Each of these persons derived an annual value for life enjoyment somewhat differently, but each then determined a present value for that annual value of life over the plaintiff or decedent's life expectancy. Persons offering testimony using the *per diem* approach originally used by Brian McDonald are Allan Parkman, Everett Dillman and Ralph Scott Boaz. The essential difference between the Smith approach and the *per diem* approach is that the annual value of life that is to be discounted to present value is allegedly derived from the Value of Life literature in the Smith approach. In the *per diem* approach, the annual value is offered as an illustration a jury could use, but without any claim that the annual value was derived from the Value of Life Literature. The method used by Ralph Scott Boaz is somewhat different from the methods used by Parkman and Dillman. Boaz cites the Value of Life literature and claims to be measuring loss of life damages with his method. However, Boaz' method is a variant of the "whole time" approach that is also sometimes used as a broad measure of an individual's earning capacity rather than a measure of hedonic damages. Boaz uses the minimum wage rate to value lost discretionary time of a decedent as a measure of loss of life damages. This is an approach I have not seen from any other proponent of hedonic damages testimony.

As noted above, the methods now used by McDonald have important similarities with the methods used by Robert Johnson. The essence of this set of methods is to provide a range between two values taken from the Value of Life literature and to suggest that the jury use that range as a starting point for making a determination of the amount to be awarded for hedonic damages.

A summary table showing major methods in use is provided on the next page.

Table 1
Summary of Hedonic Damages Methods

Category of Damages	Stan V. Smith	Robert Johnson	Brian McDonald
Loss of estate of decedent for enjoyment of life damages. (In states with standard Wrongful Death Acts, there is no right to recover for lost enjoyment of life of a decedent.)	Smith provides annual value for life enjoyment. Smith had annual value of \$129,544 in 2009. Loss is projected for life expectancy of decedent. Others using this method have different annual values of life enjoyment.	Robert Johnson provides two values from papers by Ted Miller and W. Kip Viscusi that Johnson has adjusted to 2010 CPI adjusted values of \$3.3 million and \$11.9 million, respectively.	Pre 2006. After discussion of Value of Life literature, McDonald provided "benchmark" value of \$50,000 per year to the end of decedent's life expectancy to illustrate lost enjoyment of decedent. Others using this method use different per diem values, but project values to the life expectancy of the decedent, reduced to present value. Post 2006. McDonald offers the opinion that the appropriate range for the value of life is from \$5 million to \$6 million.
Personal injury loss of enjoyment of life to surviving injury victims. This category is allowed as an element of damages in all states. In most states, expert testimony with respect to these damages is not allowed.	Smith provides upper and lower projections as "benchmarks," with percentages varying by Smith's perception of the degree of injury and offered as "illustrations" and not definite opinions. As of 2009, amounts were based on upper and lower percentages of \$129,544 projected for life expectancy of injury victim. Author has not seen other reports for injury victims using this method.	Johnson provides the same ranges used for wrongful death, but indicates thatjuries must reduce figures in the range to take into account fact that individuals are still alive. The range for Johnson is \$3.3 million to \$11.9 million as of 2010.	Pre 2006. After discussion of Value of Life literature, McDonald provided "benchmark" value depending on severity of injury, but typically in the range of \$25,000 to \$50,000 per year. Post 2006. McDonald offers the opinion that the appropriate range for the value of life is from \$5 million to \$6 million.
Loss of relationship/society by survivors of wrongful death and persons close to personal injury victims.	Smith provides annual percentage losses in enjoyment of life of individuals suffering loss of relationship. Percentages in wrongful death cases range from 30% to 45% for surviving spouse and 15% to 25% for surviving children. Percentages used with surviving injury victims vary, but all reductions are based on percentages of \$129,544 in 2009.	Johnson makes no distinction between loss of enjoyment of life and loss of relationship between survivors of a decedent. The 2010 range of 3.3 million to \$11.9 million includes both decedent's loss of enjoyment of life and loss of relationship by survivors.	Because New Mexico uses a loss to the estate standard, McDonald does not discuss loss of relationship/loss of society.

Endnotes

¹The “whole time” approach places dollar values on the lost time of an individual resulting from an injury or death. “Lost time,” however, can be seen a part of an extended view of earning capacity rather than as loss of enjoyment of life, as such. To some extent, I am splitting hairs, but lost time can be viewed as lost time that could be used either to earn additional income, provide household services or for personal enjoyment or as time that would have been spent on personal enjoyment only. The view of “lost time” as time that could be used for any purpose is not a form of hedonic damages testimony, but the view of lost time as a measure of lost enjoyment is a form of hedonic damages testimony, particularly when accompanied by discussion of the Value of Life literature. See Ward (2007) for a general discussion of the “whole time” approach.

² Pages 62-108.

³ Chapter 15, pages 15-1 to 15-13.

Literature References

- Berlá, E. P., Brookshire, M. L., & Smith, S. V. (1990). Hedonic damages and personal injury: A conceptual approach. *Journal of Forensic Economics*, 1990, 3(1), 1-8.
- Brookshire, M. L., & Smith, S. V. (1990). *Economic/Hedonic damages: The practice book for plaintiff and defense attorneys*, Chapter 9, pp. 161-175. Cincinnati, OH: Anderson.
- , Michael R. Luthy, M. A. & Slesnick, A. F. (2009). A 2009 survey of forensic economists: Their methods, estimates and perspectives. *Journal of Forensic Economics*. 21(1), 5-34
- , & Ireland, T. R. (1994). Converting from a present value lump sum to a future payment stream. *Journal of Forensic Economics*, 7(2), 151-158.
- Ireland, T. R., Horner, S. M., & Rodgers, J. D. (1998). Module I: Reference guide for valuing economic loss in personal injury, wrongful death and survival actions, part three: Hedonic damages. *Expert Economic Testimony*. Tucson, AZ: Lawyers & Judges.
- , & Ward, J. O.. (1996). *The New hedonics primer for economists and attorneys*. Tucson, AZ: Lawyers and Judges.
- mcdonald, m. b. (2007). loss of Enjoyment of Life Damages in New Mexico. *Journal of Forensic Economics*, 20(2), 171-186.
- Martin, G. D. (2008). *Determining economic damages*, Chapter 15. Cosa Mesa, CA: James.
- Miller, T. R. 1990. The Plausible range for the value of life—red herrings among the mackerel. *Journal of Forensic Economics*. 3(3), 17-39.
- Moore, M., & Viscusi, W. K. (1988). The quality-adjusted value of life. *Economic Inquiry*, 26(3), 369-388.
- Palfin, R. A., & Danninger, B. B. (1990). *Hedonic damages: Proving damages for lost enjoyment of living*. Charlottesville, VA: Michie.
- Smith, S. V. (1996). The value of life to close family members: Calculating the loss of society and companionship. Reading 31 in *The new hedonics primer for economists and attorneys*. Tucson, AZ: Lawyers & Judges.

- Viscusi, W. K. (2004). The value of life: Estimates with risks by occupation and industry. *Economic Inquiry*, 42(1), 29-48.
- Ward, J. O. (2007). Time Valuation as an alternative to lost enjoyment of life in determining wrongful death damages. *Journal of Forensic Economics*, 20(2), 155-170.

Case References

- Adams v. O'Leary*, No. 86 C 3359, U.S. District Court (N.D. IL), Smith deposition on 2/29/88, with his report dated 2/26/88 and list of Value of Life literature as exhibits.
- Bell v. City of Milwaukee*, 746 F.2d 1205 (7th Cir. 1984).
- Couch v. Astec Industries, Inc.*, 132 N.M.531, 53 P.3d 398 (N.M. App. 2002)
- Fantozzi v. Sandusky Cement*, 64 Ohio St. 3d 601, 597 N.E.2d 474 (Ohio 1992).
- Hein v. Merck & Co., Inc.*, 868 F. Supp. 230 (M.D.Tenn. 1994).
- Romero v. Byers*, 872 P.2d 840 (N.M. 1994).
- Sena v. New Mexico State Police*, 892 P.2d 604 (N.M. App. 1995).
- Sherrod v. Berry*, 629 F. Supp. 159 (N.D.Ill. 1985), aff'd, 827 F.2d 195 (7th Cir. 1987), vacated, 835 F.2d 1222 (7th Cir. 1987), rev'd on other grounds, 856 F.2d 802 (7th Cir. 1988).
- Smith v. Ingersoll Rand*, 214 F.3d 1235 (10th Cir. 2000).
- Tonsgard v. State of Alaska, No. 1Ju-98-1141 CIV, First Judicial District at Juneau, deposition on 6/12/00, report dated January 21, 2000.
- Wright v. The Vons Companies, Inc.*, No. A. 374381, Dept. VII, Docket U, District Court of Clark County, Nevada, deposition on May 24, 1999, report dated June 10, 1998.