

Does the New Jersey Unisex Life Expectancy Table Alleviate or Promote Gender Discrimination?

Frank D. Tinari, Ph.D.
Kevin E. Cahill, Ph.D.¹

February 3, 2005

Over two decades ago, the State replaced standard gender-specific life expectancy tables with a single gender-neutral life expectancy table currently published in the *Rules Governing the Courts of the State of New Jersey*. This was intended as an equity measure in the belief that, since a “unisex” table treats men and women the same with respect to life expectancy, a gender-neutral table provides an equitable means to compute economic losses. However, as documented in national life expectancy tables, women do, in fact, outlive men on average. In light of this statistical fact, we examine how the unisex table systematically favors some plaintiffs over others. A key finding is that the answer depends not only on the gender of the plaintiff or decedent but also on the type of case and the age of the plaintiff.

The crux of the issue rests on the fact that, on average, women live longer than men. The average life expectancy of women at birth is about 79.7 years; for men, it is 74.3 years. The difference between the two estimates persists at different ages, as shown in Table 1, although the size of the difference becomes smaller. For example, life expectancy at age 65 is 19.3 years for women and 16.2 years for men.

¹ Tinari is Professor Emeritus at Seton Hall University and President of Tinari Economics Group. Cahill is an Associate Economist at Tinari Economics Group. The authors would like to thank Amy Brennan for excellent research assistance and editing.

Table 1

Life Expectancies by Age and Sex: 2000

age	male	female	all*
birth	74.3	79.7	77.0
45	32.3	36.5	34.5
50	27.9	32.0	30.1
65	16.2	19.3	18.0

Source: U.S. National Center for Health Statistics, *Vital Statistics of the United States*, annual; *National Vital Statistics Report*, Vol. 51. No. 5; http://www.cdc.gov/nchs/data/nvsr/nvsr51/nvsr51_05.pdf

* Estimates are higher than those reported in New Jersey court rules because these are based on the most current data release.

The life expectancy table currently used in the *Rules Governing the Courts of the State of New Jersey* combines men and women into one group and forms one gender-neutral life expectancy. According to national estimates, life expectancy at birth for men and women combined is 77.0 years and life expectancy at age 65 is 18.0 years. This means that a gender-neutral table yields a life expectancy estimate at birth that is 2.7 years higher for men and 2.7 years lower for women. The difference is important because calculations of economic losses are oftentimes based on life expectancies. The direction and magnitude of the distortion depends primarily on the type of case under consideration and the gender and age of the plaintiff.

In **employment matters**, the impact of using a gender-neutral life expectancy table versus a gender-specific one is somewhat limited. Future earnings losses (“front pay” losses) are typically calculated for a constrained number of years into the future, based on the amount of time it likely will take for the plaintiff to find employment comparable to what he or she had prior to the termination. For younger plaintiffs, the forensic economist oftentimes provides a range of, say, one to six years into the future. For older individuals, the forensic economist

typically evaluates future earnings losses through retirement. By and large, the New Jersey life expectancy figures have little bearing on lost earnings calculated in employment litigation.

But pension losses are often considered in employment matters, and use of a gender-neutral life expectancy table influences the present value of a defined-benefit pension plan. Defined-benefit pension plans typically pay benefits on a monthly basis, starting at some “normal” retirement date and extending through the lifetime of the individual. When pension losses are calculated using a gender-neutral table as opposed to a gender-specific table, males are credited with more years of payments and females are credited with fewer years. Taking earnings and pension losses together, the use of a gender-neutral life expectancy table in employment cases serves to benefit male over female plaintiffs.

The impact of life expectancy is more pronounced in **personal injury cases** since plaintiffs may also experience a diminution in their lifetime ability to perform household services in addition to earnings and pension losses. When household service losses extend through a plaintiff’s life expectancy, which they oftentimes do, use of a gender-neutral life expectancy table increases household service losses for men and reduces them for women, compared to the gender-specific table. So, as in employment cases, the use of a gender-neutral life expectancy table in injury matters serves to benefit male plaintiffs over female ones.

In cases involving the **death of a spouse**, the story is more complicated, and the impact on male and female plaintiffs is mixed. With respect to earnings and pension losses, if the plaintiff is female, economic losses are based on the male decedent for whom the gender-neutral life expectancy table yields a higher estimate of life expectancy compared to the gender-specific table. Hence, females gain with the use of gender-neutral life expectancies, since the decedent’s life expectancy is the relevant factor.

Economic losses from the death of a spouse also typically include household services, as in personal injury cases, as well as other services, such as companionship services, and advice/counsel services to both the decedent’s spouse and children. The relevant future time period over which losses take place is the key issue here. Losses to the surviving spouse are typically calculated over the lesser of the plaintiff’s life expectancy and the decedent’s but-for life expectancy. When women marry older men, which is more often the case than not,² the lower life expectancy of the couple is determined by the male. A gender-neutral life expectancy table boosts the life expectancy of males, so the use of this table yields a higher economic loss for services for most plaintiffs. In contrast, plaintiffs from couples in which the female is significantly older than the male will experience a lower economic loss with the use of a gender-neutral table versus gender-specific ones. Table 2 summarizes these effects.

Table 2

The Impact on Calculated Service Losses
of Using a Gender-Neutral Life Expectancy Table
in Death Cases Involving a Spouse

in married couples:	surviving spouse
male expected to die first	gains
female expected to die first	loses

² Fields, Jason. “America’s Families and Living Arrangements: 2003.” 2004. Current Population Reports. U.S. Bureau of the Census, Washington, DC (November).

The distortions continue in cases involving the **death of a child**. Economic losses to the parents typically include future potential financial assistance (as a small fraction of the child's but-for future earnings), plus future companionship and advice/counsel services when the child reaches adulthood. The relevant future loss period for financial support typically extends through each parent's life expectancy, under the assumption that the parents' life expectancies are shorter than the child's but-for statistical retirement age. Use of a gender-neutral life expectancy table therefore yields a higher economic loss for fathers and a lower economic loss for mothers, compared to the loss based on a gender-specific table.

The same holds true with respect to companionship and advice/counsel services in child death cases. Estimates of loss of these services do not require assumptions about the relationship between the child's expected retirement age and the parents' life expectancies. Rather, the loss is based entirely on the life expectancy of the parents. So use of a gender-neutral table instead of a gender-specific one necessarily implies that fathers will have higher economic losses for companionship and advice/counsel services in child death cases and mothers will have lower economic losses.

Perhaps the most perverse outcome of using a gender-neutral table arises when calculating service losses to children in cases involving the **death of a parent**. Children who lose a father have higher economic losses when a gender-neutral table is used compared to a gender-specific table, while children who lose a mother receive less.

Table 3 summarizes our main findings. First, in employment and injury cases, male plaintiffs have higher economic losses than warranted when a gender-neutral life expectancy table is used instead of a gender-specific one ("gains") while female plaintiffs have lower economic losses than warranted ("loses"). Second, in death cases involving a spouse, male

plaintiffs lose and female plaintiffs gain when calculating earnings losses. In contrast, plaintiffs from different types of *couples* (i.e., those in which women marry older men) gain when a gender-neutral life expectancy table is used to compute companionship and advice/counsel services. Third, in child death cases, fathers gain and mothers lose with a gender-neutral table. And, finally, in cases involving the death of a parent, plaintiffs gain with the death of a father and lose with the death of a mother.

Table 3

Summary of the Impact on Calculated Damages
of Using a Gender-Neutral Life Expectancy Table

Case Type	Gender of Plaintiff	
	male	female
Employment [^]	gains	loses
Injury [#]	gains	loses
Death of a spouse*		
earnings	loses	gains
services	mixed	mixed
Death of a child*	gains	loses

Case Type	Child of:	
	male decedent	female decedent
Death of a parent*	gains	loses

[^] includes earnings and pension losses

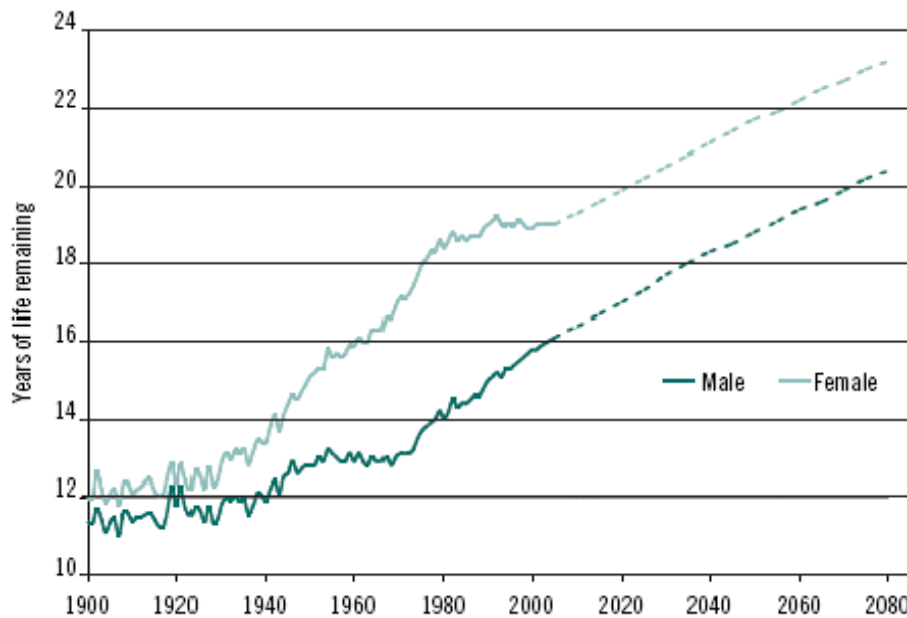
[#] includes earnings, pension and household service losses

* includes earnings and pension losses; household service losses; and companionship and advice/counsel services to both spouse and children

The distortions noted in Table 3 call into question the fairness of a gender-neutral life expectancy table. Still, equity concerns may be moot if the difference between male and female life expectancies is expected to disappear over time. But are male-female life expectancies converging over time? Figure 1 shows that the gap between male and female life expectancies widened over the last half century. Future projections also show no sign of a convergence in life expectancies, only a stabilization of the gap. Gender differences in life expectancies are expected to persist.

Figure 1

Life Expectancy at Age 65, 1900-2080



Source: Bell, Felicitie C. and Michael L. Miller. 2002. "Life Tables for the United States Social Security Area 1900-2100." Actuarial Study No. 116 (August). Washington D.C.: Social Security Administration. <http://www.ssa.gov/OACT/NOTES/as116/as116TOC.html>

Ethnicity influences life expectancies as well. We know, for example, that White females live, on average, about five years longer than Black females when life expectancy is measured at birth, and that the difference is even larger among males.³ As a result, it seems that the distortions discussed above for males versus females would also apply to Blacks versus Whites. However, census categorization by ethnicity is subjectively determined. Ethnic categories are not mutually exclusive either. Respondents in the Census 2000, for example, could categorize themselves as belonging to more than one ethnic group.

Life expectancies may differ systematically by other factors as well, such as urban or rural location or even region of the country. Should these be considered? While differences in life expectancies may indeed exist by region, factors such as these are not pre-determined. Individuals choose where to live, and in what type of setting. Thus, long-term economic losses based on these factors would be tenuous.

Gender is unique; it is predetermined, well defined, and time invariant. As such, use of a gender-specific life expectancy table is logical and straightforward in practice.

We have found that some attorneys, mainly those for plaintiffs who reside out of state and who are litigating in New Jersey, request that the economist rely on a gender-specific table for many of the same reasons outlined in this article. They believe they can mount a strong argument, too, because gender is permanent and not influenced by an individual's decision making.

The courts have imposed gender neutrality with respect to life expectancy, presumably to promote equal treatment for men and women. But as we have shown in this article, the gender-neutral approach to life expectancy hurts some plaintiffs and benefits others, often in unintended

³ U.S. National Center for Health Statistics, *Vital Statistics of the United States*, annual; *National Vital Statistics Report*, Vol. 51, No. 5.

ways. The end result of ignoring statistical differences by gender when calculating economic losses is, ironically, discrimination against female claimants in a number of types of cases.