

TRIAL LAWYERS ASSOCIATION OF BRITISH COLUMBIA
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Proof of Infants' Future Income Loss

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After Howard's first job as an Army bomb-disposal officer, everything else seemed dull — teaching economics and environmental studies (at Western Washington University), regulating utilities (for the State of Oregon), teaching accounting (at Simon Fraser University), managing accounting research (for the Certified General Accountants). Then he discovered dragonboat racing and litigation accounting.

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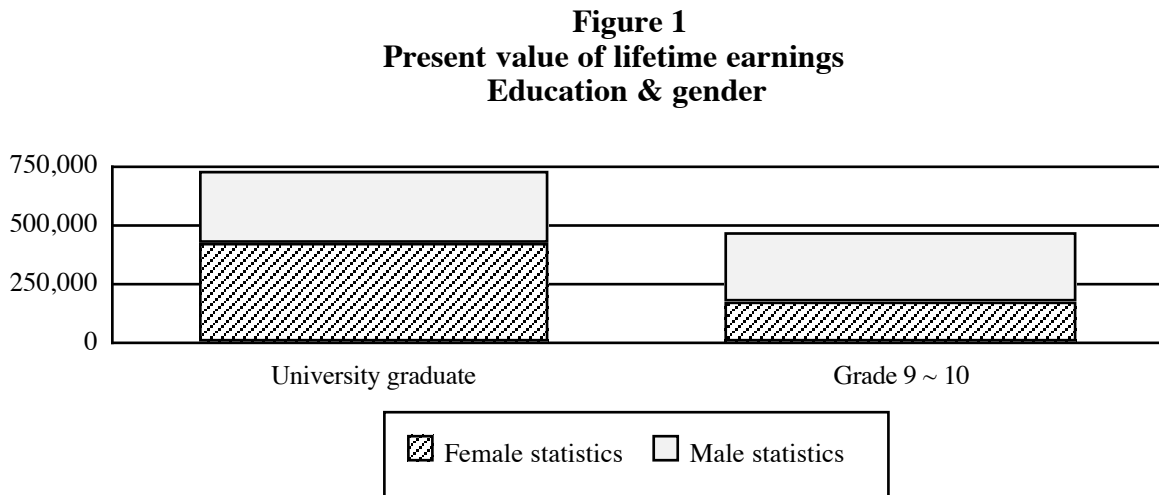
In estimating the potential and lost income of someone too young to have an established earnings record, one uses averages — potential incomes and labour-market contingencies, as well as survival contingencies. The first trick is to place her or him in the appropriate preinjury statistical group; the second is to establish the income loss, often by placing her or him in the appropriate disability-statistics group. Then the potential and lost income follow mechanically from the assumed facts (which the expert assumes but you prove).

Permanent disability might also affect domestic capacity. Special considerations govern the grossup allowances for investment-management fees (using the Public Trustee) and income taxes (earnings on awards for own injuries are exempt while under 21).

This paper will illustrate the process by using the example of a newborn girl. An infant with no track record best illustrates the statistical bases.

Potential income

The statistical class for potential income and related contingencies depends on two main issues — education and gender. Education and gender, that is, account for most of the variation in earnings. Figure 1 and Schedule 1 (attached) show why they matter.¹



Calculating the contingency-adjusted present value of potential future income

Figure 1 shows contingency-adjusted present values because one cannot just add up the future potential incomes. The attached Appendix A explains how we calculate the contingency-adjusted present value of future income by applying these factors to each year's full-time, full-year potential:

Discount — the 2½% discount rate prescribed under §51(3) of the *Law and Equity Act* for earnings. This rate allows for the time value of money, future price-level rises, and future real wage-level or productivity increases. [§A.1]

Survival — the preaccident chances of reaching each future year, usually from Statistics Canada's 1990–1992 life table for women or men in Canada. [§A.2]

Labour-market contingencies — the chances that she or he will earn less than the potential full-time, full-year income. The statistics, from a special tabulation by Statistics Canada of the 1991 Census in British Columbia, equal the chances that someone her or his age with similar education would not *participate* in the labour force by working or seeking to work, would be *unemployed*, or would work only *part-time*. [§A.3]

Schedules 2 and 3 perform the calculations for the case of a female university graduate. The schedules apply the discount and survival factors at midyear because cash flows and deaths occur throughout the year.

The older the child, the less heavily the eventual earnings get discounted: Schedule 2 notes that the contingency-adjusted present value at age 10 exceeds that at birth by about a third.

Effects of education

Education tends to indicate not only the potential income but also the likelihood of earning it — the contingencies. Consider these rationales:

Personality — success depends not just on the aptitudes that permit one to succeed in school or work but also on the attitude that keeps her or him at it. Never-married mothers, for example, are less likely than either married, common-law, or divorced women both to have completed high school and to have held a job — ever.

Opportunity cost — Lower-paid workers have less reason to work than higher-paid ones, which their participation rates and other contingencies reflect: the university graduates in Schedule 1 show half the contingencies of the dropouts. With some variation, the statistics on work and earnings by the partially disabled show the same tendency.

Proving education

Proving education serves as a proxy for proving achievement. The statistics rank educational attainment from none and grade eight or less through complete or incomplete high school, trades certificates, postsecondary, nonuniversity certificates, and university, to professional and graduate degrees.

Without a track record of her or his own, one turns first to the parents' education, since most children end up at their parents' level or one or two levels above.² To dispute or reinforce that presumption, one looks at other family members and influences, as well as to such parental behaviour as their own occupational attainment, their own reading, reading to their children, or sending their children to a private or French immersion school.

Gender wars

For male children, one takes the male statistics as presented, but it's less obvious that female statistics apply to girls. Earnings differences like those in Figure 1 make the question more intense but no clearer. With a two generations of women's penetration into the labour force, it's also not obvious that women will soon earn as much as men. The difficulty with projecting equality lies not just in the labour-market statistics but in the continuing role of mother and caregiver.³ We sometimes use indications that a girl would have pursued a nontraditional or 'man's' job in the sciences, for example, or we might just provide both figures.

Perhaps the best-known case on the point is *Tucker v. Asleson*. In that, the Court accepted the argument that a primary-school girl could have attained the earnings of a male university graduate but then discounted that capacity by two-thirds.⁴

Income loss

Some catastrophic damage makes the income loss easy: it equals the potential capacity. That usually entails costs of care as well. More often, the child has some lesser disability. One that closes off a likely and remunerative career also eases the loss estimate. Most injuries, though, seem to fall into an intermediate zone — partial disability. Statistics Canada's defines "mild mobility or agility disability" as some persistent difficulty in such tasks of daily living as reaching in any direction, walking, standing, bending, grasping, reaching, carrying, cutting food, or dressing or undressing.

For partial disability, as noted, we employ another set of statistics — the effects on the likelihood of being employed and on earnings if employed. Thus our notional mildly disabled alumna might face the 24% reduction in employment and earning capacity of the average Canadian woman with a university degree and a mild mobility or agility disability.⁵

Domestic capacity

When the evidence suggests a loss of capacity for unpaid work around the house, one can project that the infant would have performed the typical household services of a Canadian woman or man but now has lost the indicated capacity. The average woman (including those who did nothing) spends 2.5 hours per day on housework and the average man spends 1 hour, besides the 2.1 hours that a mother spends on childcare or the 1.6 hours that a father does. A woman's housework includes 0.9 hours of meal preparation and 0.7 hours of domestic cleaning.⁶

Then one applies a typical wage rate to the lost time and discounts it. It is unclear which prescribed discount rate (2½% or 3½%) applies to this capacity.⁷

Grossup allowances

Ordinarily, the invested part of the awards would need to be grossed up to protect them against taxes on the earnings that must make good the future losses, as well as for the fees that an investment-manager would charge to realize the projected earnings. All balances can receive investment-management protection, and balances for future cost of care or domestic capacity can receive tax protection as well.

As noted, infants differ in two respects from other plaintiffs:

Tax — The *Income Tax Act*, §81(1)(g.1) and (g.2), exempts the investment income from tax until she or he turns 21 if the invested award compensated for her or his own injuries.

Management — The tariff of the Public Trustee applies, rather than that of a trust company or other manager.

Notes

¹ *Career start* — The survival factors represent a newborn female, so that the lifetime earnings in these examples somewhat overstate the earnings of a male when using male earnings and labour-market contingencies. As Schedule 1 notes, the male labourer shows a higher contingency-adjusted present value of future earnings because he starts at least occasional work seven years sooner, at 15 rather than 22.

² *Social mobility* — G. Creese, N. Guppy, and M. Meissner, *Ups and downs on the ladder of success: Social mobility in Canada*. General Social Survey Analysis Series. [Ottawa: Statistics Canada, 1991], Chapter 6, Social mobility and education. 63% of children surpassed their parents' education, while 27% equalled it [Table R, p 59].

³ *Women's household work* — We usually recognize the fact that women perform more unpaid services than men in estimating lost domestic capacity — as below.

⁴ *Female v male* — Reasons for judgment of the Hon. Mr. Justice Finch, April 25, 1991, in *The Public Trustee as guardian ad litem on behalf of Brandi Helen Tucker v. Wayne Robert Asleson et al.*, Vancouver Registry N° B871616. S. A. Griffin, cocounsel for the plaintiff in Tucker, discusses that and some other cases in "The value of women — avoiding the prejudices of the past." *The Advocate*, Vol. 51 Part 4, July 1993, pp 545 ~ 555.

⁵ *Disability statistics* — A mild mobility or agility disability results from difficulty with one or more of such classifying activities. Some material, persistent difficulty with an activity counts as one point, while complete inability to do it counts as two points. Mild disability, the most common, runs from one to five points.

To conduct the 1991 HALS, Statistics Canada surveyed 10,000 Canadian residents identified as disabled in the 1991 Census. Statistics Canada then performed a special tabulation of the results for us — tabulating earnings and labour-market activity and classifying those of persons with disabilities by the nature and severity of the effects as well as by the usual demographic factors of gender and education. This tabulation provided the capacity-loss statistics cited here.

Relative to unaffected women with degrees, women with mild mobility or agility disabilities face a 32.2% reduction in the likelihood of being employed, partly offset by a 12.2% higher income if employed. In this statistical class, disability tends to remove the lower-paid from the labour force, perhaps because, comparing the potentially lower- and higher-paid, for those with lower potential earnings the available pensions and insurance replace more of the potential earnings; i.e., it costs more for someone higher-paid not to work. The combined effect approximates 24%: $1 - (1 - 0.322 \text{ employment}) \times (1 + 0.122 \text{ income}) = 0.239 \approx 24\%$.

Losses arise because affected persons are less likely than those unaffected to participate in the labour force (to work or seek to work), to be employed, to work full-time, and to advance their positions and incomes. [Statistics Canada: G. L. Cohen, "Disabled workers," *Perspectives on Labour and Income*, Winter 1989, p. 36; A. Shain, "Employment of persons with disabilities," *Canadian Social Trends*, Autumn 1995, pp. 10–12]. Lesser or less generally applicable education, which limits the opportunities of even nondisabled persons, tends to intensify the effect.

⁶ *Household work — Where does time go?* A. S. Harvey, K. Marshall, and J. A. Frederick. Catalogue n° 11-612E, n° 4. [Ottawa: Statistics Canada, 1991.] Table G, p 50; Table I, p 59.

⁷ *Damages* — Such capacity losses may differ from the loss of enjoyment included in general damages [*Fobel v. Dean and Macdonald*, Court of Appeal for Saskatchewan, Vancise, JA, August 17, 1991, p. 28] and may be compensated whether or not the person actually hires someone to perform the work [p. 32]. The 2½% rate for employment income differs from the 3½% basic rate by a 1% annual average increase in labour productivity or real wages [§A.1]. Unpaid household work is nonetheless valuable work, and household productivity appears to have increased at least as fast as the sluggish real earnings in paid employment: real or inflation-adjusted earnings fell in six of the last eleven years in British Columbia, rose in only four, and did not change in one — for an average ½% decline per year. [BC Stats, *Earnings and Employment Trends*, various issues.]