

Appendix E: Income Effects from Reduced IQ

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Table E – 1

Total (males and females together)					Total (males and females together)				
		Mean					Mean		
		Earnings		Adjusted for			Earnings		Adjusted for
Age group	Mean age	in age group	Survival	survival	Age group	Mean age	in age group	Survival	survival
15-17	16	916	0.98956	906	15-17	16	916	0.98956	906
18-24	21	13,631	0.98598	13,440	18-24	21	13,631	0.98598	13,440
25-29	27	31,892	0.97986	31,249	25-29	27	31,892	0.97986	31,249
30-34	32	39,526	0.97481	38,530	30-34	32	39,526	0.97481	38,530
35-39	37	46,622	0.96826	45,142	35-39	37	46,622	0.96826	45,142
40-44	42	48,845	0.95864	46,824	40-44	42	48,845	0.95864	46,824
45-49	47	52,657	0.94435	49,726	45-49	47	52,657	0.94435	49,726
50-54	52	49,679	0.92383	45,895	50-54	52	49,679	0.92383	45,895
55-59	57	44,541	0.89478	39,854	55-59	57	44,541	0.89478	39,854
60-64	62	32,253	0.85231	27,490	60-64	62	32,253	0.85231	27,490
65-69	67	16,774	0.79122	13,272	65-69	67	16,774	0.79122	13,272
70-74	72	7,720	0.70636	5,453	70-74	72	7,720	0.70636	5,453
75+	80.5	2,827	0.50523	1,428	75+	80.5	2,827	0.50523	1,428

Scott Gross' analysis uses 2005 earnings data and adjusts it for survival by age cohort.

This age and survival adjusted information is used to extrapolate the lifetime earnings effect based on an income change of 1.1% for each IQ point.

The present value of the earnings is based on 3 different discount rates: 1%, 3%, and 5%. These discount rates give a present value of earnings per IQ point of \$20,169, \$9,076, and \$4,053 respectively.

Table E- 2

Human Capital 2005 Spreadsheet Calcs Total sheet			1 IQ point Value
Age	Earnings in age group Adjusted for survival		1.10%
15	17 \$ 906.00		\$ 9.97
18	24 \$ 13,440.00		\$ 147.84
25	29 \$ 31,249.00		\$ 343.74
30	34 \$ 38,530.00		\$ 423.83
35	39 \$ 45,142.00		\$ 496.56
40	44 \$ 46,824.00		\$ 515.06
45	49 \$ 49,726.00		\$ 546.99
50	54 \$ 45,895.00		\$ 504.85
55	59 \$ 39,854.00		\$ 438.39
60	64 \$ 27,490.00		\$ 302.39
65	69 \$ 13,272.00		\$ 145.99
70	74 \$ 5,453.00		\$ 59.98
	75 \$ 1,428.00		\$ 15.71

The analysis in this letter relies heavily on and replaces earlier work in Grosse, Scott D., Thomas D. Matte, Joel Schwartz, Richard J. Jackson. 2002. "Economic Gains Resulting from the Reduction in Children's Exposure to Lead in the United States." Environmental Health Perspectives. 110(6):563-569.