Appendix to The Dynamic Effects of Disability Types: Incomes, Employment, and Partial Insurance.

By Robert Millard

Click Here for Latest Draft of Working Paper

1 Model of Disability Based on Limitations to Daily Activities

I model disability based on self-reported measures of limitations to daily activities. This has the advantage of honing in on an intermediate step in the mapping from a health condition to an individual's labour market outcomes. It is often unclear if, or how, a given health condition will influence behaviour. However, focusing on the activity limitations caused by a given health condition reveals if it impairs performance in productive tasks at work. To illustrate, when left untreated, diabetes can result in a substantial physical impairment, which may restrict the set of physically demanding tasks a worker can perform. However, with proper treatment, diabetes may not limit one's activities or significantly impact work or productivity. Measuring the extent of physical impairment helps to overcome this ambiguity.

I represent disability status using a latent index framework. The "extent" of individual i's disability is modeled as a continuous latent univariate index, $\hat{d}_i$, that summarizes the extent of limitation in a set whose elements represent a specific activity of daily living (ADL) chosen by the analyst. Disability status of individual i, d_i, is a binary variable that equals one for an individual when the extent of their disability breaches some threshold, $\bar{d}_i$. This threshold is indexed by i, as the threshold of disability depends on an individual's unique economic characteristics and environment.[1] That is, disability status is represented as

$$d_i = \begin{cases} 1, \text{ if } \hat{d}_i > \bar{d}_i \\ 0, \text{ otherwise.} \end{cases}$$

I assume that if $\hat{d}_i = 0$, an individual is completely uninhibited in performing tasks comprising the specified set of ADLs. The larger the value of this index, the more limited an individual is in performing the set of ADLs. For instance, a mildly sprained ankle would give a lower value to $\hat{d}_i$ than a broken ankle if the activities include walking or running. If $\hat{d}_i > \bar{d}_i$, the individual is considered disabled.[2]

Even this simple representation of disability illustrates the difficulties associated with its measurement and representation. $\bar{d}_i$ and $\hat{d}_i$ are private information and are endogenous to the environment, lifestyle, and

[1] For instance, people differ in the sets of tasks making up work, daily life, and their tolerance for dealing with barriers to performing these tasks.

[2] That is, someone with a mild ankle sprain may not be limiting enough for them to consider themselves disabled, whereas a broken ankle requiring crutches may breach this threshold.

occupation of the individual. A mild ankle sprain may be more disruptive to the livelihood of a professional athlete than a software engineer.

Defining $\hat{d}_i$ based on a chosen set of ADLs helps to address the empirical difficulties associated with the subjectivity of $\hat{d}_i$ and $\bar{d}_i$. I assume the activities are summarized by a vector, v_i, whose elements are continuous indexes representing the extent of limitation for a specific activity. For instance, an element may represent the extent of limitation in walking on a flat surface for 20 minutes. This vector maps into $\hat{d}_i$ by a chosen function or metric, $F : D^v \to D^d$, where D^j is the domain of "j" for $j \in \{v, d\}$. The threshold, $\bar{d}_i$, can be chosen in terms of v and the mapping from v to $\hat{d}_i$. For example, one may normalize d_i and elements of v_i between 0 and 1. Then F can be: "if the average of the elements of v_i is greater than 0.5, then the individual is flagged for disability." This strategy takes a stance on what constitutes a disability. The definition of disability is relative to the chosen activities, the reported limitation of these activities (observed), the mapping F, and the choice of $\bar{d}_i$.

This framework offers a flexible way to summarize the large variety of disabling conditions and the presence of multiple disabling conditions. For instance, it could be the case that someone may be flagged as disabled if they are severely limited in a given daily activity but uninhibited in all others. Alternatively, someone may be moderately limited in multiple activities, where the combination causes them to be considered disabled (i.e., breach the threshold in the latent index of the extent of disability). In contrast, they may not be flagged if they were only limited in one of these dimensions.[3]

In this paper, I take these components directly from the model used in LISA. LISA derives disability status using self-reported questions on the frequency and magnitude of difficulty associated with performing specific ADLs.[4] These responses to these questions are categorical and are taken as a noisy measure of the elements of v. I flag disability based on frequency responses exclusively, as there are inconsistencies in questions about magnitude of difficulty across survey waves. The grouping is useful to average out any small measurement error in reporting a continuous number and summarizes the elements v while maintaining ordinality.

[3]This may be accommodated by adding penalties to multiple conditions in the mapping from v to $\hat{d}_i$.
[4]The set of ADL includes mobility, flexibility, memory, dexterity, learning, pain, and mental health.

1.1 Sample Survey Questions on Limitations to Daily Activities

Table 1: Questions used to Measure Limitations to Daily Activities

Questions to Derive Aggregate Physical Disability
How much difficulty do you have walking on a flat surface for 15 minutes without resting?
How much difficulty do you have walking up or down a flight of stairs, about 12 steps without resting?
How much difficulty do you have reaching in any direction, for example, above your head?
How much difficulty do you have using your fingers to grasp small objects like a pencil or scissors?
Do you have pain that is always present?
Questions to Derive Mental-Cognitive Disability
Do you think you have a condition that makes it difficult in general for you to learn? This may include learning disabilities such as dyslexia, hyperactivity, attention problems, etc..
Has a teacher, doctor or other health care professional ever said that you had a learning disability?
Has a doctor, psychologist or other health care professional ever said that you had a developmental disability or disorder? This may include Down syndrome, autism, Asperger syndrome, mental impairment due to lack of oxygen at birth, etc..
Do you have any ongoing memory problems or periods of confusion? Please exclude occasional forgetfulness such as not remembering where you put your keys.
Do you have any emotional, psychological or mental health conditions? These may include anxiety, depression, bipolar disorder, substance abuse, anorexia, etc..

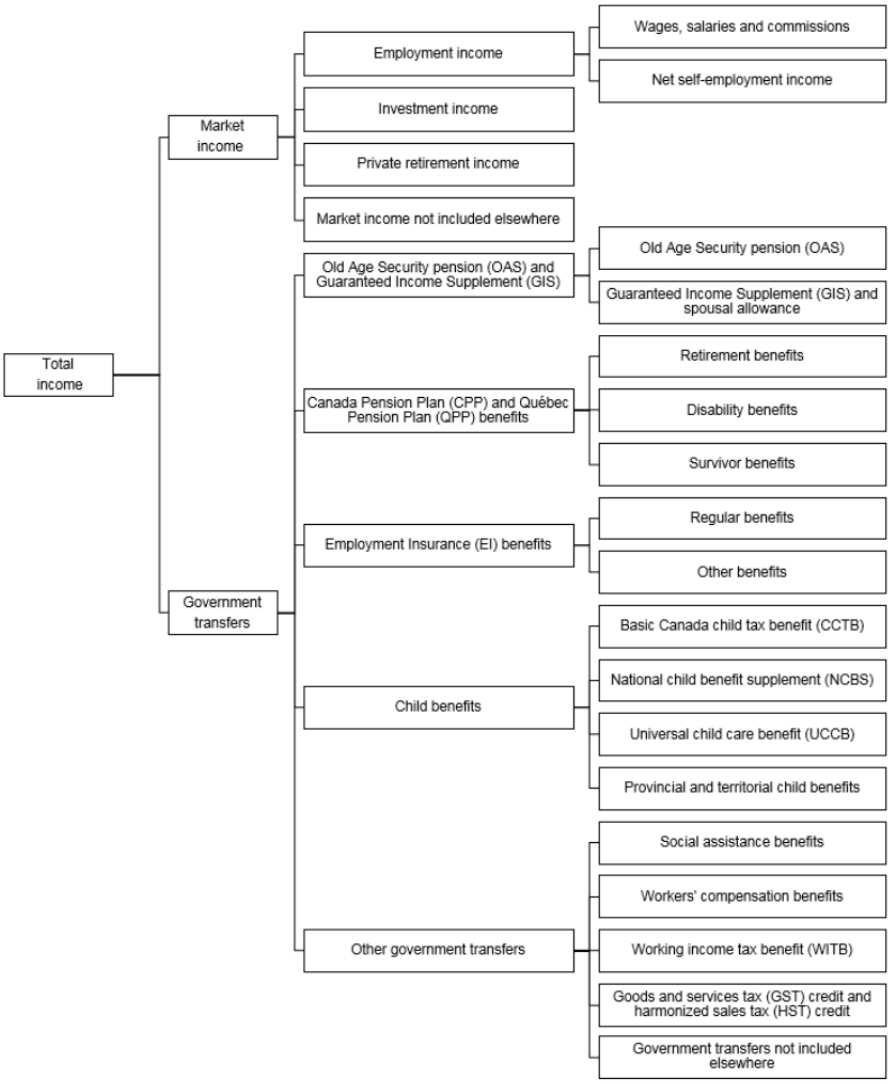
Source: Table comes directly from Grondin, C. (2016). A new survey measure of disability: The Disability Screening Questions (DSQ). Statistics Canada.

2 T1FF Components of Income and Variable Construction

This section offers more detail about the measures of income and breakdown of personal income in the T1FF. Theses data are derived from annual tax filings, which is especially advantageous in mitigating concerns with measurement error that often plagues survey data. Figure 1 shows the breakdown of personal income used for the Canadian Census. There are some slight differences in the more dis-aggregated measures of income in the T1ff. However the overall decomposition is parallel to what I focus on in this paper. For this papers purposes, the income concepts from this figure are the sufficient.

Figure 1: Census of Population Components of Incomes.

Figure 8: Census of Population Components of Incomes.



Source: https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/app-ann/a4_1-eng.cfm.

Source: https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/app-ann/a4_1-eng.cfm.

An individual's personal income can be partitioned into market income and income from transfer payments. This distinction is important for separating resources that are earned through market participation, such as the labour market (wages) or investment market (Dividends, savings, etc..). Transfer income is associated with publicly provided resources made available to individuals with low or zero earnings. For instance, Employment Insurance (EI) may be available for people who lose their job, or specific barriers or costs that may limit one's ability to provide for themselves or dependents. For example, disability insurance is available to aid with the costs and barriers to work caused by a disability.

An individual's Market income is mainly comprised of income earned from employment but includes other sources. Employment income can be differentiated into wages, salaries and commissions (T4E), self-employment income (SEI), which includes net business income, farming income, fishing, etc.., and other forms of employment income(OEI), which may include tips, gratuities, or wage loss replacement plans (private disability insurance). Market income also includes interest and investment income, corporate dividends, alimony, limited partnership income, retirement savings plans, and income from private pensions (OTHER).

Government transfer payments combine federal and provincial programs aimed at assisting those with little or no market income. Two of the largest transfer programs are federal EI and Canadian Pension Plan, the latter of which offers supplementary benefits to working-age adults affected by disability (CPP-D). Canada offers a set of transfers and tax credits targeting families at both the federal and provincial levels. Notably, The Canadian Child benefit (CTIB), which replaced the family allowance (FA) program in 1992, and the child tax credit (CTC) lowers taxes for low-income families. Provincial tax credits (PTXI) and goods and service and harmonized sales tax credits are included in government transfers (GHST). Additionally, each province offers family benefits (FABEN). Government transfers also consist of non-taxable income received through provincially administered social assistance (SA), workers compensation programs (WC), and net federal supplements, which consist of transfers targeting the elderly (NFSL).[5]

I do not include old age security (OAS) or other programs targeting retirees because the population of interest are not old enough to be eligible. Also, I do not include the working income tax benefit (WITB), which was introduced in 2007 to reduce taxes for individuals earning low levels of income from work.[6]

2.0.1 Variable Construction

$$
\begin{aligned}
MKTINC &= T4E + SEI + OEI + OTHER \\
DISABTRANS &= WC + SA + CPPD + EI + DTC \\
FAMTRANS &= FABEN + FA + CTC + CTBI \\
GOVTRANS &= DISABTRANS + FAMTRANS + GHST + PTXI \\
XTIRC &= MKTINC + GOVTRANS \\
AFTAX &= XTIRC - TAX, \text{ where tax combines...} \\
FTXI &= \sum_i XTIRC_i, \text{ for i in economic family}
\end{aligned}
$$

[5]Net federal supplements are grouped in a measure of non-taxable income. But the sample of study is not eligible for these transfers.

[6]For more details on the types of incomes included in this study and these data, refer to `https://www150.statcan.gc.ca/n1/en/pub/12-585-x/12-585-x2017000-eng.pdf?st=adGLEEeP`.

3 Additional Descriptive Statistics

Table 2: Reason of Disability Onset: Total Disability and Aggregate Types

	Total Disability	Physical	Cognitive	Concurrent
Existed at Birth	0.049	0.032	0.073	0.072
Disease	0.330	0.321	0.202	0.389
Non Work Related	0.205	0.208	0.109	0.232
Work Related	0.276	0.292	0.193	0.2745
Aging	0.212	0.252	0.126	0.165

Note: The sample reflects working age (25-55) Canadians from provinces who reported to have a disability. Survey weights have been applied so the sample reflects the demographic composition of Canada in 2012.

Table 3: Reason of Disability Onset: Non-Mutually Exclusive Activity Limitations

	Mobility	Flexibility	Dexterity	Pain	Cognitive Functioning	Mental Health
Existed at Birth	0.037	0.033	0.033	0.031	-	0.082
Disease	0.435	0.324	0.475	0.322	0.166	0.205
Non Work Related	0.203	0.232	0.134	0.217	0.177	0.085
Work Related	0.297	0.386	0.303	0.296	0.186	0.205
Aging	0.295	0.260	0.342	0.246	0.233	0.086

Note: The sample reflects working age (25-55) Canadians from provinces who reported to have a disability. Survey weights have been applied so the sample reflects the demographic composition of Canada in 2012.

4 Robustness and Sensitivity

This section considers sensitivity of results to alternate selection criterion and coding of variables. These robustness exercises involve slicing the sample into smaller groups. This creates the risk of some groups falling below the count threshold to be approved for extraction from the Statistics Canada Research and Data Center. I describe the robustness exercises, and note that results from these exercises may be available upon request.

Years of Post-Onset Observations

In selecting the sample, I drop individuals that have less than 4 post-onset observations. However, my empirical specification is interested in the ten years post-onset, which introduces concerns that censoring in the data may bias estimates of the shorter run effects. To illustrate, estimates of the first few post-onset years reflect effects from disabling conditions that recover in the long run, which may be different from long-term disabling conditions.

To assess this issue, I drop any individuals with fewer than 10 post-onset observation, re-estimate the empirical models, and compare the treatment paths. I find no meaningful changes in the magnitudes of point estimates. Due to the reduced sample sizes, standard errors of point estimates are much larger and I lose significance in many effects.

By Sex

With a finite sample, there exists a trade-off between statistical power and the extent of heterogeneity I can explain. This analysis distinguishes heterogeneity in effects across granular disability types in each of the ten years relative to onset for a rich disaggregated set of income measures, which is a considerable contribution relative to the existing literature. However, reasonable arguments can be made that effects differ within other demographic groups. Notably, the sample in this paper combines males and females to enhance statistical power of estimates, and I include a rich set of controls interacted with sex in the estimating specification Section 5 of the main paper.

To assess the robustness of the empirical results with respect to sex, I separately conduct the empirical analysis by sex, and compare the estimated path in treatment effects. The general results hold when conditioning on male or female. While there exist some differences in the magnitude of effects for some dependent variables, the sign in effects and the path in effects hold for most output. That said, the estimates are considerably less precise due to the smaller sample.

In the interest of transparency, I describe the models with the largest differences in estimates between males and females. The choice criterion is based on whether the point estimate for one sex is outside the 95% confidence interval for the other. This is more restrictive that a simple test of equivalence, which always fails to reject a significant difference due imprecise estimates resulting in a considerable overlap in the distribution of estimates. With this approach, I have more statistical power to highlight sex based differences in estimates.

First, for the aggregate disability types, aggregate physical and mental-cognitive, I follow a similar progression for dependent variables as the results section in the body of the paper. The females third post-onset point estimate of a physical disability on models for WSC of participants was below the confidence interval of the estimate for males. Otherwise, I found no differences in paths between males and females for WSC or WSC of participants. Onset of a physical disability impacted labour market participation more for males than females, but the path in effects was nearly parallel and only a few point estimates were outside the confidence intervals for the respective point estimate of females. Within aggregate physical, onset of a pain limitation results in significant labour market exit for males, but not for females. This is likely due to different composition of jobs for males, notable physically demanding job tasks. Types within mental-cognitive have the smallest sample sizes and the least precise.

Next, onset of an aggregate physical disability results rise by a greater magnitude for males than females, although the path in effects is nearly parallel. This difference is also reflected in results for disability relevant transfer programs. I find no significant change in family transfers following onset of an aggregate physical disability. Following onset of a mental-cognitive disability both treatment paths exhibit concave shape, but of greater magnitude for female, which is consistent with mothers tending to claim these benefits more often. Within aggregate physical, males receive more government transfers in the short run following onset of a disability to kinetic ability, but the rise for females converges to males in the long run. I obtain no significant results on models for government transfer within mental-cognitive.

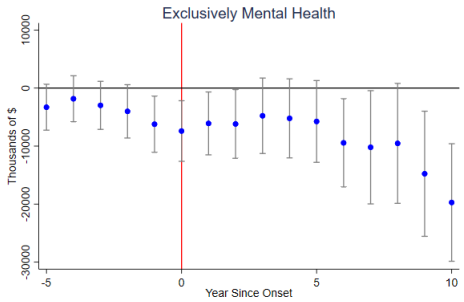
For other smoothing mechanisms, family total income and income of family members declines by more following the onset of an aggregate physical disability than males. The effects on total nontaxable income follows from the results of total government transfers. Females experience a sharper decline in total before- and after-tax income post-onset of a mental-cognitive disability in the short run, but effects converge toward males in the long run. Within aggregate physical, income of family members significantly declines following the onset of a disability to kinetic ability for females, but not males. Moreover, the post-onset effects of a disability to kinetic ability results in larger declines of total before and after-tax income for males, but the trend is parallel for females. Again, mutually exclusive disability types within mental-cognitive are mostly insignificant.

Endogeneity of Onset to Labor Market Conditions

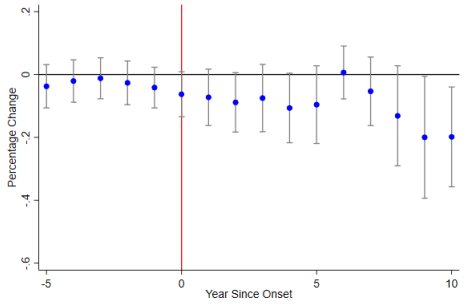
A final robustness check relates to concerns of reverse causality. It may be the case that poor labor market conditions cause onset of work-limiting disabilities. This concern is particularly relevant for mental health disabilities. To assess robustness of this paper results to results to this reverse causality, I exclude all individuals that report their disability onset to be work related and re-estimate all the models. I find no meaningful difference in estimates when excluding these individuals. I extracted the results from this robustness exercise for models considering onset of mental health, which are shown in Figure 2

Figure 2: Effect of Non-work Related Mental Health Disability on Market Income

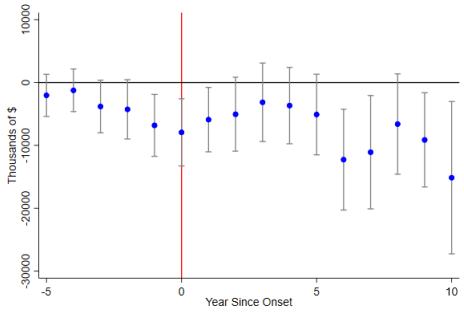
Wages, Salaries, and Commissions (Level)



Labour Market Participation



Wages, Salaries, and Commissions for Participants



Note: Figures plot point estimates from an IW estimation, whose specification is outlined in Section 5. The models for WSC are top-coded at the 99 percentile. These results drop individuals reporting their disability to be work-related, as shown in Section 2 of this Appendix.

5 Model Estimates

The following reports the point estimates and standard errors used to produce the graphs within the body of paper.

Table 4: All Physical: Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	Non-Market Income	Total Government Transfers	Disability Relevant Transfers	Family Transfers	Family Total Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	0.011	-923.73	-1385.128	-184.497	50.238	54.697	0.793	-4594.061	-1695.148	-767.604	54.604	-2150.693
	(0.009)	(722.914)	(677.596)	(993.152)	(122.903)	(40.135)	(1686.143)	(675.616)	(537.421)	(1346.147)	(671.788)	(1049.251)
-3	-0.001	-522.768	-597.724	-72.228	-74.766	-73.348	3.074	-4855.911	-1783.336	-933.413	10.533	-2278.335
	(0.01)	(774.34)	(743.88)	(1017.355)	(133.526)	(39.837)	(1676.392)	(692.246)	(579.923)	(1458.435)	(728.582)	(1074.57)
-2	0.012	-885.452	-870.939	-500.234	-225.943	-185.429	-39.225	-5990.158	-2500.139	-1885.553	-122.206	-2598.232
	(0.011)	(791.807)	(779.838)	(1156.067)	(130.887)	(39.485)	(1762.466)	(753.899)	(592.682)	(1505.053)	(773.372)	(1090.778)
-1	-0.006	-1321.497	-774.796	-426.346	-61.542	-67.697	4.335	-4522.174	-2772.242	-1927.781	-96.672	-168.39
	(0.012)	(812.027)	(807.513)	(1019.423)	(150.548)	(43.724)	(1770.179)	(718.844)	(618.996)	(1499.5)	(823.037)	(1151.67)
0	-0.004	-1070.075	-254.413	-655.633	103.138	96.19	1.673	-5095.349	-2616.424	-1829.668	63.803	-1962.629
	(0.012)	(821.731)	(808.593)	(1484.14)	(167.264)	(45.758)	(2163.636)	(942.271)	(607.532)	(1525.704)	(847.241)	(1149.665)
1	-0.013	-2995.174	-2286.953	-275.214	258.655	254.047	-4.71	-6209.273	-3909.785	-2540.401	226.986	-2181.143
	(0.013)	(951.692)	(875.994)	(1665.236)	(173.92)	(44.387)	(2414.886)	(1045.173)	(678.022)	(1641.698)	(911.679)	(1199.177)
2	-0.035	-3447.75	-2433.752	-355.5	530.932	547.697	-28.054	-7196.028	-4199.992	-2766.936	421.463	-2963.807
	(0.013)	(992.599)	(895.478)	(1755.471)	(201.812)	(45.316)	(2431.877)	(1077.728)	(692.872)	(1674.564)	(946.233)	(1206.804)
3	-0.059	-4222.687	-2112.182	-421.333	696.817	705.081	-9.597	-7398.375	-4850.503	-3055.965	558.331	-2426.478
	(0.015)	(977.829)	(930.59)	(2087.448)	(181.389)	(59.72)	(2854.318)	(1259.951)	(738.47)	(1715.1)	(977.402)	(1312.672)
4	-0.083	-3685.297	-702.396	-667.343	651.727	694.788	-43.381	-5836.434	-4903.57	-3282.847	475.224	-1434.148
	(0.016)	(959.981)	(939.755)	(2685.79)	(193.941)	(50.145)	(3712.654)	(1587.286)	(741.142)	(1829.752)	(995.291)	(1499.852)
5	-0.104	-4059.66	-680.409	-745.597	891.636	903.715	-12.072	-7223.039	-4619.391	-3042.85	585.528	-4571.156
	(0.016)	(1131.932)	(1000.797)	(3391.088)	(209.421)	(50.423)	(4116.213)	(2024.486)	(783.257)	(1857.168)	(1068.564)	(1426.2)
6	-0.099	-4272.281	-1299.467	-676.097	1228.078	1262.87	-25.961	-8249.256	-4750.334	-3150.939	673.063	-5030.624
	(0.017)	(1215.214)	(1078.339)	(3671.587)	(221.849)	(51.553)	(4549.748)	(2081.609)	(830.496)	(2128.989)	(1147.013)	(1631.01)
7	-0.102	-4134.408	-813.216	-1052.761	1047.416	1061.661	-20.742	-7557.311	-5318.876	-3612.849	576.686	-4220.665
	(0.019)	(1350.79)	(1250.514)	(4125.943)	(205.851)	(60.13)	(5156.413)	(2364.703)	(944.067)	(2378.829)	(1275.54)	(1805.749)
8	-0.098	-3963.577	-1719.126	-1373.152	1015.08	1010.68	2.737	-8683.912	-4973.242	-3230.766	652.85	-5105.508
	(0.019)	(1479.642)	(1256.091)	(3894.526)	(227.945)	(61.816)	(4837.174)	(2326.294)	(960.237)	(2440.784)	(1284.321)	(1825.747)
9	-0.109	-4668.361	-1883.433	-1199.881	1522.181	1521.293	3.382	-7673.348	-4736.345	-2769.036	872.098	-5696.726
	(0.02)	(1458.316)	(1304.334)	(4218.588)	(293.962)	(61.324)	(5200.79)	(2392.377)	(1006.762)	(2664.452)	(1352.969)	(2026.961)
10	-0.091	-3513.265	-1941.287	-1332.188	1622.97	1600.652	8.369	-4426.94	-3923.442	-2797.646	729.974	-3662.327
	(0.02)	(1579.938)	(1425.361)	(5314.72)	(277.978)	(62.226)	(6218.062)	(3092.774)	(1258.459)	(2718.185)	(1366.275)	(2017.086)
11	-0.124	-4180.601	-1735.851	-1566.553	1597.555	1549.44	30.874	-8204.408	-5251.802	-3264.249	633.845	-6381.975
	(0.021)	(1703.985)	(1446.107)	(5970.219)	(255.787)	(58.049)	(6874.984)	(3410.599)	(1117.895)	(2795.115)	(1444.134)	(2079.38)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.

Table 5: Mental-Cognitive: Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	„ Non-Market „ Income	Total Government Transfers	Disability Relevant Transfers	„ Family „ Transfers	„ Family Total „ Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	-0.022	138.585	1071.846	286.629	211.068	-143.423	354.659	75.209	571.958	1046.629	110.865	491.07
	(0.024)	(1676.387)	(1557.093)	(686.866)	(287.678)	(246.667)	(170.806)	(3776.882)	(1516.632)	(1237.747)	(138.184)	(2957.692)
-3	-0.025	161.642	1823.842	1342.362	-112.476	-467.245	371.114	2572.22	416.256	621.107	-205.478	3839.421
	(0.027)	(1821.698)	(1554.492)	(1127.982)	(271.502)	(252.822)	(153.566)	(4417.099)	(1533.358)	(1161.226)	(124.064)	(4063.184)
-2	-0.015	-1376.547	-848.569	1145.907	84.356	-414.336	496.873	1102.328	-781.082	-325.34	-189.719	3277.499
	(0.026)	(1795.383)	(1662.662)	(987.294)	(319.182)	(258.178)	(176.325)	(4610.755)	(1599.458)	(1197.384)	(113.088)	(4217.998)
-1	-0.012	-1201.994	-888.315	121.9	224.747	-389.783	619.018	173.275	-1412.687	-415.212	-205.228	3653.147
	(0.025)	(1824.706)	(1794.825)	(838.931)	(296.61)	(247.446)	(177.471)	(4792.273)	(1656.854)	(1259.812)	(113.23)	(4478.739)
0	-0.014	-2949.359	-3321.337	393.867	250.879	-236.558	511.382	-1432.658	-1819.537	-1493.391	-163.035	2583.698
	(0.024)	(1842.039)	(1804.479)	(830.291)	(294.491)	(262.586)	(166.646)	(4929.357)	(2047.454)	(1485.419)	(107.388)	(4584.861)
1	-0.071	-5892.798	-4488.747	164.223	682.42	93.693	590.067	-3488.763	-5444.96	-3741.602	17.571	3505.57
	(0.03)	(2254.908)	(2268.2)	(912.803)	(332.963)	(288.884)	(171.102)	(5237.19)	(2039.112)	(1561.773)	(179.976)	(4765.054)
2	-0.082	-5351.647	-3398.434	749.327	486.851	-318.881	813.783	-7970.074	-4472.532	-3025.723	183.453	-1740.526
	(0.035)	(2314.944)	(2082.628)	(1274.53)	(390.271)	(329.068)	(271.692)	(4477.277)	(2137.625)	(1660.739)	(280.843)	(4002.357)
3	-0.073	-5670.7	-4307.293	446.297	846.988	136.218	676.501	-5809.291	-5539.742	-3854.425	288.934	2094.245
	(0.035)	(2417.189)	(2269.843)	(1187.642)	(518.453)	(519.362)	(237.466)	(4463.279)	(2202.487)	(1748.119)	(426.021)	(4156.235)
4	-0.084	-6225.35	-4543.783	-96.712	949.564	174.693	739.803	-6025.95	-7103.568	-5377.58	315.71	3690.193
	(0.042)	(2530.688)	(2424.89)	(1345.774)	(443.149)	(430.676)	(232.529)	(4598.547)	(2380.358)	(1929.037)	(337.138)	(4124.394)
5	-0.079	-6181.044	-5937.279	505.373	1351.743	699.338	621.327	-4877.228	-6732.86	-4135.831	423.098	4987.38
	(0.042)	(2683.891)	(2501.682)	(1501.603)	(644.555)	(650.741)	(258.283)	(5822.805)	(2423.284)	(1971.637)	(550.156)	(5560.21)
6	-0.102	-5182.026	-4358.135	2605.9	852.996	-0.769	794	-3635.922	-4260.417	-2209.592	-0.059	3802.19
	(0.043)	(2612.31)	(2537.45)	(2669.489)	(431.501)	(361.536)	(311.727)	(5155.276)	(2772.771)	(2232.362)	(239.691)	(4902.53)
7	-0.021	-7183.298	-9085.652	-948.412	1418.095	678.265	677.493	-6967.141	-8360.021	-5197.984	-31.455	5455.83
	(0.041)	(3027.239)	(3077.976)	(1190.307)	(556.547)	(544.179)	(310.852)	(5613.047)	(2480.709)	(2125.225)	(211.031)	(5263.912)
8	-0.077	-7496.097	-7066.827	1637.518	1292.881	1085.367	149.494	-9756.873	-8328.385	-4910.202	260.34	2848.504
	(0.05)	(3567.953)	(3604.254)	(1785.308)	(616.348)	(574.885)	(215.984)	(4632.224)	(2847.143)	(2252.244)	(242.045)	(4388.652)
9	-0.168	-8802.158	-3514.304	3365.661	1545.495	1259.637	222.294	-9104.442	-8436.155	-4757.72	556.49	3768.525
	(0.063)	(3852.54)	(2992.497)	(3004.865)	(669.269)	(621.598)	(233.968)	(5991.231)	(3307.894)	(2778.084)	(385.825)	(5073.623)
10	-0.239	-12584.01	-3468.583	6705.797	1528.444	1159.884	231.654	-18011.6	-7478.001	-4138.34	658.352	-7029.566
	(0.072)	(4161.887)	(3421.509)	(3389.648)	(655.317)	(609.852)	(189.517)	(6190.798)	(3843.185)	(3203.658)	(443.151)	(4053.833)
11	-0.289	-16080.99	-4126.197	5380.124	2331.56	2002.871	220.199	-22657.1	-10348.11	-5818.406	781.696	-8204.155
	(0.061)	(4377.811)	(5462.125)	(3535.865)	(747.58)	(741.192)	(183.723)	(7094.598)	(4362.706)	(3896.005)	(471.177)	(5284.828)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.

Table 6: Mental Health: Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	„ Non-Market „ Income	Total Government Transfers	Disability Relevant Transfers	„ Family „ Transfers	„ Family Total „ Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	0.012	4457.713	5302.236	117.022	324.635	93.404	242.758	7025.931	3849.384	3821.492	349.761	2800.873
	(0.034)	(3401.733)	(3522.792)	(1155.672)	(569.774)	(495.827)	(231.67)	(7402.503)	(3346.594)	(2718.821)	(334.12)	(4422.964)
-3	-0.041	485.433	5627.727	3110.252	-50.978	-302.778	274.782	7317.273	1542.983	491.746	-193.797	7123.281
	(0.055)	(3804.94)	(3064.494)	(3102.089)	(513.845)	(475.605)	(201.256)	(8899.96)	(2918.257)	(2185.855)	(237.849)	(8255.458)
-2	-0.027	-957.226	3458.448	1636.171	50.558	-579.804	644.223	3809.425	179.411	33.961	-339.347	3305.471
	(0.052)	(3595.375)	(2900.214)	(2333.426)	(550.421)	(488.634)	(302.347)	(7593.766)	(3093.613)	(2376.375)	(165.576)	(6652.557)
-1	0.022	2050.133	4342.323	870.548	-284.253	-844.832	570.066	6145.241	2313.857	2144.383	-378.81	5387.75
	(0.037)	(3206.882)	(3375.339)	(1800.527)	(478.389)	(367.592)	(272.46)	(6548.154)	(3191.329)	(2409.269)	(158.509)	(6165.498)
0	0.013	2.942	1140.556	2108.667	-105.357	-593.989	495.459	-1335.539	252.613	-43.633	-230.572	429.699
	(0.038)	(2991.49)	(3178.701)	(2104.02)	(478.21)	(418.132)	(273.445)	(6979.021)	(3565.73)	(2464.594)	(188.492)	(6062.545)
1	-0.096	-5073.385	753.557	2473.178	663.507	158.903	471.25	-3866.935	-2997.484	-2163.497	276.882	717.553
	(0.059)	(4238.308)	(4131.422)	(2397.294)	(582.881)	(530.014)	(255.407)	(9135.597)	(4095.156)	(3063.995)	(430.196)	(7560.688)
2	-0.085	-3923.884	1130.774	4314.92	658.397	-33.388	645.546	-3116.249	1615.699	1573.196	827.705	-4681.635
	(0.059)	(4176.464)	(3932.571)	(3509.128)	(770.303)	(800.759)	(268.887)	(7900.29)	(3897.768)	(2926.324)	(732.073)	(5736.588)
3	-0.029	-5083.423	-3450.972	2681.85	1469.597	475.706	929.218	-3112.974	-2364.672	-469.544	1227.565	1135.515
	(0.058)	(3988.467)	(3706.799)	(3257.713)	(1187.208)	(1206.459)	(383.23)	(8416.382)	(3544.754)	(2685.655)	(1167.402)	(7126.51)
4	-0.088	-8820.478	-5280.393	1139.304	1456.965	562.182	826.022	-15169.18	-7611.864	-4940.035	771.128	-4712.361
	(0.066)	(3708.242)	(3510.188)	(3278.787)	(902.486)	(888.146)	(341.865)	(7229.601)	(3695.54)	(2718.564)	(797.34)	(5946.475)
5	-0.061	-9378.786	-8164.563	3212.804	2440.877	2148.049	238.345	-13774.98	-6419.597	-3209.821	1553.233	-4146.668
	(0.058)	(4050.266)	(4643.59)	(3630.419)	(1437.605)	(1450.663)	(343.419)	(8221.354)	(3677.403)	(3087.849)	(1338.031)	(7438.695)
6	-0.152	-8912.473	-5777.486	8019.816	1607.617	631.052	852.774	-5122.071	-1162.246	446.181	376.449	-733.04
	(0.069)	(4191.419)	(4400.824)	(7056.358)	(908.513)	(714.053)	(513.834)	(8841.577)	(5492.795)	(4575.422)	(522.796)	(8495.55)
7	-0.068	-6030.279	-6149.962	-2029.673	2001.787	1180.51	733.463	-4832.127	-5987.98	-2645.613	228.341	5864.31
	(0.094)	(5083.251)	(4675.563)	(1745.022)	(1261.483)	(1195.394)	(438.462)	(10282.67)	(3123.865)	(3009.775)	(334.452)	(9813.778)
8	-0.112	-8729.436	-7383.017	2232.931	2352.792	2104.651	171.082	-16644.8	-9082.027	-5712.727	844.222	-2756.2
	(0.115)	(6355.566)	(6735.697)	(3430.948)	(1228.694)	(1134.29)	(422.998)	(6992.403)	(4748.162)	(3532.489)	(635.884)	(6264.293)
9	-0.239	-13035.27	-3932.927	6681.613	3465.145	3110.568	255.506	-9374.791	-9115.394	-4777.778	1507.42	4776.081
	(0.129)	(6655.436)	(4630.667)	(7302.566)	(1387.102)	(1332.79)	(378.848)	(11514.53)	(5801.624)	(4742.942)	(992.658)	(8315.685)
10	-0.319	-16339.65	-1272.644	10763.89	2821.919	2526.373	138.529	-24228.87	-9135.627	-4512.084	1450.945	-11478.44
	(0.14)	(7594.526)	(6894.287)	(6652.507)	(1393.309)	(1310.148)	(286.207)	(9712.675)	(6585.372)	(5424.303)	(1052.915)	(6673.857)
11	-0.432	-17188.88	10795.57	7626.713	4013.899	3763.138	111.042	-27884.18	-9684.125	-4413.794	1618.249	-12759.76
	(0.121)	(8910.675)	(7284.34)	(7663.188)	(1522.251)	(1509.628)	(321.277)	(10017.5)	(9039.008)	(8142.823)	(1125.244)	(6963.665)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.

Table 7: Exclusively Pain: Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	„ Non-Market „ Income	Total Government Transfers	Disability Relevant Transfers	„ Family „ Transfers	„ Family Total „ Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	-0.006	-1304.733	-982.387	80.26	409.117	369.733	51.122	-5631.28	-1318.159	-340.487	124.683	-4387.267
	(0.015)	(1339.973)	(1465.478)	(439.253)	(214.999)	(188.791)	(79.305)	(3189.832)	(1399.775)	(1121.991)	(109.334)	(2234.524)
-3	-0.021	-1897.697	-1073.035	223.828	-58.951	-74.662	7.777	-7628.274	-3165.476	-2416.761	31.847	-4471.372
	(0.016)	(1390.707)	(1486.748)	(678.297)	(187.377)	(175.165)	(68.914)	(3284.98)	(1459.639)	(1095.975)	(83.754)	(2337.248)
-2	-0.001	-1904.659	-990.685	-369.852	-155.654	-107.61	-47.591	-8015.284	-3428.971	-3100.827	-36.704	-4429.004
	(0.017)	(1417.967)	(1465.573)	(489.997)	(179.572)	(169.439)	(65.421)	(3331.045)	(1471.61)	(1103.251)	(72.753)	(2257.288)
-1	-0.034	-2610.244	-696.539	200.198	187.688	123.969	46.134	-6441.676	-2647.295	-2237.164	56.866	-2715.746
	(0.019)	(1492.315)	(1482.31)	(715.393)	(191.253)	(182.343)	(70.411)	(3120.63)	(1505.021)	(1150.131)	(76.95)	(2348.94)
0	-0.017	-1007.025	1055.477	-470.046	225.796	249.671	-39.539	-4481.666	-1719.464	-1780.972	272.984	-3385.225
	(0.019)	(1561.161)	(1496.009)	(563.492)	(217.077)	(208.146)	(62.483)	(4252.112)	(1520.564)	(1113.974)	(131.527)	(2480.761)
1	-0.02	-2886.425	-1428.426	-354.925	31.847	16.111	-6.831	-6370.233	-3302.739	-2419.599	243.299	-4059.127
	(0.02)	(1636.291)	(1718.818)	(565.912)	(215.298)	(193.354)	(73.779)	(4796.872)	(1616.676)	(1219.793)	(141.053)	(2723.137)
2	-0.03	-2493.331	-1113.444	-1.461	55.187	68.394	-30.995	-5065.564	-2552.273	-1921.392	256.71	-4392.846
	(0.019)	(1696.312)	(1838.481)	(614.19)	(206.606)	(185.634)	(72.448)	(5114.588)	(1672.31)	(1265.36)	(126.506)	(2704.224)
3	-0.055	-3403.003	-214.045	-131.943	28.809	78.058	-57.435	-5012.914	-4285.691	-3088.919	228.147	-2906.019
	(0.022)	(1763.937)	(1711.023)	(621.595)	(206.692)	(188.691)	(74.041)	(6405.626)	(1820.555)	(1430.728)	(132.201)	(3167.828)
4	-0.064	-1251.538	3029.962	-336.259	-128.732	-91.444	-43.703	-123.441	-2799.947	-2201.834	135.995	-1115.875
	(0.022)	(1788.238)	(1611.681)	(666.2)	(215.567)	(198.596)	(77.314)	(8567.847)	(1762.723)	(1357.353)	(105.662)	(3494.506)
5	-0.066	-486.777	3199.368	-369.3	-132.414	-138.33	11.776	-716.502	-1797.636	-1461.868	111.32	-4692.95
	(0.022)	(1888.14)	(1842.234)	(684.643)	(222.382)	(202.594)	(82.125)	(9397.193)	(1851.44)	(1428.919)	(114.094)	(3359.175)
6	-0.058	-1880.204	1407.343	-218.587	183.211	234.242	-40.483	-424.816	-2106.771	-1823.725	71.732	-5216.084
	(0.023)	(1996.834)	(1910.146)	(773.702)	(244.985)	(221.084)	(91.319)	(10615)	(2031.86)	(1516.272)	(136.552)	(3440.799)
7	-0.071	-1350.058	3471.413	-1039.57	-43.255	11.003	-54.48	1089.88	-2503.126	-2142.818	233.346	-5672.61
	(0.026)	(2238.859)	(2011.131)	(770.705)	(229.894)	(204.938)	(103.925)	(12095.9)	(2430.185)	(1798.457)	(151.655)	(3881.936)
8	-0.061	-1644.831	1118.538	-1347.318	-164.386	-139.708	-25.808	1462.103	-2487.183	-2339.583	198.635	-3678.45
	(0.025)	(2312.246)	(2483.751)	(741.144)	(236.652)	(207.738)	(114.856)	(11306.03)	(2497.073)	(1872.234)	(140.976)	(4023.374)
9	-0.083	-3406.375	1176.052	-822.145	835.413	790.929	48.316	1448.288	-2206.76	-1485.692	275.535	-3432.4
	(0.029)	(2425.436)	(2404.532)	(832.466)	(393.593)	(367.885)	(122.883)	(11242.53)	(2558.31)	(1933.928)	(190.648)	(4552.27)
10	-0.038	-381.805	927.891	-1184.275	128.939	193.085	-71.939	11147.34	25.351	-1730.043	170.834	-1185.434
	(0.024)	(2385.777)	(2725.989)	(889.521)	(277.593)	(251.22)	(89.094)	(14524.78)	(2675.652)	(2622.511)	(131.029)	(4116.939)
11	-0.073	-1229.523	1251.455	-1214.397	377.243	306.64	64.516	7150.658	-2172.037	-1923.51	162.165	-3752.383
	(0.026)	(2489.015)	(2841.963)	(851.598)	(314.551)	(264.318)	(105.65)	(16459.02)	(2626.322)	(1961.601)	(137.05)	(4499.118)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.

Table 8: Cognitive Functioning: Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	„ Non-Market „ Income	Total Government Transfers	Disability Relevant Transfers	„ Family „ Transfers	„ Family Total „ Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	-0.04	-1966.082	988.573	402.179	118.726	-270.429	387.959	-3693.09	-1027.931	-388.432	-15.497	-1018.746
	(0.031)	(1839.328)	(1452.328)	(841.302)	(305.613)	(282.214)	(239.155)	(3935.647)	(1619.182)	(1326.937)	(133.913)	(3528.87)
-3	-0.025	-672.774	-348.773	642.838	-139.721	-552.089	428.824	-656.025	-774.19	89.306	-241.634	2006.135
	(0.031)	(1877.945)	(1662.916)	(917.242)	(303.611)	(304.585)	(216.677)	(4352.174)	(1599.15)	(1237.92)	(161.62)	(4031.562)
-2	-0.014	-2074.141	115.343	1007.342	111.439	-342.552	448.378	-1697.29	-1656.628	-863.298	-154.311	2124.3
	(0.03)	(1910.365)	(1741.155)	(981.634)	(368.636)	(310.833)	(216.064)	(5261.659)	(1734.08)	(1278.515)	(162.467)	(4854.836)
-1	-0.032	-3192.434	-2518.667	-149.619	469.962	-170.239	648.31	-4493.04	-3619.023	-2026.44	-156.715	1464.544
	(0.031)	(2037.342)	(2018.286)	(908.625)	(347.448)	(324.692)	(225.625)	(5952.635)	(1755.379)	(1340.55)	(165.32)	(5490.973)
0	-0.032	-4643.807	-3118.383	-231.049	377.384	-114.811	527.454	-3054.276	-3175.964	-2540.466	-175.727	2455.452
	(0.029)	(2185.186)	(2122.481)	(704.581)	(352.303)	(331.179)	(208.287)	(5944.038)	(2465.56)	(1804.952)	(147.709)	(5587.686)
1	-0.062	-6638.983	-5182.692	-845.102	709.309	71.566	658.862	-4842.226	-6914.239	-4735.371	-115.095	3613.176
	(0.032)	(2409.029)	(2117.36)	(709.728)	(369.555)	(326.833)	(221.222)	(5926.457)	(2024.526)	(1572.679)	(162.062)	(5633.009)
2	-0.085	-6457.554	-6725.629	-921.875	437.379	-436.851	913.21	-11949.77	-7899.069	-5655.303	-152.159	-1411.569
	(0.04)	(2479.336)	(2402.222)	(783.72)	(430.853)	(263.376)	(406.468)	(4755.03)	(2145.319)	(1683.823)	(175.627)	(4568.278)
3	-0.099	-6479.404	-5456.51	-497.53	540.186	-26.869	553.124	-8839.243	-7633.454	-5991.253	-177.459	1400.401
	(0.042)	(2757.546)	(2370.751)	(816.028)	(451.735)	(469.825)	(311.069)	(4503.368)	(2505.05)	(1972.959)	(197.168)	(4405.283)
4	-0.086	-5260.933	-4833.266	-643.774	705.148	-9.018	702.524	-2429.396	-7246.171	-6019.37	57.577	7304.946
	(0.049)	(3016.917)	(2831.068)	(1073.2)	(404.893)	(405.317)	(312.122)	(5112.878)	(2775.427)	(2316.55)	(242.976)	(4726.942)
5	-0.094	-4965.681	-3765.251	-948.581	775.284	-95.268	860.984	-2153.885	-7586.168	-5266.481	-264.205	8532.105
	(0.049)	(3146.405)	(2972.329)	(998.033)	(477.362)	(482.127)	(376.011)	(7195.792)	(2816.026)	(2175.915)	(219.519)	(7128.863)
6	-0.089	-4481.618	-4247.026	-80.201	490.581	-307.232	779.962	-5883.407	-7137.46	-4735.404	-290.426	4380.017
	(0.056)	(3222.25)	(2904.405)	(1411.383)	(377.798)	(397.164)	(412.437)	(5394.899)	(2911.304)	(2216.259)	(257.053)	(4901.028)
7	0	-8817.988	-4166.298	-218.235	1117.497	430.943	648.59	-11350.11	-10733.81	-7567.584	-225.648	3105.428
	(0.038)	(3447.006)	(2841.098)	(1547.613)	(566.536)	(626.929)	(450.909)	(5455.394)	(3005.497)	(2431.387)	(290.421)	(5161.437)
8	-0.056	-7640.257	-10632.39	1231.923	784.986	574.141	169.245	-8854.129	-8789.567	-5167.623	-84.029	3712.999
	(0.048)	(4449.752)	(3315.58)	(1951.376)	(596.474)	(566.278)	(238.248)	(6114.909)	(3579.506)	(2820.103)	(103.466)	(5845.709)
9	-0.127	-6953.641	-7696.396	1088.849	368.144	99.019	232.442	-10599.48	-9178.106	-5744.335	-55.268	2580.945
	(0.073)	(4849.488)	(3844.097)	(1973.053)	(604.023)	(522.584)	(268.186)	(6793.133)	(3986.816)	(3272.303)	(117.036)	(6291.584)
10	-0.178	-9770.67	-3631.802	3264.95	542.225	86.902	341.833	-15089.57	-6889.168	-4495.946	64.385	-4753.197
	(0.087)	(5236.537)	(3629.22)	(3068.554)	(593.571)	(498.063)	(259.627)	(8923.608)	(5036.945)	(4070.2)	(81.822)	(5706.079)
11	-0.177	-14788.74	-4215.506	3270.299	981.162	669.549	232.71	-20163.04	-10995.83	-7030.763	172.223	-6115.688
	(0.073)	(5014.675)	(3201.369)	(2913.761)	(746.67)	(641.781)	(203.046)	(10778.16)	(4397.518)	(3586.242)	(156.146)	(8031.837)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.

Table 9: Kinetic Ability : Estimates for Changes in Market and Employment Income Before and After Disability Onset

Year Relative to Onset	Labour Market Participation Rate	Wages, Salaries, and Commissions	WSC for Participants	„ Non-Market „ Income	Total Government Transfers	Disability Relevant Transfers	„ Family „ Transfers	„ Family Total „ Income	Before-Tax Income	After-Tax Income	Non-Taxable Income	Family Members Income
-4	0.021	-724.068	-1573.275	-348.507	-172.321	-144.057	-27.976	-3903.403	-1955.642	-1047.882	4.906	-743.951
	(0.012)	(701.723)	(730.947)	(375.163)	(166.947)	(158.205)	(42.627)	(1830.634)	(672.517)	(535.194)	(106.177)	(1728.89)
-3	0.012	285.095	-167.107	-233.415	-95.268	-84.111	0.182	-2947.032	-972.771	-70.865	-15.783	-730.58
	(0.014)	(798.134)	(844.476)	(479.491)	(193.721)	(184.079)	(47.68)	(1686.838)	(786.415)	(632.439)	(119.52)	(1412.623)
-2	0.021	-212.217	-550.236	-578.36	-290.717	-252.852	-36.097	-4396.248	-1902.532	-1149.3	-187.31	-1271.056
	(0.014)	(880.469)	(915.112)	(349.066)	(189.218)	(179.127)	(48.442)	(1865.064)	(858.906)	(651.053)	(96.135)	(1496.794)
-1	0.012	-526.63	-599.723	-797.854	-248.408	-215.239	-25.611	-3059.741	-2871.201	-1784.792	-208.903	1593.819
	(0.014)	(928.026)	(926.626)	(359.003)	(221.147)	(210.083)	(54.321)	(1967.452)	(891.094)	(682.736)	(148.927)	(1621.135)
0	0.005	-1080.258	-848.65	-759.934	-6.597	-25.588	20.245	-5112.373	-3186.68	-1897.42	-82.721	-813.516
	(0.016)	(947.708)	(936.141)	(389.731)	(243.296)	(231.001)	(61.54)	(2114.85)	(885.04)	(681.059)	(171.603)	(1835.09)
1	-0.007	-3044.238	-2656.996	-207.593	365.253	371.112	-7.366	-5834.505	-4301.463	-2655.264	198.989	-823.967
	(0.016)	(1036.987)	(1058.909)	(536.19)	(257.123)	(248.279)	(53.482)	(2313.692)	(974.849)	(775.942)	(190.289)	(1892.27)
2	-0.036	-4016.841	-3096.016	-536.219	779.409	802.664	-31.297	-8139.523	-5203.804	-3317.328	502.434	-1850.039
	(0.018)	(1062.482)	(1101.781)	(433.855)	(302.937)	(293.151)	(55.154)	(2042.606)	(979.41)	(775.323)	(235.31)	(1705.687)
3	-0.06	-4693.937	-3132.433	-560.009	1045.492	1036.913	10.713	-8497.426	-5217.606	-3094.544	727.481	-1925.249
	(0.019)	(1089.992)	(1107.099)	(445.424)	(277.824)	(258.703)	(80.729)	(2143.458)	(979.058)	(788.16)	(219.541)	(1774.538)
4	-0.092	-5050.82	-2817.79	-828.535	1065.41	1123.236	-54.903	-8836.14	-6116.08	-3940.163	654.258	-1381.995
	(0.021)	(1124.744)	(1138.356)	(417.504)	(287.392)	(274.666)	(62.675)	(2449.576)	(1041.56)	(843.462)	(207.28)	(2053.733)
5	-0.123	-6042.952	-2994.104	-942.388	1437.161	1471.341	-37.788	-10634.63	-6242.722	-3985.57	837.605	-4217.969
	(0.022)	(1222.162)	(1356.41)	(425.488)	(306.546)	(298.323)	(60.605)	(2902.082)	(1120.975)	(887.167)	(229.296)	(2092.622)
6	-0.121	-5563.104	-2725.911	-922.365	1777.174	1816.872	-32.5	-12288.35	-6230.359	-3924.928	991.957	-4598.228
	(0.023)	(1341.642)	(1516.115)	(475.7)	(320.145)	(310.712)	(58.678)	(2916.282)	(1201.484)	(948.558)	(254.658)	(2581.694)
7	-0.117	-5648.411	-3206.643	-1056.906	1615.311	1626.547	-21.518	-11806	-6882.742	-4478.727	745.588	-2886.45
	(0.024)	(1464.277)	(1703.918)	(560.544)	(295.089)	(284.936)	(69.824)	(3390.53)	(1346.145)	(1036.832)	(207.129)	(2981.731)
8	-0.118	-5193.471	-3158.88	-1402.234	1641.607	1638.453	0.582	-13966.85	-6358.125	-3759.994	892.674	-5440.797
	(0.025)	(1463.272)	(1738.958)	(480.868)	(329.612)	(320.093)	(67.408)	(2885.812)	(1322.511)	(1026.802)	(226.09)	(2478.204)
9	-0.123	-5333.086	-3534.198	-1413.584	1872.093	1916.778	-43.478	-12467.04	-6162.2	-3554.847	1197.78	-6507.728
	(0.026)	(1527.164)	(1749.299)	(536.589)	(405.332)	(396.933)	(61.284)	(3958.58)	(1381.994)	(1090.978)	(301.696)	(2657.431)
10	-0.12	-5126.044	-3350.515	-1411.195	2421.483	2371.192	31.916	-12978.71	-6111.533	-3422.682	1028.356	-4700.974
	(0.027)	(1594.55)	(1801.865)	(568.311)	(398.276)	(395.779)	(80.396)	(3285.704)	(1506.77)	(1204.921)	(239.108)	(2792.219)
11	-0.152	-5744.97	-3295.309	-1749.127	2224.855	2209.71	-9.161	-16551.81	-6975.96	-4074.296	869.56	-7422.203
	(0.027)	(1714.146)	(2031.689)	(571.504)	(362.761)	(355.682)	(64.041)	(3114.73)	(1625.561)	(1284.278)	(244.386)	(2553.797)

Note: reported numbers are from estimate coefficients from the time of onset indicator variables in a linear two way fixed effect regression for levels. Standard errors are clustered by person and reported in brackets below the estimates.