

APPENDIX A: THE MEASUREMENT OF HEALTH ACROSS DATASETS

Table A.1: Question Wording for Health Variables

<i>National Longitudinal Study of Youth 1997</i>	
Physical limitations	What conditions have you been diagnosed with? (Select all that apply) [Asthma, heart condition, anemia, diabetes, cancer, epilepsy, HIV/AIDS, other STD, other (specify)]
Depression	<p>If YES: Does the [chronic condition] currently limit your activities?</p> <p>The next questions ask about how often you felt things during the past month. For each statement, please indicate whether you have felt this way all, most, some or none of the time. How much of the time during the last month have you...</p> <p> Been a very nervous person?</p> <p> Felt calm and peaceful?</p> <p> Felt downhearted and blue?</p> <p> Been a happy person?</p> <p> Felt so down in the dumps that nothing could cheer you up?</p>
Self-rated health status	Now I would like to ask you some questions about your health. In general, how is your health?
<i>Panel Study of Income Dynamics</i>	
Physical limitations	Has a doctor or other health professional ever told you that you have or had [asthma, breast cancer, cervical cancer, colon cancers, lung cancer, lymphoma, leukemia, melanoma, other cancer, ovarian cancer, prostate cancer, skin cancer, uterine cancer, type I diabetes, type II diabetes, high blood pressure, other conditions (seizures, bone disorder/arthritis/scoliosis, kidney disease, coronary problem, anemia, allergies, other)]?
Depression	<p>If YES: How much does this (condition/problem) limit your normal daily activities?</p> <p>During the past 30 days, how often did you feel... (Would you say: All of the time, most of the time, some of the time, a little of the time, or none of the time?)</p> <p> Everything was an effort?</p> <p> Hopelessness?</p> <p> Nervousness?</p> <p> Restlessness?</p> <p> Sadness?</p> <p> Worthless?</p>
Self-rated health status	Would you say your health in general is excellent, very good, good, fair, or poor?

APPENDIX B: REPLICATION WITH THE PANEL STUDY OF INCOME DYNAMICS

We replicate the analyses using the Panel Study of Income Dynamics (PSID). The PSID is a longitudinal survey of 5,000 households and encompasses over 18,000 individuals. Relevant to this study is the Transition to Adulthood subsample in which the children of respondents completed extensive surveys once they entered late adolescence and early adulthood. Most importantly are questions about voter turnout in the 2004, 2006, 2008, and 2010 elections and questions about health status, including physical limitations from chronic conditions, depression, and overall well-being. The rates of voter turnout are shown in Figure B.1.

[Insert Figure B.1 about here]

The PSID measures of health are similar to those from the NLSY97. Physical limitation is measured by asking respondents how certain health conditions (asthma, blood pressure, cancer, diabetes, etc.) limit their activity. Responses to each question range from not at all or never diagnosed (0) to a lot (3). Responses across these five conditions were averaged so that a 3 indicates a lot of limitations across all health conditions while a 0 indicates no limitations or diagnosis across all health conditions (mean = 0.04, SD = 0.13). Depression is measured using six items that asked respondents how often they experienced a depressive symptom (e.g., “sad”) during the past month, with response options ranging from none of the time to all of the time. These six items have a high degree of reliability ($r = 0.77$) and were combined into a single value by averaging across items (mean = 0.83, SD = 0.61). Overall well-being is measured using SRHS with response options ranging from poor (3) to excellent/very good (0) (mean = 0.44, SD = 0.66). All measures of health are coded so that higher values indicate poorer values of health. Exact question wording for each health measure is reported in the bottom panel of Table A.1 of Appendix A.

Control variables include race (white is omitted category), gender (1=female), marital status (1= married), parenthood status (1= parent), mobility status (1 = moved in past year), economic status (measured as family income), and education levels of respondent and respondent's parent (measured as grades completed and, for parents, averaged across mother and father). Finally, we include a control variable for parental political participation, which is measured by asking how recently the head of household voted in elections (prior to 1972, the interview year when the question was asked). Respondents could select within the last year (1), a year or two ago (2), three to five years ago (3), or more than five years ago or never (4). The modeling strategy is identical to the approach used in the NLSY97 analyses. We report the results in three sets that correspond to the analyses of just the health measures, the interactions between health and parental education, and the interactions between health and family income. Within each set of results, Model 1 includes only physical limitation, Model 2 includes only depression, Model 3, includes only SRHS, and Model 4 includes all measures of health. We also report a baseline model in the first set of results which excludes all measures of health.

The results from the first set of PSID analyses are reported in Table B.1 (corresponding to Table 1 in the text) and largely corroborate the findings from the NLSY97 analysis. In Model 5, physical limitations do not exert a statistically significant effect on either starting levels or on trajectory. This finding is consistent with the NLSY97 results. Depression does not affect starting levels but it does affect trajectory, with individuals who experience more depressive symptoms less likely to have a trajectory that moves them from a non-voting to a voting status. This finding is also consistent with the NLSY97 results. Finally, SRHS has a statistically significant effect on starting levels such that those in poor/fair health are less likely to participate

than those with either good or very good/excellent health. This finding is also consistent with the NLSY97 results.

[Insert Table B.1 about here]

The results with the health-parent education interactions are reported in Table B.2 and present some findings that are inconsistent with those from the NLSY97. Specifically, we observe no statistically significant interaction terms, which comports with the NLSY97 findings on physical limitations and depression, but contrast to the findings on SRHS. This inconsistency raises questions about the robustness of the NLSY97 SRHS-parental education findings.

[Insert Table B.2 about here]

The results with the health-family income interactions, which are reported in Table B.3, are fully consistent with the corresponding NLSY97 findings. In none of the models are the interaction terms statistically significant, thus reinforcing the idea the effect of health is not conditioned on economic background.

[Insert Table B.3 about here]

Table B.1: The analysis of health and turnout in the PSID replicates the NLSY79 findings.

	Base- Line	Model 1	Model 2	Model 3	Model 4
<i>Health: Initial Probability</i>					
Physical limitations		0.152 (.258)			0.292 (.259)
Depression			-0.181 (.182)		-0.074 (.192)
Self-rated health status				-0.291 * (.173)	-0.306 * (.181)
<i>Health: Time-Varying</i>					
Physical limitations		-0.051 (.214)			0.051 (.217)
Depression			-0.415 ** (.153)		-0.399 ** (.156)
Self-rated health status				-0.227 (.142)	-0.184 (.144)
<i>Controls: Initial Probability</i>					
Black	1.314 ** (.221)	1.311 ** (.223)	1.262 ** (.218)	1.340 ** (.222)	1.278 ** (.221)
Other	1.759 ** (.884)	1.752 ** (.891)	1.725 ** (.879)	1.767 ** (.890)	1.691 * (.887)
Female	0.345 * (.204)	0.351 * (.206)	0.390 * (.202)	0.413 ** (.206)	0.441 ** (.205)
Parental education	0.157 ** (.060)	0.159 ** (.060)	0.158 ** (.059)	0.150 ** (.060)	0.152 ** (.060)
Family income	-0.007 (.011)	-0.008 (.012)	-0.010 (.011)	-0.006 (.012)	-0.008 (.012)

	Parental vote	-0.163	*	-0.159	*	-0.160	*	-0.150	*	-0.140
		(.090)		(.091)		(.089)		(.091)		(.090)
	Married	-0.031		-0.036		0.002		-0.080		-0.054
		(.413)		(.415)		(.405)		(.415)		(.410)
	Parenthood	-0.644		-0.623		-0.558		-0.654		-0.505
		(.588)		(.593)		(.579)		(.591)		(.586)
	Migration	-0.420	*	-0.435	*	-0.460	*	-0.446	*	-0.500
		(.237)		(.240)		(.235)		(.239)		(.239)
	<i>Controls: Time-Varying</i>									
	Education	0.347	**	0.349	**	0.323	**	0.321	**	0.308
		(.055)		(.056)		(.055)		(.056)		(.056)
	Married	-0.370	**	-0.371	**	-0.348	**	-0.359	**	0.342
		(.150)		(.151)		(.148)		(.150)		(.149)
	Parenthood	-0.002		-0.004		0.003		0.003		-0.005
		(.284)		(.286)		(.283)		(.286)		(.285)
	Migration	-0.473	**	-0.467	**	-0.467	**	-0.482	**	-0.470
		(.167)		(.168)		(.166)		(.168)		(.168)
	<i>Other</i>									
	Election	0.504	**	0.508	**	0.501	**	0.520	**	0.515
		(.081)		(.082)		(.081)		(.082)		(.082)
	Midterm	-2.439	**	-2.472	**	-2.437	**	-2.446	**	-2.473
		(.162)		(.164)		(.163)		(.163)		(.165)
	Constant	-0.209		-0.230		-0.281		0.080		-0.083
		(.846)		(.856)		(.832)		(.857)		(.851)
	<i>Variance Components</i>									
	Intercept	5.687		5.892		5.500		5.720		5.767
	Election	0.407		0.426		0.389		0.415		0.418
	<i>Observations</i>	1,849		1,846		1,848		1,846		1,843

<i>Cases</i>	591	590	591	589	588
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** p < 0.05, * p < 0.10

Note: Data come from the Panel Study of Income Dynamics. Cell entries are coefficients from a multi-level logistic regression; standard errors are listed in parentheses.

Table B.2: Parental education does not condition the effect of health on turnout as it does in the NLSY79.

	Model 1	Model 2	Model 3	Model 4
<i>Health: Initial Probability</i>				
Physical limitations	0.228 (.310)			0.403 (.072)
Limitations X parental education	-0.066 (.137)			-0.102 (.137)
Depression		-0.227 (.200)		-0.150 (.212)
Depression X parental education		0.057 (.107)		0.093 (.115)
Self-rated health status			-0.264 (.196)	-0.260 (.206)
SRHS X parental education			-0.027 (.095)	-0.044 (.098)
<i>Health: Time-Varying</i>				
Physical limitations	-0.033 (.261)			0.072 (.264)
Limitations X parental education	-0.017 (.116)			-0.015 (.117)
Depression		-0.492 ** (.171)		-0.467 ** (.174)
Depression X parental education		0.079 (.082)		0.066 (.083)
Self-rated health status			-0.226 (.157)	-0.198 (.159)
SRHS X parental education			0.001	0.008

					(.074)	(.073)		
<i>Controls: Initial Probability</i>								
Black	1.326	**	1.245	**	1.344	**	1.286	**
	(.224)		(.217)		(.222)		(.222)	
Other	1.758	**	1.746	**	1.773	**	1.742	*
	(.893)		(.874)		(.894)		(.891)	
Female	0.349	*	0.410	**	0.410	**	0.459	**
	(.206)		(.202)		(.206)		(.206)	
Parental education	0.186	**	0.163	**	0.160	**	0.210	**
	(.072)		(.059)		(.072)		(.080)	
Family income	-0.007		-0.010		-0.005		-0.007	
	(.012)		(.011)		(.012)		(.012)	
Parental vote	-0.162	*	-0.163	*	-0.151	*	-0.150	*
	(.091)		(.089)		(.091)		(.090)	
Married	-0.042		0.025		-0.090		-0.050	
	(.415)		(.404)		(.416)		(.409)	
Parenthood	-0.626		-0.552		-0.653		-0.515	
	(.594)		(.578)		(.592)		(.586)	
Migration	-0.435	*	-0.462	**	-0.444	*	-0.503	**
	(.240)		(.235)		(.239)		(.240)	
<i>Controls: Time-Varying</i>								
Education	0.349	**	0.322	**	0.319	**	0.305	**
	(.056)		(.055)		(.056)		(.056)	
Married	-0.374	**	-0.349	**	-0.360	**	-0.347	**
	(.151)		(.148)		(.151)		(.150)	
Parenthood	-0.010		-0.009		0.004		-0.016	
	(.287)		(.283)		(.286)		(.287)	
Migration	-0.468	**	-0.460	**	-0.483	**	-0.466	**
	(.168)		(.166)		(.168)		(.168)	

<i>Other</i>							
	Election	0.507 **	0.497 **	0.520 **	0.512 **		
		(.082)	(.080)	(.082)	(.082)		
	Midterm	-2.473 **	-2.429 **	-2.446 **	-2.467 **		
		(.164)	(.162)	(.163)	(.165)		
	Constant	-0.247	-0.326	0.085	-0.148		
		(.856)	(.829)	(.857)	(.847)		
<i>Variance Components</i>							
	Intercept	5.851	5.379	5.729	5.586		
	Election	0.428	0.382	0.416	0.414		
<i>Observations</i>		1,846	1,848	1,846	1,843		
<i>Cases</i>		590	591	589	588		

** p < 0.05, * p < 0.10

Note: Data come from the Panel Study of Income Dynamics. Cell entries are coefficients from a multi-level logistic regression; standard errors are listed in parentheses.

Table B.3: Family income does not condition the effect of health on turnout.

	Model 1	Model 2	Model 3	Model 4
<i>Health: Initial Probability</i>				
Physical limitations	0.153 (.259)			0.278 (.261)
Limitations X family income	0.023 (.038)			0.043 (.042)
Depression		-0.204 (.184)		-0.076 (.195)
Depression X family income		-0.026 (.027)		-0.015 (.029)
Self-rated health status			-0.288 * (.174)	-0.306 * (.183)
SRHS X family income			-0.010 (.017)	-0.019 (.022)
<i>Health: Time-Varying</i>				
Physical limitations	-0.058 (.215)			0.055 (.218)
Limitations X family income	-0.013 (.036)			-0.003 (.037)
Depression		-0.410 ** (.155)		-0.408 ** (.159)
Depression X family income		0.003 (.019)		-0.007 (.022)
Self-rated health status			-0.221 (.143)	-0.177 (.146)
SRHS X family income			0.001	-0.001

					(.015)		(.015)	
<i>Controls: Initial Probability</i>								
Black	1.307	**	1.283	**	1.358	**	1.319	**
	(.223)		(.219)		(.224)		(.225)	
Other	1.774	**	1.701	*	1.757	**	1.719	*
	(.891)		(.884)		(.892)		(.897)	
Female	0.354	*	0.403	**	0.415	**	0.458	**
	(.206)		(.203)		(.206)		(.207)	
Parental education	0.160	**	0.157	**	0.144	**	0.148	**
	(.061)		(.059)		(.061)		(.061)	
Family income	-0.012		-0.007		0.005		-0.002	
	(.015)		(.012)		(.020)		(.022)	
Parental vote	-0.158	*	-0.159	*	-0.151	*	-0.140	
	(.091)		(.089)		(.091)		(.091)	
Married	-0.031		-0.017		-0.093		-0.078	
	(.416)		(.407)		(.415)		(.414)	
Parenthood	-0.620		-0.566		-0.646		-0.514	
	(.595)		(.580)		(.591)		(.591)	
Migration	-0.433	*	-0.450	*	-0.428	*	-0.453	*
	(.241)		(.236)		(.241)		(.244)	
<i>Controls: Time-Varying</i>								
Education	0.352	**	0.321	**	0.315	**	0.304	**
	(.056)		(.055)		(.056)		(.057)	
Married	-0.371	**	-0.349	**	-0.358	**	-0.345	**
	(.151)		(.148)		(.150)		(.150)	
Parenthood	-0.013		-0.001		0.002		-0.020	
	(.287)		(.283)		(.285)		(.287)	
Migration	-0.463	**	-0.468	**	-0.480	**	-0.461	**
	(.168)		(.166)		(.168)		(.169)	

<i>Other</i>									
	Election	0.506	**	0.504	**	0.524	**	0.520	**
		(.082)		(.081)		(.082)		(.083)	
	Midterm	-2.474	**	-2.441	**	-2.444	**	-2.485	**
		(.164)		(.163)		(.163)		(.165)	
	Constant	-0.240		-0.271		0.084		-0.083	
		(.858)		(.835)		(.857)		(.859)	
<i>Variance Components</i>									
	Intercept	5.882		5.606		5.779		5.960	
	Election	0.429		0.401		0.417		0.442	
<i>Observations</i>		1,846		1,848		1,846		1,843	
<i>Cases</i>		590		591		589		588	

** p < 0.05, * p < 0.10

Note: Data come from the Panel Study of Income Dynamics. Cell entries are coefficients from a multi-level logistic regression; standard errors are listed in parentheses.

Figure B.1: Reported Turnout in Each Election, PSID

