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Daniel S. Hamermesh

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ABSTRACT

Using diaries covering 25-61-year-olds in the American Time Use Survey 2009-24, this study demonstrates that temporal variety—doing more different things in a day—is income superior. Linking these data to underlying Current Population Surveys, propensity-score models show that people stating that they have a mobility/physical disability in each of two consecutive annual surveys undertake almost 4 percent fewer activities per day than other, demographically identical individuals. They also earn about 50 percent less. Combining the estimated impact of income on temporal variety with the implied reductions in variety incurred by those with the disability yields a monetary equivalent of lost variety exceeding that of lost earnings. Measuring disability status only once yields much smaller estimated shortfalls in temporal variety and earnings. That suggests that one-time self-reports of disabilities, which underlie the bulk of studies on the impacts of disabilities on earnings, also underestimate long-term effects.

Daniel S. Hamermesh
University of Texas at Austin
Department of Economics
and IZA
and also NBER
hamermes@eco.utexas.edu

…if he [a person injured in a fight] rise and walk abroad …, he [the assailant] shall pay for the loss of his time [lost work] and shall cause him to be thoroughly healed. *Genesis* 21:19.

I. Introduction and Motivation

With a few exceptions (Ireland, 2001; Strauss *et al*., 2001), economists interested in the effect of disabilities on economic losses have paid no attention to losses outside the labor market; and none has conducted any empirical analysis or attempted to define and measure these losses. As the epigraph shows, this neglect goes back over 2000 years (although losses due to pain and suffering were recognized in the rabbinic literature).

The same neglect is true more generally: An immense literature has considered the monetary costs of a disability, with research examining both physical and mental disabilities. (DeLeire, 2000; Charles, 2003; Deshpande *et al*., 2021, are just a few of the former, while Bartel and Taubman, 1986, and Germinario *et al*., 2022, are examples of the latter.) To the extent that a disability has resulted from an accident, be it in a workplace, a public place, or at home, it can generate a tort action for which the damages, medical, lost earnings, and pain and suffering, can be assessed. The literature has entirely ignored the possible losses arising because a disability constrains people's choices about how they spend their time. Given that more time allows people to optimize their goods consumption, a restriction on time use generated by an accident or otherwise that produces a loss in utility is a tort that might be valued monetarily.

The purposes here are twofold: First, to analyze how incurring a disability alters how people use their non-market time. Although the literature is sparse, a few studies have considered the ways in which a person with a disability spends time differently. It compared time use between these two groups of people (Pagan-Rodriguez, 2013; Flores *et al*, 2015; Enam *et al*, 2018), and noticed that, in addition to differences in work time, the two groups differ in the amount of time devoted to various non-work activities. Hamermesh and Myck (2025) went a step further, examining the overall pattern of time use in samples of older (65+) non-workers in seven countries, demonstrating that those reporting a disability engaged in fewer different activities in all countries.

Here I extend this last study in several ways. First, and most important, the major focus on disability in the literature, and in the courts, is on losses incurred by people who had been working for pay before incurring the disability. I thus examine patterns of time use in the age groups most likely to be in the U.S. labor force, people ages 25-61, studying how time is spent differently by working people who have suffered monetary losses resulting from having a disability. Second, while a disability may develop over time, in many cases it is the result of a discrete event, be it an accident or a developing physical problem. I attempt to tease out the dynamic implications of such a disability for time use, recognizing that it may take people time to adjust to the constraints imposed by a new disability.[1]

The second purpose is to consider how to measure a disability. While the literature typically indicates disability status at one point in time, I show that such measurements often reflect either reporting errors or shorter-run impacts. Measuring disability status at points one year apart yields a better (and larger) estimate of the impact of whatever produced the disability and is thus appropriate if we wish to calculate the total damages that have resulted. This finding casts some doubt on most of the disability literature while also indicating a path for evaluating damages when a disability is incurred.

Section II motivates the central idea—that the variety of activities which a person undertakes is constrained when s/he develops a disability, while Section III demonstrates the relationship between temporal variety and income. Section IV discusses the data on disability and examines their relationship to temporal variety at a point in time. Section V, the central part of the study, delves more deeply into the data, the measurement of a disability, and its effects over time. Section VI considers the same questions but analyzes the impacts on earnings, while Section VII calculates the joint monetary costs of the time constraint and the earnings loss.

[1] I do not examine the underlying causes for any of the impacts found. Ameri *et al*. (2018) and Kruse *et al*. (2018) do so for earnings losses. Given the novelty of looking at the impact of a disability on time use outside the labor market, such an examination has obviously not been done to explain the "why" of any impacts on non-market time use.

II. Theoretical Motivation

I motivate the empirical analysis with a brief theoretical description of the role of disability in time use. Let Person 1 have no physical disability. S/he maximizes utility over all possible activities A_j, j=1, …, Z, with Z a very large number, by choosing some activities in which to engage, others not to spend any time on. Thus her/his utility function consists of:

(1) $U = U(A_{1,1},\ldots, A_{M,1}, A_{M+1,1}., ..A_{Z,1})$,

with the arguments of U indicating the time spent on each activity. Assume that Person 1 maximizes (1) by choosing to spend time on activities 1 through M, but not to engage in activities M+1 through Z. Following a hierarchy of needs (Maslow, 1954), A_1 is the most needed, and the activities descend in importance from there. Person 1's utility-maximizing choices yield:

(2) $U_1(A_{1,1}) = ... = U_M(A_{M,1}) > U_{M+1}(A_{M+1,1} = 0) \geq \ldots \geq U_Z(A_{Z,1} = 0)$,

with $[A_{1,1} + ...+ A_{M,1}] = 1440$, the daily time endowment in minutes, with the second subscript indexing Person 1. Time spent on each activity that is undertaken yields identical satisfaction at the margin; and that extra satisfaction exceeds the satisfaction from the first minute spent on any other activity, A_{M+1} through A_Z, would yield. I thus observe the person engaging in M different activities, enjoying variety in life indexed as V(M).

We can think in several different ways about how Person 2, who has some physical disability but is otherwise identical to Person 1, chooses to spend time. One possibility is that some activities entail switching costs, which reduce the number of different uses of time in which the person will engage. Another, which can be examined empirically, is that some activities become more difficult than others for Person 2, creating a vector $1 > \theta_j \geq 0$, j=1, …, Z, multiplying each argument in U, thus reducing utility differentially from time spent in different activities. This will lead Person 2 to abandon those activities in which θ_j is closer to zero and to concentrate on a smaller set of activities than Person 1.

This assumption yields the additional prediction that time spent in Person 2's activities, a subset of Person 1's, might be disproportionate from what Person 1 spends in the same activities. Person 2 thus maximizes utility by engaging in only K activities, K<M, setting:

(3) $U_1(\theta_1 A_{1,2}) = ... = U_K(\theta_K A_{K,2}) > U_{K+1}(\theta_{K+1} A_{K+1,2} = 0) \geq U_M(\theta_M A_{M,2} = 0) \geq \ldots \geq U_Z(A_{Z,2} = 0)$,

with $[A_{1,2} + ...+ A_{K,2}] = 1440$. It is possible that the θ_j on some activities in the set [M+1, Z] are larger than those on some of the A_M activities that were in the set [1, M]. We would then observe these other activities being undertaken; but, in general, we would expect that the total number of activities will still be less than those of Person 1.

By raising the cost of beginning new activities, or by making some activities relatively more difficult, the disability makes activities K+1 through M no longer worth doing. Person 2 will engage in K < M activities, enjoying variety V(K) < V(M). S/he will spend 1440/K minutes on average on the activities undertaken, more time per activity than the 1440/M minutes spent by Person 1. The average person with a disability will not simply choose a different set of activities from those undertaken by Person 1 but will also choose to engage in fewer different activities.

III. Income and Variety in Time Use

The American Time Use Survey (ATUS) has collected one-day time diaries from roughly 1,000 randomly selected U.S. households per month starting in 2003, with one randomly chosen adult (age 15+) in each household completing a diary describing her/his activities during the previous day (Hamermesh *et al*., 2005). The person's responses, listing the minute when each activity began and when it ended, are coded into over 400 categories of activity. Most of these are not performed by most respondents, and examining variety across all of them would be both awkward and not informative (obviously, with each person having the same total time available each day—1440 minutes—total time spent in activities cannot differ in the sample, so that one of the implications of the discussion above could not be tested).

I include all adult respondents ages 25-61 (to avoid using most full-time students and older people who could be retired) and examine their time use in each ATUS category that does not involve paid work and commuting time, etc. I use ATUS diaries from 2009 through 2024, which provide data on disability status from 2008 onward, excluding the main Covid year 2020. In these 15 years 99,939 adults in this age group completed usable diaries.

Twenty-five categories of non-work time take at least 5 minutes of the average adult's day; another 21 categories show averages of between 2 and 4.99 minutes/day; and another set of 25 categories averages 1-1.99 minutes/day. I thus focus on time use in three groups of activities—the 25, 46, and 71 most frequent activities. The activities in these three groups are listed in Appendix Table 1. Along with work time they total just over 23 hours/day, with the remaining hour scattered among over 300 other non-work categories of time use. The measures of temporal variety used here are thus the respondent's number of activities in each of these successively broader sets of categories, denoted by V(25), V(46), and V(71).

The ATUS contains individuals who have recently (within 2-5 months) completed their eighth month in the Current Population Survey (CPS). In their fifth month in the CPS they responded to questions that allow creating a measure of disability.[2] They answered whether they had a difficulty in: Mobility; physical activity; hearing; vision; remembering; and/or personal care. I define the person as having a mobility/physical disability if s/he reports having either of the first two difficulties, and as having another disability if s/he does not but does report one or more of the other four difficulties. Throughout most of this study I focus on mobility/physical disabilities.

Gronau and Hamermesh (2008) showed for several countries that temporal variety is positively related to additional education. To take this one step further, and to demonstrate the effect of income on time use, Table 1 shows the results of regressions of V(25), V(46), and V(71) in relation to the respondent's household income.[3] Each regression includes an indicator of whether the diary was kept on a weekday or not; and the second regression in each of the three pairs also includes a measure of time spent in paid work on the diary day. Only those respondents with no mobility/physical difficulty are included.[4]

[2] 13 percent, 69 percent, 17 percent, and 1 percent of the sample completed their time diaries 2, 3, 4, or 5 months after their final CPS interview (CPS Month 8).

[3] Income is given in the CPS in 15 closed intervals and an open top-coded interval. I created a continuous measure of income using the mid-points of each closed interval and 1.5 times the top-coded amount of $150,000. 15 percent of the usable respondents had top-coded incomes.

[4] Here and throughout this study I use sampling weights. The weights have the dual purpose of accounting for non-random responses in relation to demographics and for the fact that there are roughly 2.5 weekend diaries for each weekday diary.

The number of activities undertaken by the average adult with no disability is 7.2, 8.5, and 9.3 in the three groups of activities respectively: Most people do not even engage in most of the activities in any of the three categories. The estimates show that temporal variety is significantly superior in each regression.[5] With the standard deviation of income equaling $68,192 in this sample, V(25) of a person with income one standard deviation below the mean is 0.28 below (about 4 percent fewer activities) that of someone whose income is one standard deviation above the mean. Similar comparisons for V(46) and (V71) show differences of 0.33 (about 4 percent) and 0.42 (about 5 percent) fewer activities.[6]

With more time spent in paid work, a person has less remaining time in which to enjoy a variety of uses of non-market time. Since income and work time are positively related, the second regression in each pair shows that, accounting for work time, the estimated impacts of income on temporal variety are greater by roughly 50 percent. The lower estimates—without workhours—are probably more reliable, since work time is clearly exogenous with respect work time and to the likely presence of a disability/health limitation, even among those who did not indicate having a mobility/physical difficulty. Overall, however, the results demonstrate the superiority of temporal variety.

IV. The Cross-section Relationship of Variety to Disability

I first consider the differences in time use between those who do not or do indicate having a mobility/physical disability in CPS Month 5, concentrating on the total amount of time spent in each of the three categories of activity, and on the number of different activities undertaken in each category. The top part of Table 2 presents statistics describing measures of time (in hours/week) spent in market work both at the time the ATUS diary is completed and in the individual's first month in the CPS (averaging 18 months

[5] The appropriate Poisson estimates are slightly more significant statistically than the OLS estimates in the Table. Since they are more difficult to interpret, I do not report them here.

[6] Adding a quadratic in income to these regressions shows that the marginal impact is declining in additional income. The marginal impact of an additional $1,000 at the mean of income produces 0.0031 additional activities among V(25), 0.0033 among V(46), and 0.0041 among V(71)—approximately half the impact at the lowest incomes in the sample. The marginal impact at the maximum income is almost identically zero. Unsurprisingly given this result, deleting top-coded respondents and re-estimating the models in Table 1 yields larger impacts.

before). Examining these rows, those with the disability unsurprisingly engage in much less market work than those without, 26.1 fewer hours per week, about 223 minutes (3.7 hours) per average day less. Only 21 percent of those stating that they have a mobility/physical disability worked during the diary week, while 79 percent without the disability worked. Noticeably too, for both disability statuses the estimated work time implied by the one-day time diaries is remarkably close to the retrospective report of usual weekly work time—within two standard errors (even with the huge sample sizes).

The right side of the upper panel in Table 2 lists the same self-reports of usual weekly hours and employment status in the two groups, but does so using data from their first appearance in the CPS. The crucial fact to note is that, even 18 months before the ATUS, and 12 months before the report on disability in CPS Month 5 that is used to classify respondents in this table, those who report having a disability performed much less market work than those who reported no disability.

The bottom part of Table 2 shows that, in each of the three aggregates of activities, those with a disability spend more time than others: T(25), T(46), and T(71), total time in the activities, is greater among those with a disability. In some ways this difference is not surprising, given that they engage in fewer hours of market work on a representative day.[7] On the other hand, with more non-market time individuals with a disability could have spread that time over more different activities. They do not: Their (additional) time is spent on fewer activities than that of people with no disability. Despite having those extra 3.7 hours per day in which to engage in leisure, personal care, and home production, people with a mobility/physical limitation undertake roughly 0.5 fewer activities during their extra non-work time in V(25) and (V71), and 0.3 fewer in V(46). As predicted in Section II, they enjoy much less variety, even though they have much more non-market time in which to vary their lives. This is a remarkable result that appears to demonstrate what the theoretical motivation claimed.

[7] While even the Top 71 categories include fewer than 20 percent of all the ATUS codes of non-market time use, both among those with or without a disability, they and work time account for all but 59 minutes per representative day among those with no disability, and all but 57 minutes among people with a mobility/physical difficulty.

Does the evidence in Table 2 really support the hypothesis? Perhaps, but these are only descriptive statistics. As Appendix Table 2 makes clear, those with a mobility/physical difficulty differ in a variety of ways from others in this age group: They are older; less educated; less likely to be partnered or have a young child in the household; less likely to be white non-Hispanic, and more likely to be African American. The results in Table 2 might merely be an artifact created by a correlation of these demographic characteristics with the incidence of the disability.

To infer the impact of a disability on temporal variety, I view it as a treatment, with those not having the disability as a control group. Of course, the occurrence of a disability is not experimental; but we can think of incurring it as an event in a natural experiment and account for demographic differences between the "treatment" and "control" groups by using nearest-neighbor propensity-score matching. The scores are matched on vectors of indicators of: Educational attainment (high-school diploma, some college, a bachelor's degree, or an advanced degree); age (35-44, 45-54, 55-61); race/ethnicity (Hispanic, white non-Hispanic, African-American non-Hispanic, or Asian-American non-Hispanic). The matching is also based on indicators of the presence of children and of a young child in the household, of gender, of metropolitan location, and of the day for which the time diary was kept (weekend or not).[8]

The first row of Table 3 shows propensity-score based estimates of the impact of a mobility/physical disability, the indicator D_t, on time in the selected groups of activities and on temporal variety. All the estimates on time in the groups of activities are positive, all on temporal variety are negative. None of the latter, however, is statistically different from zero. Although the ATET are negative as predicted, the differences are small. One reason may be misreported disability status or disability being temporary, a possibility we return to in the next Section.

[8] I also estimate the impacts using ordinary least squares. There is no reason for the estimated ATET resulting from the matching method to differ from regression estimates. Taking each approach, however, might allow a better estimate of the impact of the disability on variety (Imbens and Xu, 2025). In any case, the estimated ATET are typically smaller in absolute value than are regression estimates.

Another part of the reason for the statistical insignificance of the ATET on variety is implicit in the discussion of the top part of Table 2: The sample used in the first row of Table 3 includes people with a disability who have much more time over which to choose a greater variety of activities. If we disaggregate the sample into those reporting positive or no work time in their diary, the results—shown in the second and third rows of Table—corroborate this hypothesis. Those reporting no work—having 24 hours per day of non-work—use time as predicted: If they have a disability, they do fewer different things, and spend more time on them. Among those reporting some work time on the diary day, there is no difference in temporal variety by disability status. This absence is unsurprising, since workers with a disability work fewer hours than those without.[9]

The estimated impacts of the demographic variables used in the propensity scores are themselves of interest. Appendix Table A3 shows the impacts of these matching variables in a linear regression of V(25). V(25) (or V(46) or V(71)) rise monotonically with educational attainment (except for a slightly lower effect among those with a postgraduate degree than a college diploma). Within the sample range it also rises monotonically with age. Women, and couples that have children at home, especially young children, engage in more activities than others. The same is true, other things equal, for individuals living in couples and among people living in metropolitan areas compared to those in rural areas. Finally, otherwise identical members of minority groups enjoy less variety than do white non-Hispanics.

In estimating the ATET I used logit estimates of the propensity scores and matched each treated observation to a single nearest neighbor. To examine the robustness of these estimates, I first re-estimated the models using probit estimates of the propensity scores. In all three groups of activities the estimated ATET were slightly higher than those in Table 3. Instead of the single nearest neighbor in the logit predictions, I next allowed for comparisons to the ten, and then the twenty nearest neighbors. The results were nearly identical to those in the table.

[9] If we include work time in CPS Month 1 in the score matching in the first row of Table 3, the estimates of CPS Month 5 disability status on temporal variety become much more negative and highly statistically significant. This inclusion would introduce substantial endogeneity, however, given the negative correlation of disability and CPS Month 1 usual weekly hours.

The theoretical motivation also suggested that the smaller set of activities engaged in by people with a disability will exclude activities that are disproportionately difficult compared to those engaged in by people without the disability. To examine this (fairly obvious) prediction, Table 4 first lists the five activities with the greatest average excess of time spent by those with the disability, and then the five activities with greatest (most positive) average excess of time spent by those without the disability. Except for health-related self care, the first five require little physical effort by a person without a disability—they are obviously "easy to do." (The specific health-related self-care activities may also be easy to accomplish, but the data do not distinguish among them.) Except eating and drinking, activities in the group with the largest excess of time spent by people without a disability require at least some physical effort. The differences between the two groups are exactly what one would expect. Even if we control for the demographics underlying the estimates in Table 3 (particularly the presence of children), the different characteristics of the two groups of activities remain.

V. The Dynamics of Disability and Their Effects

A. Repeated Reports of Disability

The previous analysis treated a mobility/physical disability as a discrete event observable in a cross-section of data (CPS Month 5). Regrettably the ATUS is not longitudinal, so I cannot examine the impact of a disability on variety, analogous to the standard evaluation of some causative variable, by using pre-post comparisons of outcomes. I can, however, consider how the time path of reported disabilities affects current time use, since the ATUS can be linked to the person's history in the CPS. People report disability status in the CPS Month 1 (about 18 months before they fill out the time diary) as well as in Month 5 (about 6 months before).

Let D_{t-1} be the person's report of a mobility/physical difficulty in CPS Month 1. Table 5 first presents the transition matrix between D_{t-1} and D_t, (the report from CPS Month 5 that was used to construct the disability indicator underlying the previous analyses). Slightly more than half of those who report a disability in Period t-1 also do so in Period t. An almost equal number who report a disability in Period t did not indicate a disability in Period t-1. Thus nearly half of those reporting D_t=1 and thus in the previous

section's "treatment" group did not report a disability a year before the report included in the ATUS data. This fact alone should give pause when considering those results (and much of the substantial literature on the impacts of a disability on earnings based on single self-reports).

A person could be present in the upper-right corner of the matrix in Table 5 because of: 1) A newly developed disability, arising in the year between CPS Months 1 and 5; and/or 2) Measurement error in the report of the mobility/physical difficulty. The latter has been shown to be important in self-reports of health (Kreider and Pepper, 2007), although several studies have demonstrated the overall consistency of self-reports and objective measures of health (Bound, 1991; Kapteyn *et al*., 2007; Blundell *et al*., 2023).

We cannot determine the relative importance of these two potential causes, but we can re-estimate the models using this information. After all:

(4) $\Pr\{D_t = 1\} = \Pr\{(D_{t-1}, D_t) = (0,1)\} + \Pr\{(D_{t-1}, D_t) = (1,1)\}$.

In terms of indicators for use in estimation:

(4') $I\{D\} = I\{0,1\} + I\{1,1\}$,

so that in this sample 57 percent of respondents with $D_t = 1$ indicated a disability both times they were asked, whereas 43 percent did so only the second time. I assume that reporting $\{D_{t-1}, D_t\} = (1,1)$ implies that the person truly has this disability, while someone reporting $\{D_{t-1}, D_t\} = (0,1)$ either may have developed the disability recently or that the report merely reflects measurement error. Regardless, we should expect a larger (more negative) response of temporal variety to a disability in the first group and a larger (more positive) report of average time spent in the remaining activities.

As an additional check on the usefulness of this transition matrix, the bottom half of Table 5 presents a similar matrix for other difficulties (remembering, vision, hearing, and personal care). There is much greater movement out of this state (which is difficult to credit for the first three limitations). Re-estimating the models in Table 3 using the presence of another difficulty yields estimated ATET of -0.042, -0.033, and -0.050, all with t-statistics below 0.5 in absolute value. Either responses about other disabilities are noise, or those other disabilities have no effect on temporal variety. Regardless, the upper part of Table 5 suggests the value of taking advantage of both reports about mobility/physical disabilities.

B. Measurement Error or Slow Adjustment?

To infer the effects of the different prior statuses of those with $D_t = 1$, I again estimate propensity-score matching models, first using the indicator I{1,1}=1, comparing people reporting the disability in both CPS Months 1 and 5 to those reporting I{0, 0}, and then comparing people reporting I{0,1}=1, a disability only in CPS Month 5, to the same comparison group. In both sets of estimates the same variables are use in creating the propensity-score matches. In both estimates I exclude individuals reporting $\{D_{t-1}, D_t\} = (1, 0)$.[10]

The first row of the top panel of Table 6 lists the estimated ATET describing the impacts of I{1,1} on the T(.) and V(.). The estimates are much larger than those shown in Table 3, with the ATET here being positive and significant on the number of minutes spent in each group of activities, negative and significant on the number of activities undertaken. Those reporting a disability at both CPS months enjoy 3.7 to 5.6 percent less variety in their non-market activities, adjusted for all the demographic differences.

The second row of the top panel presents similar estimates for I{0,1}. As expected, the temporal variety enjoyed by people reporting a disability in CPS Month 5, but not in CPS Month 1, differs much less from that reported by people with no disability. The estimates of the ATET on time spent per group of activities average about half of those for people with I{1,1}. In terms of the number of activities undertaken, they are never statistically different from zero. Together with the estimates discussed above, the results demonstrate that using two reports of disability status, separated in time by a year, yields much different implications from a focus on a single cross-section report.

To examine possible heterogeneity in the longer-term impacts of a disability across demographic groups, I re-estimated the models in the top panel of Table 6 separately for various aggregates of respondents. I report only the estimated ATET of I{(1,1)} on V(25), but comparisons based on V(46) and V(71) are very similar. Consider first education. The ATET of I{(1,1)} is -0.624 (s.e.=0.130) among those with no high-school diploma. Among those with only a high-school diploma, with some college, or with at least a college degree the estimates are -0.418 (s.e.=0.090), -0.246 (s.e.=0.100), and -0.420 (s.e.= 0.145)

[10] Including this last group in the same models has almost no impact on the estimated ATET of the two indicators.

respectively. These estimates are statistically equal among the three more educated groups; but the loss in variety experienced by a high-school dropout with a disability exceeds that in the other groups.

Among women the estimated ATET of reporting the disability in both CPS months is -0.707 (s.e.=0.092), while among men it is -0.450 (s.e.=0.077), significantly lower. Since women provide more childcare than men, perhaps this difference is attributable to the impact of the disability on the ability to engage in childcare activities. With 48 percent of women in the sample having a child in the house, I examine this possibility by estimating the models for women separately by the presence of children. The estimates for these two sub-groups are nearly identical, suggesting that the gender difference in the impact of the disability on temporal diversity is not related to the greater burden of childcare on women.

Dividing the sample into four age groups, the estimates of the ATET of the indicator I{(1,1)} are -0.377 (s.e.=0.229), -0.305 (s.e.=0.156), -0.418 (s.e.=0.091), and -0.416 (s.e.=0.080) among respondents ages 25-34, 35-44, 45-54, and 55-61 respectively. These estimates are statistically indistinguishable.

Although there are only 509 African Americans and 246 Hispanics who indicate I{(1,1)} = 1 in the sample, it is interesting to examine differences in the impacts on temporal variety between these groups and non-Hispanic whites. Among African Americans the ATET of reporting a mobility/physical difficulty over a year is -0.310 (s.e.=0.104), while among Hispanics it is -0.220 (0.153). Both estimates are below the estimated impact among non-Hispanic whites of -0.431 (s.e.=0.074), but not quite statistically significantly so. The disability affects the temporal variety of activities that the largest racial/ethnic minorities undertake less than it does that of non-Hispanic whites.[11]

The upper panel of Table 6 also contains some calculations that allow considering the causes of the differences between the estimated impacts of I{0,1} and I{1,1}. Considering only the V(.), the impacts of

[11] Another concern relating to measurement error is that reports of a disability are excessive among people who do not work in the market Kreider and Pepper (2007). To examine this issue here, I re-estimate the models in Table 6 restricting the sample to respondents who did at least some market work in both CPS Month 1 and in the week when they completed the ATUS time diary. This concern is only a slight problem here: Comparable estimates of the ATET to those in the first row of Table 6 are -0.208 (s.e.=0.149), -0.260 (s.e.=0.193), and -0.367 (s.e.=0.222). The point estimates, especially for V(46) and V(71), are very close to those in the Table, with the standard errors larger because of the exclusion of large numbers of observations.

the former are tiny compared to those of the latter, suggesting that one-time measurements of disability status represent mostly measurement error. If, however, we base the comparison on the time spent in activities, the ratio of the former to the latter (e.g., 92.14/156.24 for T(25)) cluster in the narrow range (0.59, 0.62), suggesting half of the adjustment to the new equilibrium in time use is made within 12 months of incurring the disability. This interpretation implicitly assumes that those reporting I{0,1} at time t will report I{1,1} at time t+1. The data suggest that this implied assumption is incorrect, since $\Pr\{D_t = 0 \mid D_{t-1} = 1\} = 0.537$: Nearly half of those reporting the disability in one period do not report it in the next. Assuming the process depicted in Table 5 is stationary, this calculation suggests that nearly half of those treated as having a disability in the middle tableau of Table 6 will respond that they do not have the disability in the next year.[12]

Overall, these comparisons imply either that much of the response of temporal variety in time use to a a single report of a mobility/physical difficulty reflects measurement error, or that the true short-run response to incurring a disability is only half that of the long-run response. Regardless, comparisons here suggest that the best estimate of the impact of the disability on temporal variety is $\partial V/\partial I\{(1,1)\}$. This conclusion means that the person's disability, which has been observed for 18 months before the ATUS diary is kept, will continue into the indefinite future. For that reason, even it may be a lower bound to the long-run effect of the disability.[13]

To examine whether other disabilities generate the same effects on time use, the bottom panel of Table 6 reproduces the results in the upper panel using those respondents reporting another "disability."

[12] The evidence suggests that the process is not stationary: Calculate $\Pr\{D_t = 0 \mid D_{t-1} = 1\}$ for each Year t, subtract the 15-year average, divide by the standard error for t, and square the result for each year. The sum of these squared unit normal deviates, 28.12, is distributed $\chi^2(15)$, significantly nonzero at the 2 percent level. Without the data from 2011, however, the sum of squares equals =18.06, and as $\chi^2(14)$ is not significantly nonzero at any standard level—one year is far out of line.

[13] One might be concerned that the results are limited to activities over a single day, since the ATUS contains only one daily diary per respondent. Evidence for two-day totals of activities in Australia, Germany, and the Netherlands in Hamermesh (2005) on the numbers of different activities undertaken (not related to income or disability status) shows that similar results are produced if one examines two daily diaries per respondent.

Comparing the estimates using I{1,1} (the first row in each panel) shows that these other disabilities produce much smaller effects on time use. In none of the estimates of the V(.) is the estimated ATET statistically significantly nonzero; and while the impacts on time spent in each category are significantly positive, they are never even one-third of their counterparts in the upper panel. A reasonable conclusion is that these other difficulties have little impact on time use, and that, in a discussion of disability, it is the mobility/physical limitations that matter. This finding suggests caution in applying results on mobility/physical disabilities to any other reported types of disability and ignoring this heterogeneity in disability status.

VI. Lost Earnings

As noted in the Introduction, the measurement of earnings losses arising from disabilities has been addressed many times. I discuss it here to provide estimates using a sample where the disability is defined more carefully than usual (having two annual reports of a disability) and that can be compared to the same people's time-use behavior. Thus, as in Table 6 on temporal variety, I first compare earnings of those with I{(1,1)}, and then of those reporting a disability only in CPS Month 5, I{(0,1)}, to those who never report a disability, I{(0,0)}.

The ATUS dataset has information on earnings in CPS Month 8 (the standard earnings report for people in their final CPS month) and then provides an updated series for respondents who changed jobs or employers, or whose earnings in CPS Month 8 were allocated.[14] I estimate regressions describing the updated series on earnings, and do so separately on all respondents in each disability group, then only including those reporting nonzero earnings.[15] The standard logarithmic formulation of earnings in

[14] Updated earnings are provided for about 1/3 of the sample, with the incidence of updating differing little by disability status in CPS Month 5.

[15] The results are very similar using CPS earnings in Month 8 earnings.

regressions is specified only for those reporting earnings, given that earnings are zero for over three-fourths of respondents with the disability.[16]

The upper panel of Table 7 lists descriptive statistics for each of the four groups classified by disability status in CPS Months 1 and 5, for all respondents and for those reporting positive earnings. The earnings of those reporting a disability are less than 1/3 of those who never did so. Among respondents with I{(1,1)} earnings are less than one-tenth those of people with I{(0,0)}. As a comparison of the means of all respondents to those of respondents with earnings shows, only part of the differences in earnings arises from the much lower employment rates of people with the disability: Even among those with earnings, respondents with I{(1,1)} earn less than 60 percent of what those never listing a disability report, while among the two groups reporting the disability in only one CPS month earnings of those who are employed are 72 percent of those in the base group, I{(0,0)}. Moreover, earnings differ relatively little between people with I{(0,1)} or I{(1,0)}.

As the descriptive statistics on the sample demographics demonstrate (Appendix Table 2), the characteristics of people reporting the disability differ from those of others in ways consistent with lower earnings. To account for these differences, the lower panel of Table 7 lists regression estimates of the impact of the disability (compared to the group with I{(0,0)} = 1), holding constant the same vectors of demographic indicators used to create the propensity scores in Tables 3 and 6.[17] As a comparison of the regression coefficients to the means of earnings in group I{(0,0)} demonstrates, the impacts of the disability on earnings are strongly negative.

Even among people who continue working, the disability is associated with 60 percent lower earnings for those with I{(1,1)}, and 20 percent lower among those with I{(0,1)}. The former effect is three times

[16] As with income, earnings are top-coded, and I multiplied the top-coded amount by 1.5. Only 4 percent of the sample reported earnings at this level. Deleting these few observations made the estimated impacts of the disability indicators very slightly more negative.

[17] To avoid clutter, Table 7 does not list the adjusted R^2 for each equation, nor does it list the estimated coefficients on all the controls. Suffice to note that the latter are completely standard, while the former range between 0.20 and 0.30.

that of the latter, a difference that mirrors the results on time use. As with temporal variety, we cannot know if the difference in the two impacts arises from observing an adjustment path or the presence of measurement error in single reports of a disability. Both observations, however, underscore the need to rely on several reports of a disability to measure its impact on economic outcomes.[18]

VII. Monetizing the Losses

Marcello *et al*. (2015), Morris *et al*. (2022), and Blavet (2024) take estimates of the earnings losses resulting from a disability (albeit measured only using one-time cross-section reports) and examine how they reduce household utility (Blavet, 2024, by using them in the context of equivalence scales for family income). Given that earnings losses have been estimated numerous times in the literature, here I only make the simple calculations of the implied annual loss in earnings, and I do so only for purposes of comparison to the novel estimated losses arising from the reduction in temporal variety. Taking the estimates of the impacts of I{(1,1)} (from the bottom panel of Table 7) shows a loss of weekly earnings of around $450—i.e., $23,400 per annum, approximately 49 percent of the earnings of someone reporting no disability in either CPS Month 1 or 5 (a person with I{(0,0)}).

The estimated parameters in Table 1 are of $\partial Y/\partial V$, where Y is income, while the parameter estimates in the top row of Table 6 represent $\partial V/\partial I\{(1,1)\}$. Define:

$$(5)\quad \alpha = \partial V/\partial I\{(1,1\}/\partial V/\partial Y = \partial Y/\partial I\{1,1\},$$

the implied impact of a reported mobility/physical difficult in both CPS Months 1 and 5 on household income.

[18] Nonresponse to the ATUS among those CPS leavers who were asked to complete a time diary is over 40 percent. Abraham *et al*., (2006) show that nonresponse is uncorrelated with the standard demographic measures used to generate the propensity scores underlying the estimates here. Calculations comparing all CPS Month 5 respondents ages 25-61 to ATUS respondents in the same age range, however, show that the rate of mobility/physical difficulty among the former is 0.052, while in the ATUS it is "only" 0.040. Depending on the correlation of that selectivity with selectivity along the dimension of income, the estimates of both the time and money impacts of a mobility/physical difficulty might contain errors compared to what would occur in a random sample of respondents. Similar calculations for other difficulties, however, show much smaller absolute and proportional differences in the disability rate between the CPS and the ATUS.

The estimated ATET of a disability on temporal variety with I{1,1)}, shown in in the top row of Table 6, are -0.408 on V(25), -0.317 on V(46), and -0.343 on V(71). The estimated impacts of an increase in income of $100,000 implied by the estimates in Table 1 are 0.206 on V(25), 0.241 on V(46), and 0.311 on V(71). The implicit annual monetary equivalent of the reduction in temporal variety generated by a mobility/physical disability, α, in this sample thus averages $198,000 using the impact on V(25), $132,000 on V(46), and $110,000 on V(71).[19]

One should note that, because the estimated α result from two estimates from slightly different samples, they may contain more error than any combination of parameters estimated over the same sample. For that reason alone, it makes sense to consider some bounds on the estimates, which I do by taking an estimate of $\partial V/\partial I\{1,1\}$ that is two standard errors below the point estimate, and an estimate of $\partial V/\partial Y$ that is two standard errors above the point estimate. Using these bounds to calculate α yields $130,000 on V(25), $64,000 on V(46), and $51,000 on V(71).

Taking the lowest of these estimates suggests that the loss of temporal variety resulting from this kind of disability is still much larger than the usually calculated monetary loss (of earnings)—about twice as large. Of course, I make no claims that this exact estimate is the truth. The only point is that, even assuming the estimates reported here are mistakenly high, they suggest that the loss of temporal variety resulting from a disability deserves at least as much attention in evaluating the costs of a disability as the more easily measured lost earnings.

This study quantifies only the time costs that the disability imposes on the individual. If the person is partnered, the partner too incurs time costs arising from reduced variety due to restrictions on the activities that might have been undertaken jointly with the person living with the disability, and also from possible shifts in the kinds of activities undertaken (Kemler and Furnée, 2002; Hamermesh and Myck, 2025). While the limitation of the ATUS to one household member precludes this calculation here, a complete accounting would need to handle these time costs too.

[19] Using the quadratic estimates described in Footnote 6 yields estimates of the monetary value of lost variety that unsurprisingly differ little from these at the mean of income.

VIII. Conclusions and Implications

Using the American Time Use Survey linked to respondents' previous reports of disability status in the underlying Current Population Survey, the results here demonstrate: 1) Additional temporal variety—doing more different things in a day—is income superior; 2) People who report a mobility/physical disability engage in fewer different activities during the typical day than demographically identical people without the disability, perhaps 4 percent fewer, despite having more non-market time to spend; 3) The same people also report approximately 50 percent lower earnings; 4) Comparing the reduction in temporal variety to the income effects on variety suggests that the monetary equivalent of the reduction is larger than the loss in earnings. Its magnitude, however, is not inconsistent with what the literature suggests is the hedonic income equivalent of the risks of on-the-job injury (Viscusi and Aldy, 2003).

It is noteworthy that the disability literature typically uses only one report on an individual's disability status (e.g., Kreider and Pepper, 2007; Livermore and Honeycutt, 2015, using one CPS observation; Blavet, 2024; and nearly all the other studies cited here that do not use administrative data). The results here suggest that using multiple evaluations of disability status yields substantially larger estimates of the impacts of disability on earnings/labor market outcomes than those in the literature, and larger estimates of the impacts on time use. Using two reports of disability status a year apart should become standard for obtaining accurate estimates of the long-run impacts of disabilities on economic outcomes.

This study has dealt with the "what" of the impact of disabilities on time use. It has not examined why someone with a disability engages in fewer different activities than do other people. Is it because the costs of switching between activities are higher for them; because they find many activities to be much costlier in time and effort; or some other reason? The ATUS does not allow distinguishing among these possibilities; but doing so would be useful in designing mechanisms and institutions to reduce the loss in variety that people with disabilities incur.

The results suggest that a disability resulting from an accident that limits mobility or physical activities generates losses outside the labor market that might be relevant in valuing tortious damages. They imply that, while direct monetary damages are important, the effects on how people spend time after an accident

represent an economic cost of the accident that also needs to be accounted for. Clearly the estimates here reflect those incurred by the average person with a mobility/physical disability, regardless of whether or not the disability is generated by an accident. Applying these results in specific cases requires considering the person's likely behavior before the accident and, if possible, comparing it to behavior thereafter. The essential point, however, is that impacts on time use can be measured and should be included in considering damages resulting from an accident.

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TABLE 1

Household Income and the Variety of Non-Market Time Use, Respondents Ages 25-61 with No Disability, ATUS 2009-24 (N=94,340)*

	Dep. Var: Number of activities:					
	V(25)		V(46)		V(71)	
Ind. Var.:						
Family income (000)	0.00206	0.00322	0.00241	0.00403	0.00311	0.00494
	(0.00011)	(0.00011)	(0.00015)	(0.00014)	(0.00017)	(0.00016)
Work hours on diary day	-------	-0.1902	-------	-0.266	-------	-0.3105
		(0.0017)		(0.0021)		(0.0025)
Adj. R^2	0.009	0.126	0.008	0.147	0.006	0.148

*Standard errors in parentheses. The regressions also include an indicator of whether the diary is on a weekday or not.

TABLE 2

Descriptive Statistics, Time Use by Mobility/Physical Disability Status, Ages 25-61, ATUS 2009-24*

Disability:	No	Yes	Disability:	No	Yes
Work time/week from ATUS (hours)	34.54 (33.54)	8.47 (21.97)			
Usual weekly hours in ATUS	34.36 (18.89)	8.25 (16.56)	Usual weekly hours in CPS Month 1	33.90 (18.65)	10.12 (18.29)
Employed at work n ATUS week	0.793	0.213	Employed at work in CPS Month 1	0.791	0.244

	Category of activity					
	5+ minutes/day 25 possible activities		2+ minutes/day 46 possible activities		1+ minute/day 71 possible activities	
Disability:	No	Yes	No	Yes	No	Yes
T	995.68 (264.54)	1190.27 (240.39)	1053.15 (272.14)	1276.49 (215.57)	1085.38 (278.50)	1309.99 (208.07)
V	7.23 (2.39)	6.74 (2.38)	8.48 (3.05)	8.14 (3.10)	9.29 (3.53)	8.77 (3.55)
N =	91,778	4,999	91,778	4,999	91,778	4,999

*Standard deviations in parentheses. Excludes people reporting another disability in CPS Month 5.

TABLE 3

Disability Indicator D=1 in ATET Estimation of Average Time (T) and Number of Activities (V), Respondents Ages 25-61, ATUS 2009-24*

Category:	5+ minutes/day		2+ minutes/day		1+ minute/day	
	T(25)**	V(25)	T(46)	V(46)	T(71)	V(71)
All respondents	92.27	-0.162	110.41	-0.038	112.99	-0.058
	(11.18)	(0.084)	(12.18)	(0.116)	(12.49)	(0.136)
Base Period:						
Worked	72.84	-0.141	90.31	0.081	93.24	0.130
	(9.78)	(0.135)	(10.36)	(0.216)	(10.95)	(0.243)
No Work	35.64	-0.734	48.74	-0.867	43.14	-1.015
	(17.98)	(0.143)	(17.50)	(0.187)	(17.44)	(0.210)

*Standard errors in parentheses. Excludes respondents reporting another disability in CPS Month 5. The propensity scores are matched on: Vectors of indicators of age, educational attainment, race/ethnicity, and household composition; gender, marital and metropolitan status, weekend or weekday time diary.

**The ATET are estimated matching the one nearest neighbor's score, with the score based on a logit predictor.

TABLE 4

Most Different Activities by Disability Status, ATUS 2009-24 (minutes/representative day)

Activity:	Average Time (No Disability)	Difference (Disability – No Disability)
TV and movies (not religious)	137.22	141.88
Sleeping	511.07	54.83
Relaxing, thinking	16.12	18.59
Health related self care	2.85	17.67
Sleeplessness	3.32	9.00
Lawn, garden, and houseplant care	9.93	-3.26
Washing, dressing and grooming oneself	40.52	-4.69
Playing with household children, not sports	8.46	-5.27
Eating and drinking	64.68	-8.14
Physical care for household children	13.25	-8.40
Work	296.31	-223.71

TABLE 5

Distribution of Disability Status in CPS Months 1 and 5, Ages 25-61, ATUS 2009-24 (N=68,821)

Mobility/Physical difficulty

	CPS Month 5		
CPS Month 1	0	1	N
0	0.980	0.020	65,515
1	0.463	0.537	3,306
N	65,732	3,089	

Other difficulty

	CPS Month 5		
CPS Month 1	0	1	N
0	0.983	0.017	66,196
1	0.725	0.275	1,905
N	67,127	1,694	

TABLE 6

Disability Indicators I{(D_{t-1}, D_t) of Mobility/Physical, or Other Difficulty, in ATET Estimation of Average Time (T) and Number of Activities (V), Respondents Ages 25-61, ATUS 2009-24*

Category:	5+ minutes/day		2+ minutes/day		1+ minute/day	
	T(25)	V(25)	T(46)	V(46)	T(71)	V(71)
Indicator:			Difficulty: Mobility/physical			
I{1,1}**	156.24	-0.408	180.50	-0.317	182.99	-0.343
	(5.63)	(0.056)	(5.08)	(0.072)	(4.91)	(0.083)
I{0,1}**	92.14	-0.068	107.86	0.079	113.17	0.052
	(7.74)	(0.072)	(7.58)	(0.096)	(7.37)	(0.109)
			Other			
I{1,1}***	40.37	-0.023	56.77	0.230	58.94	0.248
	(10.80)	(0.099)	(10.64)	(0.134)	(10.65)	(0.151)
I{0,1}***	35.519	0.123	42.67	0.171	39.73	0.162
	(8.70)	(0.076)	(8.55)	(0.098)	(8.54)	(0.114)

*Standard errors in parentheses. Excludes respondents reporting another disability in CPS Month 5. The propensity scores are matched on: Vectors of indicators of age, educational attainment, race/ethnicity, and household composition; gender, metropolitan status, weekend or weekday time diary time diary. The ATET are estimated matching the one nearest neighbor's score, with the score based on a logit predictor.

**The samples in the upper panel exclude respondents with another disability at either CPS Month 1 or Month 5. The first row also excludes those with either I{1,0} or I{0,1}. The second row excludes those with either I{1,0} or I{1,1}.

***The samples in the lower panel exclude respondents with a mobility or physical disability at either CPS Month 1 or 5. The first row also excludes those with another disability at either CPS Month 1 or Month 5. The second row excludes those with another disability at CPS Month 1 or in both CPS Months.

TABLE 7

Earnings: Descriptive Statistics; Effects of a Disability, Respondents Ages 25-61, ATUS 2009-24

Means (s.d.)			
I{1,1}	I{0,1}	I{0,0}	I{1,0}
All respondents			
$85.64	$265.17	$927.79	$317.11
($371.47)	($570.44)	($1,009.43)	($583.38)
With earnings			
$723.04	$898.30	$1,240.04	$826.05
($840.37)	($730.79)	($986.73)	($682.90)

Regression Coefficients*			
All respondents		With earnings	
I{1,1}	**I{0,1}**	**I{1,1}**	**I{0,1}**
-$446.58	-$365.76	-$283.19	-$173.41
($20.82)	($23.98)	($57.28)	($43.40)
		ln(earnings)	
		-0.597	-0.228
		(0.047)	(0.036)

*Standard errors in parentheses. Earnings are reported in the ATUS, either copied from CPS Month 8 or updated if the person had changed jobs or (re-) entered employment. The samples also include respondents with I{0,0} and exclude respondents with other disabilities. Also included in the regressions are: Vectors of indicators of educational attainment, race/ethnicity, and age; and indicators of household composition, gender, marital and metropolitan status.

TABLE A1

Most Time-Consuming Daily Nonwork Activities (Based on Adult Population Averages), and Work Time (Total 23.03 Hours)

ATUS Code	Description
	>=5 minutes/day (16.78 hours)
10101	Sleeping
10201	Washing, dressing and grooming oneself
20101	Interior cleaning
20102	Laundry
20201	Food and drink preparation
20203	Kitchen and food clean-up
20501	Lawn, garden, and houseplant care
20681	Care for animals and pets
20902	Household and personal organization/planning
30101	Physical care for household children
30103	Playing with household children, not sports
60101	Taking class for degree, etc.
60301	Research/homework for class for degree, etc.
70101	Grocery shopping
70104	Shopping, except groceries, food and gas
110101	Eating and drinking
120101	Socializing and communicating with others
120301	Relaxing, thinking
120303	TV and movies (not religious)
120307	Playing games
120308	Computer use for leisure (except games)
120312	Reading for personal interest
140101	Attending religious services
180782	Travel related to shopping (except groceries)
181101	Travel related to eating and drinking
	2-4.99 minutes/day (0.98 hours)
10102	Sleeplessness
10301	Health-related self care
20301	Interior arrangement, decoration and repairs
20701	Vehicle repair and maintenance (by self)
20904	Household and personal email and messages
80401	Using health care services outside home
120201	Attending or hosting parties, etc.
120306	Listening to/playing music (not radio)

130131 Walking
130134 Working out, unspecified
140102 Participation in religious practices
160101 Telephone calls with family members
160102 Telephone calls with friends, neighbors, etc.
180280 Travel related to household activities
180381 Travel related to caring for/helping household children
180482 Travel related to caring for/helping non-household adults
180701 Travel related to grocery shopping
181201 Travel related to socializing/communicating
181283 Travel related to relaxing/leisure
181301 Travel related to sports/recreation participation
189999 Miscellaneous travel

1-1.99 minutes/day (0.54 hours)

20103 Sewing, repairing and maintaining textiles
20104 Storing interior household items
20401 Exterior cleaning
20402 Exterior repair, improvements, and decoration
20901 Financial management
20903 Household/personal mail and messages (not email)
30109 Looking after household children
30110 Attending household children's events
30112 Picking up/dropping off household children
30201 Homework (household children)
40103 Playing with non-household children, not sports
70103 Purchasing food (not groceries)
120305 Listening to the radio
120309 Arts and crafts as a hobby
120403 Attending movies/film
120499 Arts and entertainment, other
130114 Golfing
130132 Participating in water sports
130133 Weightlifting/strength training
159989 Volunteer activities, n.e.c.
169989 Telephone calls, n.e.c.
180382 Travel related to caring for/helping household adults
180601 Travel related to taking class
180804 Travel related to using medical services
181401 Travel related to religious/spiritual practices

Work (4.73 hours)

TABLE A2

Descriptive Statistics, Means of Matching Variables by Mobility/Physical Disability Status, Ages 25-61, ATUS 2009-24*

Disability:	No	Yes		No	Yes
Variable:			Variable:		
High school	0.267	0.389	Child <6	0.191	0.049
Some college	0.238	0.269	Partnered	0.691	0.520
College	0.258	0.093	Nonspouse adults in house	0.334	0.437
>College	0.156	0.037	Female	0.506	0.549
Age 35-44	0.271	0.150	In metro area	0.861	0.781
Age 45-54	0.268	0.339	White non-Hispanic	0.635	0.623
Age 55-61	0.172	0.403	Black non-Hispanic	0.114	0.205
Child in house	0.465	0.428	Asian non-Hispanic	0.058	0.012
			Hispanic	0.177	0.127

*Excludes respondents who reported another disability in CPS Month 5.

TABLE A3

Regression Estimates of V(25) on Variables Used in Propensity-score Match in Table 3*

Ind. Var.:		Ind. Var.:	
High school	0.316	Partnered	0.283
	(0.029)		(0.017)
Some college	0.494	Nonspouse adults	-0.097
	(0.030)	in house	(0.016)
College	0.616	Female	1.257
	(0.030)		(0.014)
>College	0.597	In metro area	0.123
	(0.033)		(0.021)
Age 35-44	0.078	White non-Hispanic	0.244
	(0.020)		(0.055)
Age 45-54	0.145	Black non-Hispanic	-0.510
	(0.021)		(0.058)
Age 55-61	0.287	Asian non-Hispanic	-0.231
	(0.023)		(0.062)
Child in house	0.456	Hispanic	-0.084
	(0.018)		(0.057)
Child <6	0.523	Weekend	0.390
	(0.023)		(0.016)

*Standard errors in parentheses.