

## **The Disability Gap in Time Use in the United States**

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Individuals with disabilities experience constraints to human, social, and health capital that affect their daily lives and use of time. However, this “disability gap” in time use remains unexamined in the U.S. This study uses the American Time Use Survey and Oaxaca-Blinder methodology to estimate time in market work, nonmarket work, tertiary activities, and leisure among 35,924 working-aged men and women. In doing so, it: 1) examines differences in contributors to time use for adults with and without disabilities, 2) quantifies the disability gap net of these contributors, and 3) decomposes the disability gap by health, household, and sociodemographic characteristics. The significant gap in market, tertiary, and leisure time is primarily exacerbated by health, followed by income and education. Household composition has a gap-narrowing effect on market work, as does marital status for women. Thus, health and social disparities are both important for explaining how disability shapes time use differentials.

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Between 12.1% (Erickson, Lee, & von Schrader 2014) and 18.7% (Brault 2010) of people in the United States are estimated to have some sort of disability. While the Americans with Disabilities Act (ADA) of 1990 emphasized the potential for persons with disabilities to participate fully in American life, with appropriate medical care, rehabilitation, and more equitable social and physical environments, myriad challenges remain for this population. They experience lower levels of educational attainment, lower rates of employment, and fewer household resources than people without disabilities (Brault 2010; Erickson et al. 2014; Shandra et al. 2012). As a result, people with disabilities often have less human capital and social capital in addition to the lower health capital (Grossman 1972; Gulley, Rasch, Chan 2011) that accompanies many types of functional limitations.

These constraints are associated with social and economic inequities. In the labor market, working-aged adults with disabilities are more likely than those without disabilities to experience wage and hiring discrimination and are often denied reasonable accommodation by their employers (Baldwin & Johnson 2006; Baldwin & Choe 2014; Harlan & Robert 1998; McMahon et al. 2008). In the family, people with disabilities have a lower hazard of entering into marriage and are more likely to be separated, divorced, or widowed than those without disabilities (Current Population Survey 2009-2013, author's calculations; McInnes 2011). More complex health needs often require people with disabilities to engage in regular rehabilitation practices, to more frequently visit care providers and to be more likely to engage in health-related self-care than people without disabilities (Gulley, Rasch, & Chan 2014; Jonas, Ibuka, & Russel 2011). Even leisure looks different, as people with disabilities often experience social

exclusion and physical exclusion from recreational facilities and the hospitality industry (Rimmer 2005; Stumbo, Wang, & Pegg 2011).

In other words, having a disability shapes the lived experience of daily life. This is perhaps most evident from the limited number of population-level studies on time use among people with disabilities in the United States. Aside from their lower likelihood and intensity of market work (Bureau of Labor Statistics 2014), having a limiting condition is negatively associated with time spent in nonmarket work such as household labor (South & Spitze, 1994) and volunteer work (Moen and Flood 2013) but positively associated with time spent in food preparation (Meyer & Mok 2009). Time spent satisfying basic needs like sleep also varies for people with disabilities, who are less likely than those without disabilities to experience optimal sleep duration (Shandra, Kruger, and Hale 2014). Thus, there is a gap between how people with and without disabilities spend their time. Other analyses of regional samples or specific condition types outside of the United States imply similarly (e.g., Leufstadius, Reg, & Edklund 2008; Shimitras, Fossey, & Harvey 2003; Winkler, Unsworth, & Sloan 2005).

However, the contributors to this time gap in the United States remain unknown. One analysis (Pagan 2013) of Spanish Time Use Survey across four major time use categories concludes that individuals with disabilities spend less time on market work and more time on nonmarket work, leisure, and tertiary activities (such as sleeping and personal care). While Pagan quantifies and decomposes the overall time gap due to disability, the specific contributors to this gap are unexplored. This raises the question: How much of the disability gap in time use is explained by differences in health, age, or other social disparities experienced by people with disabilities? Given the disparate levels of health, education, and family resources often

experienced by people with disabilities, the role of these characteristics in widening – or narrowing – the time gap is an important first step to understanding how it might be closed.

This study uses data from the American Time Use Survey to examine how people with and without disabilities in the United States spend their time in market work, nonmarket work, tertiary activities, and leisure. The objectives are three-fold: to examine differences in contributors to time use for adults with and without disabilities, to quantify the disability gap net of these contributors, and to decompose the disability gap by health, household, and sociodemographic characteristics using the Oaxaca-Blinder approach (Blinder 1973; Oaxaca 1973).

## **Data and methods**

### *Data source and sample*

Data are analyzed from the publically available American Time Use Survey (ATUS), a nationally representative survey sponsored by the U.S. Bureau of Labor Statistics that collects information on daily time use, including sleep and wake activities (Hofferth, Flood, & Sobek 2013). Respondents aged 15 and over were chosen randomly from households that had undergone their final interview for the Current Population Survey (CPS), with ATUS collected two to five months after the final CPS interview. The sample was randomized by day such that half the respondents reported on a weekday and half reported on a weekend day. Sample weights were later applied to correctly represent each day of the week. Computer-assisted telephone interviewing was used to ask respondents to provide demographic information, as well as a detailed account of their activities for each minute during a 24-hour period beginning at 4:00 am. Thus, the “diary day” is the day about which the respondent reports, with pooled data from

all currently available years (2003-2013) resulting in a total initial sample size of 148,345 diary days.

While the ATUS includes detailed information on time use and sociodemographic characteristics for every year, information on both disability and health status is available more sporadically. Detailed information on disability was introduced only in mid-2008, reducing the sample size to 66,910 diary days. Self-reported health as collected at the time of the ATUS interview was collected only as part of a series of modules that were administered to a more limited subset of respondents. Among the years that include disability information, the Eating and Well-being Module collected health in 2008, the Well-being Module of 2010, 2012, and 2013, and the Leave Module of 2011. This restriction reduces the sample to 45,372 – 35,924 of which is between 18-64 years of age. Thus, the final eligible sample size includes 16,481 men and 19,443 women. All analyses are weighted using the corresponding years' module weights so that the data remains nationally representative.

#### *Dependent measures*

The ATUS includes 17 major categories in its activity lexicon (Shelley, 2005), which are categorized here into nonmarket work (including household activities, caring for and helping household and non-household members, volunteering, and purchasing goods and services), market work (work), leisure (socializing and leisure, sports and recreation, religious, and telephone calls), and tertiary activities (personal care and eating and drinking). The only category that is not accounted for in these analyses is education, as it is not directly compensated as market work, nor does it have exchange value as does nonmarket work. The percentage of eligible respondents who report any time in education is small (4.32%), and including this measure as market work does not change results.

This scheme is based on Pagan's (2013) categorization of disability and time use in the Spanish Time Use Survey and follows Frazis and Stewart's (2011) use of the American Time Use Survey. Like Frazis and Stewart (2011) and Bureau of Labor Statistics [BLS] reports (e.g., BLS, 2013), associated travel time is combined with each corresponding detailed activity category. Unlike Frazis and Stewart (2011), volunteer work is included here as it could have market value (Brown, 1999; Salamon, Sokolowski & Haddock, 2011) and can be considered a productive activity – particularly for those who may be less likely to be in the paid labor force (Hank & Stuck, 2008; Moon & Flood, 2013). Likewise, time spent in care to non-household children and adults is also included as productive time, as it represents another form of carework.

#### *Disability and independent measures*

In 2008, a module was added to the basic monthly survey of the CPS to assess six detailed aspects of disability, including hearing difficulty, vision difficulty, difficulty remembering, physical difficulty, mobility limitation, and personal care limitation. These questions were designed to correspond to “four basic areas of functioning (vision, hearing, mobility, and cognitive functioning) that identified the largest component of the population of people with disabilities...[and] two key elements that could be used for monitoring independent living and the need for services” (Brault & Stern 2007). These questions were asked of all persons ages 15 and older and collected at the time of the final CPS interview, two to five months before the ATUS interview. Due to sample size limitations, individuals are considered to have a disability if they answer affirmatively to any of these six measures.

Health information at the time of the ATUS is only sporadically assessed in the American Time Use Survey as part of the aforementioned data modules. Respondents are asked, “Would you say [your] health in general is excellent, very good, good, fair, or poor?” Education is

measured as the respondent's highest completed level of education and includes the three categories of "less than high school", "high school diploma" (including General Educational Development and some college coursework), and "bachelor's degree or higher", measured at the date of the last CPS interview. Age in years is collected at the time of the ATUS interview, and following Pagan (2013), is expressed in both linear and quadratic terms. Marital status is only collected at the time of the final CPS interview, and is coded as married, widowed, or divorced/separated, versus single. Immigrant status compares those who are foreign born to those who are native born in the US, Puerto Rico or U.S. Outlying Areas, or born abroad of American parent/s. Children 0-5, 6-12, and 13-17 are dichotomous indicators of whether or not the respondent has an own child of each age category living in the household as of the ATUS interview. Number of household adults is a continuous measure of the number of persons aged 18 and older living in the respondent's household and was collected at the time of ATUS.

Family income was constructed from an ATUS measure that includes the income of all members of the household ages 15 or older from jobs, business, farm or rent, pensions, dividends, interest, Social Security payments, and other monetary income. This information was provided by ATUS as an ordinal measure with 16 income categories, ranging from \$0-\$150,000 (except in 2003, when it was top-coded at \$75,000). In these analyses, respondents with a family income of less than \$25,000 were compared to those who report \$25,000-\$49,999, \$50,000-\$74,999, and \$75,000 *plus*. ATUS began imputing missing data for family income in 2010; however, rates of missing data on this measure averaged over 13% for previous years. Thus, missing values were replaced with the median income level by education, gender, and year. Finally, I include dichotomous controls for year, region, and indicating if an interview occurred

on a *weekend* (Saturday or Sunday) or *holiday* (New Year's Day, Easter, Memorial Day, 4<sup>th</sup> of July, Thanksgiving, or Christmas).

### *Analytic strategy*

I utilize the *Oaxaca* procedure (Jann 2008) in Stata, using a two-fold approach to estimate characteristics and returns. From these results, I first present OLS estimates and then provide overall and detailed decompositions. In doing so, I group together sets of dummy variables so that the coefficient for the unexplained part of the decomposition does not depend on the choice of base category. Finally, an extensive literature documents how men and women allocate varying amounts of time in household labor and carework (Bianchi et al., 2012; Milkie, Raley, & Bianchi, 2009); therefore, the analyses presented here are also stratified by gender.

## **Results**

### *Bivariate analysis*

Table 1 presents weighted estimates of time spent in market work, nonmarket work, tertiary activities, and leisure by sex and disability status. In doing so, I differentiate between the overall mean time use, the percentage of respondents reporting any time use in each category, and the mean time use only among respondents reporting any time use in each category. This approach enables the analysis of both level of participation and intensity of participation in each category. Results indicate significant differences in mean time use between those with and without disabilities for both men and women in nearly all time use categories *except* nonmarket work.

As expected, the largest difference in overall time use occurs in market work, with men and women without disabilities spending 169.03 and 158.88 more minutes than men and women without disabilities, respectively. While men and women without disabilities are 31.24% and



32.87% more likely than those without disabilities to report any time in market work on diary day, no significant difference exists among men who do report time. The market time gap among women is less than 40 minutes. Much of this time is made up in tertiary activities and leisure. Nearly all respondents report time in tertiary activities, which include basic needs like sleeping and eating. Overall, men and women without disabilities spend 616.83 and 640.42 minutes in this category, whereas those with disabilities spend 658.08 and 688.61 minutes. The gap in leisure is much wider, however, with men and women with disabilities spending 139.7 and 129.98 more minutes than men and women without disabilities, respectively.

Table 1 also includes distributional measures of the personal and household variables used as covariates. Men and women with disabilities are significantly older, have lower levels of educational attainment, less likely to be married or to be immigrants (for men), and are in poorer health than those without disabilities. They also report significantly lower household income, are less likely to be living with household children, and live with fewer household adults.

#### *OLS and Decomposition Analysis*

A significant curvilinear association is found between age and three of the four outcomes for adults without disabilities, specifically an inverted u-shape for market work and a u-shape for tertiary activities and leisure. For men without a disability, having a college—versus no degree—is positively associated with market work and negatively associated with leisure, with no significant associations for those with disabilities. Education is more consistently important for women's time use. Those without disabilities who have a Bachelor's degree spend more time in market work and less time in nonmarket work, tertiary activities, and leisure. For women with disabilities, postsecondary education associates only with market work.

Being married, compared with being single, positively associates with market work for men, although much more so for men with disabilities. Being married negatively associates with market work for women without disabilities, and being widowed positively associates with market work for women with disabilities. Those who are divorced spend more time in market work if they do not have a disability but less time if they do. Otherwise, marital status does not associate with the other categories of time use for people with disabilities at the  $p < .05$  level. Men and women without disabilities spend more time in nonmarket work and less time in leisure if they are married. Being an immigrant is positively associated with tertiary activities and negatively associated with leisure for both men and women without disabilities. Among those without disabilities, it negatively associates with nonmarket work for men, and positively associates for women with disabilities. Men without disabilities who are immigrants also spend more time in market work than non-immigrants, with no association for women.

For women, poor health compared with excellent health is negatively associated with market work and positively associated with tertiary activities and leisure. There is a less consistent pattern of results among men. Those without disabilities spend less time in market and nonmarket work in poor health and more time in tertiary activities and leisure. Those with disabilities spend more time in market work when their health is very good and more time in tertiary activities when it is fair or poor. Having a household child of any age (versus no children) negatively associates with market work for women without disabilities, but this relationship only exists among women with disabilities who report preschool-aged children. Women with children of any age spend more time in nonmarket work than children without children, as do men without disabilities and men with disabilities with preschoolers. The number of household adults is negatively associated with time spent in market work all men and women

without disabilities. It is positively associated with leisure for all men. Income is significantly associated with time spent in market work for both males and females disabilities at the \$50,000-74,999 and \$75,000 or more levels. Men and women with higher household income at all levels spend less time in leisure. Women without disabilities spend less time in nonmarket work and tertiary activities with higher income, with a less consistent pattern found among men.

Table 4 decomposes the OLS results from Tables 2 and 3 into the observed difference, characteristics (the “explained” component), and returns (the “unexplained” component) using the Oaxaca-Blinder methodology (Blinder 1973; Oaxaca 1973). Focusing first on men’s market work, men without disabilities spend an average of 326.13 minutes in market work after adjusting for all other covariates in the OLS model, while men with disabilities spend an average of 157.1 minutes. The difference between these two values indicates a large observed difference (“D”) in the amount of time spent in market work for men with and without disabilities, such that men without disabilities spend 169.03 more minutes in market work than men with disabilities. This gap is further broken down into characteristics (“C”), or the part of the differential due to group differences in the predictors, and returns (“R”), or the contribution of differences in the estimated coefficients (Jann 2009). More specifically, C reflects the mean increase in time use for men with disabilities if they had the same characteristics as men without disabilities, and R quantifies the change in time use for men with disabilities if the coefficients for men without disabilities were applied to the characteristics of men with disabilities. Here, 72.5 minutes of the observed differential can be explained by differences in the personal and household characteristics included as covariates in the models and 96.53 minutes can be accounted for by the returns obtained from these personal and household characteristics. Thus, a greater percentage of the time gap in market work can be attributed to returns (57.11%) than

characteristics (42.89%). The same is true for the women's model, as 55 minutes (34.61%) of the differential can be explained by differences in the mean values of the predictors and 103.89 minutes (65.39%) can be accounted for by returns.

The observed difference in nonmarket work is not significant for either men or women. If men (women) with disabilities had the same characteristics as men (women) without disabilities, they would spend 15.28 (13.76) fewer minutes in tertiary activities and 65.76 (60.33) fewer minutes in leisure. Returns account for the larger percentage of both tertiary activities (63.95% for men and 71.44 % for women) and leisure (52.93% for men and 53.59% for women) than do characteristics.

These components can also be further decomposed into various subcomponents to help understand the extent to which each covariate contributes to the overall differential, and thus the extent to which they widen (increase) or narrow (decrease) the gap in time use between adults with and without disabilities. When the observed difference is positive, and thus those without disabilities spend more time, a positive coefficient indicates that the subcomponent increases the time gap between those with and without disabilities. A negative coefficient indicates that the component decreases the gap. Conversely, when the observed difference is negative, and thus those with disabilities spent more time, the opposite is true: negative coefficients increase the gap and positive coefficients decrease it. Tables 5 and 6 display these detailed decompositions for each of the equations with a significant observed differential (market work, tertiary activities, and leisure). These tables include the percentage with which each covariate contributes to the overall differential. Dummy variables are grouped as per Jann (2008) so that the covariate's contribution to the differential does not depend on the choice of base category. Other substantively similar characteristics (i.e., age and household composition) are also grouped.

Starting with market work, the characteristics with the largest significant gap-widening effects for both men and women are health (15.03% for men and 16.65% for women) and family income (13.09% for men and 12.93% for women). Household composition (including presence of children and the number of household adults) narrows the differential for men by 2.01% and for women by 8.61%. Marital status also has a gap-narrowing effect for women's market work. Among returns, age is the primary contributor to the gap for men (288.45%) and women (177.76%), with being interviewed on a weekend or holiday also narrowing the gap (34.41% for men; 29.57% for women). Health status is the primary gap-widening characteristic in tertiary activities and leisure for both men and women. For tertiary activities, household composition, family income, and education also widen the gap, while only immigrant status narrows it for both men and women. There are no significant gap-narrowing characteristics for men's or women's leisure, but health, income, age, immigrant status, and education all increase the differential. Among returns, being interviewed on a weekend or holiday decreases the time gap in tertiary activities and leisure for both men and women. Age increases it for men's leisure and women's tertiary activities.

## **Discussion**

The aims of this study were three-fold: to examine differences in contributors to time use for adults with and without disabilities, to quantify the disability gap net of these contributors, and to decompose the disability gap by health, household, and sociodemographic characteristics.

Results of the first question indicate that the contributors to time use vary greatly by gender and by disability status. For example, being married positively associates with time spent in market work for all men, but the magnitude is much larger for those with disabilities. On the contrary, marriage negatively associates with market time for women without disabilities and is

not significant for women with disabilities. Poor health appears to decrease time in market work and increase time in tertiary activities and leisure more so for women with disabilities than those without. For men with disabilities, it appears to increase only time spent in tertiary activities. Household income consistently matters for men's and women's market work and leisure. The magnitude of the coefficients, however, is much larger for those with disabilities. The market effects for women by disability look similar in magnitude, but the coefficient for the highest income level is much larger for men with disabilities than for men without disabilities. Time in market work and household income are clearly related and longitudinal data would be required to disentangle causal effects.

The results of the second question indicate that – after controlling for the personal and household characteristics presented here – men with disabilities, compared to those without, spend 169 minutes less in market work, 41 minutes more in tertiary activities, and 140 minutes more in leisure. Women with disabilities, compared to those without, spend 159 minutes less in market work, 48 minutes more in tertiary activities, and 130 minutes more in leisure. There is no significant difference in nonmarket work. Thus, market work appears largely reallocated to tertiary and leisure time.

Finally, the results of the second question indicate that the significant gap in market, tertiary, and leisure time is primarily exacerbated by health, followed by income and education. Household composition has a gap-narrowing effect on market work, as does marital status for women. Thus, health and social disparities are both important for explaining how disability shapes time use differentials.

Time use data offer the tremendous potential to understand daily life. These analyses utilize OLS to estimate outcomes in market time, nonmarket time, tertiary activities, and leisure,

as OLS is suggested to generate unbiased estimates (Stewart 2013), relative to Tobit and Cragg (double-hurdle) estimators. Next steps will be to fit a series of robustness checks on the results using these alternate specifications.

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**Table 1. Time distribution and mean values of explanatory variables by gender and disability status**

	Men			Women		
	Without disability	With disability	Difference	Without disability	With disability	Difference
<i>Time use variables (minutes per day)</i>						
<b>Market work</b>						
Total minutes	326.13	157.10	169.03 ***	242.86	83.98	158.88 ***
% with minutes > 0	63.30	32.06	31.24 ***	52.88	20.01	32.87 ***
Total minutes   minutes > 0	515.25	489.96	25.29	459.29	419.74	39.55 *
<b>Nonmarket work</b>						
Total minutes	159.03	158.26	0.77	251.28	244.84	6.44
% with minutes > 0	83.00	80.04	2.96 †	93.21	91.23	1.98 †
Total minutes   minutes > 0	191.61	197.72	-6.11	269.60	268.38	1.22
<b>Tertiary activities</b>						
Total minutes	616.83	658.08	-41.25 ***	640.42	688.61	-48.19 ***
% with minutes > 0	100.00	100.00	0.00	100.00	100.00	0.00
Total minutes   minutes > 0	616.86	658.08	-41.23 ***	640.42	688.61	-48.19 ***
<b>Leisure</b>						
Total minutes	304.46	444.16	-139.70 ***	268.20	398.18	-129.98 ***
% with minutes > 0	95.67	97.68	-2.01 *	95.52	96.61	-1.09
Total minutes   minutes > 0	318.26	454.73	-136.47 ***	280.79	412.15	-131.35 ***
<i>Personal and household variables</i>						
Age	40.03	47.61	-7.59 ***	40.32	49.24	-8.92 ***
Education			***			***
Less than High School	10.96	18.93	-7.97	9.09	20.27	-11.18
High school diploma	57.11	65.70	-8.59	55.97	64.30	-8.33
Bachelor's degree or more	31.93	15.37	16.56	34.94	15.43	19.51
Marital status			***			***
Single	33.58	30.25	3.33	29.40	22.87	6.53
Married	55.88	44.28	11.60	55.33	42.90	12.43
Widowed	.61	2.67	-2.06	2.25	6.91	-4.66
Divorced/separated	9.92	22.79	-12.87	13.02	27.32	-14.30
Immigrant	16.83	5.33	11.50 ***	15.52	7.39	8.13
Health status			***			***
Excellent	21.40	7.27	14.13	21.97	3.51	18.46
Very good	36.70	19.06	17.64	35.54	10.54	25.00
Good	30.84	26.56	4.28	29.85	25.42	4.43

Fair	9.55	27.34	-17.79	10.76	33.74	-22.98
Poor	1.51	19.77	-18.26	1.87	26.79	-24.92
Children 0-5	16.16	5.11	11.05 ***	18.860	3.50	15.36 ***
Children 6-12	17.95	8.70	9.25 ***	20.01	10.65	9.36 ***
Children 13-17	13.10	8.47	4.63 ***	14.87	6.31	8.56 ***
Weekend or holiday diary day	29.70	29.88	-0.18	29.91	30.55	-0.64
Family income			***			***
Less than \$25,000	14.87	42.04	-27.17	18.11	49.10	-30.99
\$25,000-49,999	25.26	27.62	-2.36	25.61	26.01	-0.40
\$50,000-74,999	20.98	12.39	8.59	19.86	11.69	8.17
\$75,000 or more	38.90	17.95	20.95	36.41	13.21	23.20
Number of household adults	2.35	2.15	0.20 ***	2.28	1.960	0.32 ***
N	15,358	1,123		18,025	1,418	

Source: American Time Use Survey. Data are weighted. †p<.10; \*p<.05; \*\*p<.01; \*\*\*p<.001 for two-tailed t-tests (age) and chi-square tests (all others).

**Table 2. OLS regressions on time use for men with and without disabilities**

	Market work		Nonmarket work		Tertiary activities		Leisure	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Without disability	With disability	Without disability	With disability	Without disability	With disability	Without disability	With disability
Age								
Age	21.188 ***	-0.251	2.847 *	-3.568	-5.137 ***	-6.236	-10.660 ***	10.529 *
Age squared	-0.259 ***	-0.040	-0.016	0.047	0.055 ***	0.073	0.136 ***	-0.083
Education								
Less than High School (reference)								
High school diploma	20.019 †	2.839	2.385	5.477	-7.106	-0.172	-11.739	-11.634
Bachelor's degree or more	37.729 **	13.071	2.809	15.258	-11.317 †	-23.415	-31.946 **	-11.205
Marital status								
Single (reference)								
Married	32.102 ***	77.255 **	18.688 ***	14.252	-0.680	-23.944	-38.345 ***	-53.520 †
Widowed	28.599	52.721	27.768	43.504	-27.426 †	-32.824	-16.176	-56.980
Divorced/separated	11.743	41.702 †	12.573 *	8.318	-1.449	-22.265	-20.738 *	-10.235
Immigrant	40.044 ***	22.044	-26.086 ***	-35.972	22.577 ***	45.086	-38.756 ***	-40.761
Health status								
Excellent (reference)								
Very good	3.831	88.250 *	-1.100	-43.089	-2.029	6.416	-1.417	-26.814
Good	-4.600	48.422	-3.065	-18.539	-2.271	-5.247	9.806	-10.551
Fair	-18.374 †	-44.372	-4.463	-29.558	6.217	52.308 *	28.162 **	32.011
Poor	-104.996 ***	-64.907 †	-26.370 *	-39.424	32.644 *	94.540 ***	105.161 ***	25.679
Children 0-5	6.252	12.101	67.800 ***	126.306 ***	-25.184 ***	-47.284 *	-35.207 ***	-87.379 *
Children 6-12	-17.586 *	26.095	32.919 ***	40.544 †	-3.099	7.086	-15.102 *	-73.219 **
Children 13-17	2.672	28.155	13.098 *	28.134	-6.998 †	-13.352	-12.228 ***	-32.596
Weekend or holiday diary day	-296.474 ***	-101.752 ***	77.419 ***	2.573	74.258 ***	21.993 †	156.038	80.769
Family income								
Less than \$25,000 (reference)								
\$25,000-49,999	49.769 ***	33.003	-9.730 †	27.637 †	-6.633	9.490	-16.715 *	-80.286 ***
\$50,000-74,999	64.163 ***	86.300 **	-0.989	6.867	-12.111 *	13.716	-28.748 ***	-104.616 **
\$75,000 or more	76.469 ***	188.715 ***	-6.179	-3.832	-12.359 *	-39.307 *	-46.077 ***	-146.472 ***
Number of household adults	-14.183 ***	-37.437 **	0.454	-3.826	-2.495	6.398	8.187 **	32.742 *
Constant	-46.299	277.550 *	36.494	163.040 †	730.813 ***	699.771 ***	496.197 ***	235.535 †
Number of observations	15,358	1,123	15,358	1,123	15,358	1,123	15,358	1,123
R <sup>2</sup>	0.271	0.306	0.105	0.065	0.084	0.102	0.182	0.193

Source: American Time Use Survey. Data are weighted. †p<.10; \*p<.05; \*\*p<.01; \*\*\*p<.001 (two-tailed tests)

**Table 3. OLS regressions on time use for women with and without disabilities**

	Market work		Nonmarket work		Tertiary activities		Leisure	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Without disability	With disability	Without disability	With disability	Without disability	With disability	Without disability	With disability
Age								
Age	18.982 ***	4.453	2.776 *	5.945	-5.692 ***	5.622	-7.396 ***	-13.091 †
Age squared	-0.233 ***	-0.063	-0.009	-0.059	0.052 ***	-0.062	0.105 ***	0.161 *
Education								
Less than High School (reference)								
High school diploma	60.147 ***	18.058	-22.535 **	11.519	-15.197 *	-26.146	-21.647 **	-17.746
Bachelor's degree or more	86.938 ***	56.172 *	-25.110 **	4.922	-25.029 ***	-45.740	-30.746 ***	-41.296
Marital status								
Single (reference)								
Married	-35.285 ***	1.943	57.069 ***	41.252 †	5.535	-17.289	-20.940 ***	-20.490
Widowed	-2.047	28.015 *	18.381 †	38.096	-2.197	-15.796	-7.975	-53.469 †
Divorced/separated	25.157 **	-1.027 ***	8.223	16.335	-9.578 †	-6.621	-21.149 **	-5.679
Immigrant	-2.047	40.219	18.350 **	-4.056	12.104 **	4.529	-32.721 ***	-48.453
Health status								
Excellent (reference)								
Very good	10.753	-75.011	-7.098	97.150 *	0.618	25.565	-1.810	-8.259
Good	-2.518	-85.154 *	-5.686	52.681	1.441	32.473	8.881	47.159
Fair	-7.538	-127.766 **	-2.244	42.313	-0.372	62.223	17.039 *	61.937
Poor	-82.633 ***	-161.118 ***	-3.084	1.593	39.997 ***	108.649 *	45.288 *	95.241 *
Children 0-5	-52.513 ***	-72.369 **	136.194 ***	213.544 ***	-25.208 ***	8.805 ***	-34.710 ***	-128.325 ***
Children 6-12	-39.321 ***	22.160	63.395 ***	63.971 **	-15.297 ***	-21.116	-11.424 **	-61.844 **
Children 13-17	-30.168 ***	-7.443	44.880 ***	82.297 **	-9.109 **	-50.868 **	-8.815 *	-29.790
Weekend or holiday diary day	-227.315 ***	-73.360 ***	44.439 ***	-26.539 *	74.896 ***	34.944 ***	120.484 ***	68.057 ***
Family income								
Less than \$25,000 (reference)								
\$25,000-49,999	49.929 ***	29.553 †	-12.249 *	30.295	-13.757 **	27.029	-18.472 **	-81.605 **
\$50,000-74,999	66.747 ***	72.656 *	-20.269 **	26.508	-13.161 **	-19.865	-25.379 ***	-66.966 *
\$75,000 or more	63.752 ***	66.616 **	-15.622 *	35.598	-11.770 *	-15.782	-32.353 ***	-72.457 *
Number of household adults	-5.995 †	-11.618	3.259	-7.153	-0.527	3.213	-0.693	4.839
<i>Constant</i>	-123.803 ***	112.882	116.533 ***	-5.227	774.023 ***	490.327 ***	414.574 ***	725.208 ***
Number of observations	18,025	1,418	18,025	1,418	18,025	1,418	18,025	1,418
R <sup>2</sup>	0.223	0.176	0.173	0.129	0.095	0.078	0.135	0.157

Source: American Time Use Survey. Data are weighted. †p<.10; \*p<.05; \*\*p<.01; \*\*\*p<.001 (two-tailed tests)

**Table 4. Decomposition from the OLS regressions between men and women with and without disabilities**

	Men				Women			
	Market work (1)-(2)	Nonmarket work (3)-(4)	Tertiary activities (5)-(6)	Leisure (7)-(8)	Market work (1)-(2)	Nonmarket work (3)-(4)	Tertiary activities (5)-(6)	Leisure (7)-(8)
Adjusted means								
Without disability	326.131 ***	159.028 ***	616.832 ***	304.463 ***	242.864 ***	251.280 ***	640.416 ***	268.202 ***
With disability	157.098 ***	158.260 ***	658.081 ***	444.163 ***	83.983 ***	244.843 ***	688.607 ***	398.179 ***
Observed difference (D)	169.033 ***	0.768	-41.249 ***	-139.700 ***	158.881 ***	6.437	-48.191 ***	-129.977 ***
Characteristics (C)	72.499 ***	2.686	-15.283 ***	-65.755 ***	54.995 ***	10.211 *	-13.761 ***	-60.328 ***
Returns (R)	96.534 ***	-1.918	-25.966 ***	-73.944	103.885 ***	-3.774	-34.430 ***	-69.648 ***
Contribution of each component (%)								
Characteristics (C/D)	42.891	349.725	37.050	47.069	34.614	158.631	28.556	46.415
Returns (R/D)	57.109	-249.725	62.950	52.931	65.386	-58.631	71.444	53.585
Total (C/D) + (R/D)	100	100	100	100	100	100	100	100

Note: The decomposition uses the Blinder-Oaxaca method and is based on the coefficients for respondents without disabilities. Results shown in Tables 2 and 3.

**Table 5. Detailed results from the decomposition of the disability gap in time use - men**

	Market work		Tertiary activities		Leisure	
	Coefficient	% of total	Coefficient	% of total	Coefficient	% of total
<b>Characteristics</b>						
Age	11.542 ***	6.829	2.178 †	-5.281	-10.021 ***	7.173
Education	4.613 **	2.729	-1.347 *	3.265	-4.405 ***	3.153
Marital status	1.699	1.005	0.724	-1.756	-1.759	1.259
Immigrant	4.771 ***	2.822	2.635 ***	-6.388	-4.646 ***	3.325
Health status	25.409 ***	15.032	-11.807 ***	28.625	-21.814 ***	15.615
Household composition	-3.400 *	-2.012	-3.788 ***	9.184	-4.553 ***	3.259
Weekend or holiday diary day	0.515	0.305	-0.129	0.313	-0.273	0.196
Family income	22.118 ***	13.085	-3.475 *	8.425	-14.167 ***	10.141
Region	-0.564	-0.334	0.287	-0.695	-0.210	0.150
Year	5.797 ***	3.430	-0.560	1.357	-3.908 ***	2.798
<b>Returns</b>						
Age	487.568 ***	288.446	7.547	-18.295	-474.134 ***	339.396
Education	1.047	0.619	-4.335	10.510	3.815	-2.731
Marital status	-2.735	-1.618	2.769	-6.712	-5.639	4.036
Immigrant	0.795	0.470	-1.237	3.000	0.294	-0.211
Health status	-3.166	-1.873	1.318	-3.194	-1.602	1.147
Household composition	43.432	25.695	-18.440	44.705	-42.966	30.756
Weekend or holiday diary day	-58.165 ***	-34.411	15.613 ***	-37.851	22.482 ***	-16.093
Family income	9.386 †	5.553	0.937	-2.271	-12.544 **	8.979
Region	2.183	1.292	-0.355	0.861	-1.252	0.897
Year	12.543 *	7.420	-7.922 *	19.206	1.971 **	-1.411
Constant	-396.354 **	-234.483	-21.858	52.990	435.630	-311.834
Total gap	169.033	100	-41.249	100	-139.700	100
N	16,481		16,481		16,481	

Source: American Time Use Survey. Data are weighted. †p<.10; \*p<.05; \*\*p<.01; \*\*\*p<.001 (two-tailed tests)

Note: Only results from significant overall differences are shown.

**Table 6. Detailed results from the decomposition of the disability gap in time use - women**

	Market work		Tertiary activities		Leisure	
	Coefficient	% of total	Coefficient	% of total	Coefficient	% of total
<b>Characteristics</b>						
Age	7.118 **	4.480	10.987 ***	-22.799	-13.445 ***	10.344
Education	11.635 ***	7.323	-3.823 ***	7.933	-4.337 ***	3.337
Marital status	-7.428 ***	-4.675	1.816 *	-3.769	1.018	-0.783
Immigrant	-0.062	-0.039	0.940 **	-1.950	-2.689 ***	2.069
Health status	26.451 ***	16.648	-13.751 ***	28.535	-18.866 ***	14.515
Household composition	-13.685 ***	-8.613	-5.295 ***	10.987	-6.849 ***	5.269
Weekend or holiday diary day	1.403	0.883	-0.466	0.968	-0.753	0.579
Family income	20.538 ***	12.927	-3.525 *	7.314	-11.307 ***	8.700
Region	0.050	0.032	0.420 †	-0.872	-0.363	0.280
Year	8.974 ***	5.649	-1.065 *	2.210	-2.738 ***	2.106
<b>Returns</b>						
Age	282.420 **	177.756	-264.506 *	548.871	136.463	-104.991
Education	7.842	4.936	-0.113	0.234	-2.956	2.274
Marital status	-1.080	-0.680	1.901	-3.944	-8.894 †	6.843
Immigrant	-3.226	-2.030	0.603	-1.252	1.190	-0.916
Health status	16.657 *	10.484	-8.493 †	17.623	-8.636	6.644
Household composition	3.159	1.988	-4.547	9.435	2.673	-2.056
Weekend or holiday diary day	-46.975 ***	-29.566	12.190 **	-25.295	15.993 **	-12.305
Family income	0.844	0.531	-2.004	4.158	-7.832	6.025
Region	-0.607	-0.382	-0.411	0.852	2.242	-1.725
Year	9.237	5.814	-1.792	3.719	1.025	-0.789
Constant	-164.386	-103.465	232.741 †	-482.956	-200.918	154.580
Total gap	158.881	100	-48.191	100	-129.977	100
N	19,443		19,443		19,443	

Source: American Time Use Survey. Data are weighted. †p<.10; \*p<.05; \*\*p<.01; \*\*\*p<.001 (two-tailed tests)

Note: Only results from significant overall differences are shown.