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The consequences of own and spousal disability on labor market outcomes and subjective well-being: Evidence from Germany

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Abstract:

In this paper, I contrast the effects of individual and spousal disability on subjective well-being and labor supply using data on couples from the German Socio-Economic Panel for the years 1984 to 2006. I find that both men and women reduce their propensity to work when they or their partner become disabled. The effects of spousal disability are economically large. I find no evidence for hours and wage adjustments by spousal disability, although there are wage effects of individual disability. The life-satisfaction of women, but not of men, is reduced considerably by their partners' disability. The effects are about 33 to 50% as large as those of individual disability. I also find no evidence that individuals adapt to their partners' disability, although there is adaption to individual disability.

Keywords: disability, labor supply, subjective well-being, adaption; other-regarding preferences

JEL Classification: D64, I10, J14

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The data from the German Socio-Economic Panel (SOEP) used in this paper are provided by the DIW Berlin. See http://www.diw.de for details. All analyses used Stata 11. Do-Files are available from the author on request.

I. MOTIVATION

The interrelation between economic outcomes and individual health, e.g., individual disability, permanent diseases or other types of adverse health shocks, have been thoroughly studied in the literature (see, e.g, the review by Currie and Madrian [1999] or Fischer and Sousa-Poza [2009], Kidd et al. [2000], Wagstaff [2007], Zhang et al [2009] for recent work). Relatively unsurprisingly, the general (qualitative) consensus from that literature is the finding of a negative relationship between deteriorating individual health on the one side and wages or employment prospects on the other side.

In contrast, in this paper I answer a related, but somewhat different question: While I also provide estimates for the effects of individual disability[1] as a comparison, my concern is how individuals react to the disability of their partner or spouse. Such a reaction is intuitively plausible as the respective partner may be forced to increase labor supply to offset the earnings loss caused by their partner's disability or, to the contrary, may decide to stay at home and care for him or her. I also consider the question how a spousal disability affects measures of subjective well-being and to what extent people adapt to their spouse's disability.

The available evidence on labor supply is relatively sparse and exclusively from the US: Berger and Fleisher [1983] consider the labor supply responses of wives to their husband's illness. Their results indicate that depending on the availability of other income sources, specifically social transfers, the wife either increases her labor supply as a result to an adverse health shock for her husband if transfer payments are not available or decreases her labor supply to care for her husband if other income sources are available. However, their results are based on data from the 1970s, in other words from a time where female labor market attachment was considerably lower than today. Haurin [1989], using data from the

[1] The disability measure used in this paper is defined in accordance with German social security law, has several legal consequences, e.g.., when it comes to employment and is only granted after an official examination, where the conditions that have to fulfilled are legally fixed, See section 2 for details.

NLS for 1979 to 1981, finds no significant effect on a woman's labor supply when her husband's health worsens. Siegel [2006] uses cross-sectional data from the 1992 Health and Retirement Survey and finds adjustments of the labor supply of women, whose directions depends on the specific illness the husband suffers from. Her data, however, cover only older individuals between 50 and 61 years of age whereas I also consider younger individuals.[2] The only other study to consider the effects of a wife's worsening health on her husband' labor supply is Charles [1999], who uses data from the first two waves of the Health and Retirement Survey, and finds evidence that men tend to reduce their labor supply in a reaction to their partner's poor health, whereas women tend to increase theirs. However, similar to Siegel [2006], he also focuses on older individual who were between 45 and 65 years of age at the time of the first wave of the survey.

In this paper, I present first evidence on labor supply reactions for a European country and first evidence for women of all ages' reactions to their partner's disability using panel data from the German Socio-Economics Panel for the years 1984 to 2006. My results suggest that employment probabilities for both men and women are reduced by between 5 and 7 percentage points by their partner's disability, regardless of whether household net income is held constant. The effects are slightly larger for women, but are also quite substantial for men. Conditional on being employed, I find no effect of a partner's disability on either (actual) working hours or wages.

It is also well-known that disability tends to reduce measures of subjective well-being (see, e.g., Ferrer-i-Carbonell and van Praag [2002], Lucas [2007], Oswald and Powdthavee [2007] and Ville et al [2001] for disability and, e.g., Groot et al. [2004] and Wu [2001] for other permanent health shocks). As there is evidence that subjective well-being measures within families are correlated (see, e.g., Winkelmann [2005] and Bruhin and Winkelmann [2009]), a fact that can be explained by other-regarding preferences or altruism within

[2] In addition, there is also some evidence on the effects of children's health on a mother's labor supply (see Gould [2004]).

families in the spirit of Becker's *Treatise on the Family* (Becker [1991], chapter 8), one can also suspect that individual disability may have a detrimental effect on the well-being of the respective partner. I study this question using life-satisfaction regressions and find evidence that women, but not men, are harmed by the disability of their respective partner, regardless of whether income effects are controlled for. Note that this result is similar to findings by Winkelmann and Winkelmann [1995] on the external effects of a partner's unemployment.

There is also plenty of evidence that individuals tend to adapt, at least partially, to a variety of conditions (see, e.g. Easterlin [2001], [2003], [2005] for income, Clark and Oswald [1994] for long-term unemployment and Clark et al. [2008] for a variety of social or economic events). With respect to disability the results are somewhat inconclusive: While Oswald and Powdthavee [2007] find evidence that individuals adapt partially to disability, the evidence in Lucas [2007] suggests that there is no adaption. The results in this paper are more similar to Oswald and Powdthavee [2007] when it comes to individual disability (and in fact almost identical to their secondary results in the appendix, where they use the same dataset as me). However, both women and men do not seem to adapt to their partners' disability. While this result is hardly surprising for men as there was no effect to begin with, it is potentially relevant for women.

Econometrically, my estimates rely on the assumption that a partner's health changes are exogenous with respects to an individual's labor supply or individual well-being. This assumption seems relatively innocuous, in particular as previous researchers have often used the stronger assumption that changes in individual disability are exogenous with respect to that individual's life-satisfaction (see Oswald and Powdthavee [2007] for the case of disability, Wu [2001] relies on a similar argument when looking at heart conditions). Additionally, I use fixed-effects estimators to control for unobserved heterogeneity and control for a fairly standard set of covariates, including work- and unemployment experience,

years of schooling and socio-demographic characteristics in the wage and employment estimates and additionally for labor force status in the subjective well-being estimates.

The remainder of this paper is organized as follows: Section 2 presents the data and descriptive evidence. Section 3 presents the estimation strategy and results for the effects on labor supply and wages. Results from the life-satisfaction regressions are presented in section 4. Section 5 concludes.

II. DATA AND DESCRIPTIVE EVIDENCE

The data come from the 1984 to 2006 waves of the German Socio-Economic Panel (SOEP, see Wagner, Frick, Schupp [2007] for a general overview), a representative longitudinal household survey of the German population provided by the DIW Berlin. Further information on the sampling design as well as additional information on the overall structure of the SOEP can be found in Haisken-DeNew and Frick [2005].

I use two measures of disability, both tied to the definition of a disabled person in German social security legislation. The first is an indicator whether an individual is considered to be severely disabled by German law. This is the case when the degree of disability, as determined by an official medical examination exceeds 50, which equals, e.g., the loss of a lower arm or the loss of a hand. Individuals with a degree of disability between 30 and 50 may obtain disability status when they would otherwise be unable to find a job (see §2 SGB IX, book 9 of the German social security code). The second measure is the degree of disability which runs from 0 to 100 (in steps of 5 or 10). The conditions that have to be fulfilled for a certain degree are legally fixed and are laid down in the *Anhaltspunkte für die ärztliche Gutachtertätigkeit* (see, e.g., Schillings and Wendler [2006]). About 85% of all disabilities are caused by disease, while roughly 5% are congenital, related to accidents or to war wounds respectively (see Statistisches Bundesamt [2003]). Note that changes in the

disability measures observed in the sample are most likely caused by disability or accidents as congenital disabilities are fixed at birth and those related to war wounds are almost exclusively the results of World War II and are consequently fixed before the observation period.

I restrict the sample to individuals between 18 and 75 years and keep only those observations where a partner is present and has non-missing information on his or her disability status. I also drop observations where the variation in the partner's disability status arises through individual's changing partners as there is little reason to suspect adaption to the health status of a former partner or labor supply responses in reaction to the disability of a former partner. Note, however, that results are almost identical when keeping these observations, which is not surprising as there are relatively few separations following a disability. The latter observation is also in line with US evidence found by Charles and Stevens Jr. [2004]. Finally, I drop cases where the changes in disability occur before the observation period. These cases contribute nothing to the estimates as these exploit within-person variation. Additionally, some analyses regarding adaption effects use the duration of the disability which is unknown for these cases. After dropping observations with missing information on any control variable, I end up with 49,078 person-year-observations from 8,177 men and with 49,312 person-year-observations from 8,369 women. Descriptive statistics for both samples can be found in table 1.

[TABLE 1 ABOUT HERE.]

Figures 1 to 3 display the distribution of subjective well-being, gross monthly labor income and employment by disability status. From figures 1a and 1b it is apparent that both men and women who are disabled or have a disabled partner are somewhat less happy than non-disabled individuals. From figures 2a and 2b, we see no apparent wage effects for women, while a greater share of disabled men and men with a disabled partner seem to be clustered in

lower income groups. For employment, figures 3a and 3b show that both disabled individuals and individuals with a disabled partner are less likely to be in employment.

[FIGURE 1a TO 3b ABOUT HERE.]

III. DISABILITY, LABOR SUPPLY AND WAGES

In this section, I consider the effects of own and spousal disability on the probability to be employed, the (actual) weekly working hours and the natural log of the monthly gross labor income. The usual estimating equation can be written as

$$y_{it} = \alpha_i + \theta_t + \beta' X_{it} + \tau * D_{it} + \varepsilon_{it,} \quad (1)$$

where α_i and θ_t are individual and year fixed-effects, X_{it} contains time-varying control variables, ε_{it} is a standard error term and D_{it} is the respective measure of individual or spousal disability. Depending on the model D_{it} contains either a dummy variable indicating (legal) disability status (Model I) or the degree of disability in a linear specification (Model II). In the case of working hours and wages, equation (1) is estimated using the standard within-estimator, while Chamberlain's [1980] conditional logit estimator is used in the case of employment probabilities. Standard errors are clustered at the person level to allow for arbitrary auto-correlation and heteroscedasticity within persons.

The included control variables are a set of dummies for household composition (which includes information on children), nationality and marital status, years of education and the years of full-time work and unemployment experience respectively. Equation (1) is estimated in two specifications, in- and excluding net household income, to gain an impression of the importance of income effects. These are potentially important as the results by Berger and Fleisher [1984] suggest that the availability of income transfers may influence individual labor supply responses. Note at this point that my measure of net household income also

includes transfers and other income redistributions through social security or the tax system, but also income from other sources, e.g., stocks.

The central question for the causal interpretation of τ is whether individual or spousal disability is indeed exogenous with respect to labor supply or wages. Remember from section 2 that changes in disability status during the observation period are the results of disease or to a much lesser extent accidents, while disabilities from war wounds and congenital disabilities are likely fixed at the beginning of the observation period. Note further that we can essentially rule out biological confounders that make individuals more vulnerable to disease and, e.g., intrinsically less likely to work as these should be captured by the fixed effects. However, there might be some issues with reverse causality when looking at individual disability, if, e.g., long working hours make individuals more likely to become disabled, for instance through strokes. While this possibility cannot be ruled out, it should be considerably less relevant for the partner's disability, which is the main focus of this paper. The essential assumption needed to give τ a causal interpretation in the estimations of main interest is that changes in a *partner*'s disability status are uncorrelated with unexplained changes in *individual* labor supply which seems plausible.

Estimation results for the parameters of interest can be found in tables 2a for men and in table 2b for women. The respective top panel presents the estimation results without holding household income fix, while the lower panel presents the results including household income. Estimations results including the control variables, which had the expected influence, are available from the author on request.

[TABLES 2a AND 2b ABOUT HERE.]

For both men and women, the results show a reduction in the propensity to work for individual and spousal disability. These effects exist regardless of whether income effects are controlled for. Evidence on marginal effects from simple linear probability models suggest that an individual disability reduces the probability to be employed by about 23% for men and

by about 18 to 19% for women with slightly larger effects being found when not controlling for income effects. A partner's disability in comparison reduces employment probabilities by 5 to 5.5% for men and by 5.4 to 7% for women, which is economically large. Looking at incremental increases in the degree of disability shows relatively similar results: For men a 10 point increase in individual disability reduces employment probabilities by 4%, while the same increase in the partner's disability leads to a 0.8 to 1% reduction in the probability of employment. For women, the corresponding values are a 5% reduction in the case of an individual disability and a 0.8 to 1% reduction in the case of a partner's disability.

Looking at working hours and gross labor income reveals a relatively similar picture: Both working hours and wages drop after an individual disability for both men and women, although the effects on working hours are economically negligible, while there is no effect to be found for the partner's disability. Additionally, point estimates, in particular when looking at wages, are essentially zero.

To sum up: Individual disability leads to considerable negative effects on both the probability to be employed and on wages. The disability of a partner does not reduce working hours or wages, but has an economically large and statistically significant negative effect on the propensity to work. These effects do not differ much between men and women, which is different from the results found by Charles [1999]. Additionally, unlike Berger and Fleisher [1984] my results do not differ when household income (including transfers) is in- or excluded.

IV. DISABILITY, SUBJECTIVE WELL-BEING AND ADAPTION

In a first step, I use life-satisfaction regressions of the form

$$y_{it} = \alpha_i + \theta_t + \beta' X_{it} + \tau * D_{it} + \varepsilon_{it,} \quad (2)$$

where α_i and θ_t are individual and year fixed-effects, y_{it} is the measure of subjective well-being described below, X_{it} contains time-varying control variables, ε_{it} is a standard error term

and D_{it} is again the respective measure of disability. Similar to the previous models D_{it} contains either a dummy variable indicating (legal) disability status (Model I) or the degree of disability in a linear specification (Model II) The included control variables are a set of dummies for household composition (which includes information on children), dummies for labor force status and nationality, years of education and work and unemployment experience. Apart from the dummies for labor force status these are identical to the controls used in the previous section. I again use two specification, in- and exluding household income, to control for income effects. Standard errors are again adjusted for clustering on the individual level.

In a second step, I study adaption effects using three specifications. The first is identical to equation (2) using a disability dummy and adding the duration of disability in years. The second specification uses the degree of disability and the duration of disability in years. Both specification lead to the following estimation equation

$$y_{it} = \alpha_i + \theta_t + \beta' X_{it} + \tau * D_{it} + \delta * years_{it} + \varepsilon_{it,} \quad (3)$$

where τ is the incremental effect of disability and δ is the average adaption to disability over time. Finally, I use another specification that allows the adaption to be different for different levels of disability. Specifically, I use the equation

$$y_{it} = \alpha_i + \theta_t + \beta' X_{it} + \tau * D_{it} + \delta * years_{it} + \lambda * (D_{it} * years_{it}) + \varepsilon_{it,} \quad (4)$$

where D_{it} is the degree of disability and λ measures differences in adaption for different levels of severance.

The measure of subjective well-being is the answer to the direct question "How satisfied are you with your life, all things considered? Please answer according to the following scale: 0 means completely dissatisfied, 10 means completely satisfied." that is usually applied in the subjective well-being literature. I treat well-being as cardinal and apply the usual within-estimator. Note that Ferrer-i-Carbonell and Fritjers (2004) report a relatively minor impact of the choice between cardinal and ordinal subjective well-being. The central

identifying assumption for the effects of interest is again is that changes in a *partner*'s disability status are uncorrelated with unexplained changes in *individual* well-being.

Results for the basic life-satisfaction estimates can be found in tables 3a and 3b. Individual disability leads to rather large losses in life-satisfaction, which was expected. These effects are not primarily driven by income losses as can be see from the comparison of the estimates in- and excluding household income. Note that the magnitude of results is similar to the results by Oswald and Powdthavee [2007], who considered Germany in a secondary analysis in their paper focused on the UK.

[TABLES 3a AND 3b ABOUT HERE.]

More interesting in the context of this paper are the results for the partner's disability. Here, I find strong differences between men and women: While men are essentially unharmed by the disability of their partner, women experience a loss in subjective well-being that equals between 33 and 50% of the effect of individual disability. The effects are again stronger when income is not held fix, but remain economically large after netting out losses in household income. Interestingly, these results are very similar to the reactions towards a partner's unemployment found by Winkelmann and Winkelmann [1995]. A potential explanation for these findings, apart from hypothesizing that women react more emotionally towards adverse strokes of fate, could be that women are more dependent on their partners than men. If, e.g., a woman's social status depends to a greater degree on her partner's social standing than it is the case for men, she has more to lose than income if that partner becomes disabled. While there is no way to test for such status effects with the available data, the fact that the results barely change when income is included make this explanation somewhat unlikely as income and social status should be correlated.

Consider now the results for adaption effects in tables 4a and 4b. For individual disability the results generally show evidence in favor for adaption effects for both men and women, although these are not always statistically significant. Note that this finding is similar

to the results by Oswald and Powdthavee [2007] for the UK. The results also show no evidence that the speed of adaption depends on the severity of the disability.

[TABLES 4a AND 4b ABOUT HERE.]

For both men and women, the results do not show evidence in favor of adaption to their partners' disability. This result is not really surprising for men as there was no effect of their partners' disability to begin with. The case is different for women though: Given that they experience economically large losses in well-being through their partners' disability, the lack of adaption implies that these losses are permanent. Note that this lack of adaption is unusual as there is evidence that individuals adapt to marriage, widowhood, divorce, the birth of a child and layoffs with the usual exception being unemployment (see Clark et al. [2008]).

V. CONCLUSION

In this paper, I contrasted the effects of individual and spousal disability on labor supply, wages and subjective well-being using German panel data for 1984 to 2006. My results suggest that both men and women tend to adjust their labor supply on the extensive margin when their partner becomes disabled: Employment probabilities drop by 5 to 7 percentage points, compared with an 18 to 23 percentage point drop caused by individual disability. There is no evidence on working hour adjustments, either through individual or spousal disability, while wages are only influenced (negatively) through individual disability. Results from fixed effects life-satisfaction regressions indicate that women but not men are harmed considerably by their partners' disability. As expected, I find that individual disability tends to reduce life-satisfaction by a considerably amount, which is in line with earlier evidence (e.g., Oswald and Powdthavee [2007]). The results also suggest that men and women tend to adapt to individual disability in a similar way as found, e.g, by Oswald and Powdthavee [2007], but not to the disability of their partner, which makes the corresponding losses in well-being by women potentially permanent. All these results remain virtually

unchanged when also controlling for net household income (including direct and indirect transfers), which suggests that income effects of disability are not the driving force behind the observed effects.

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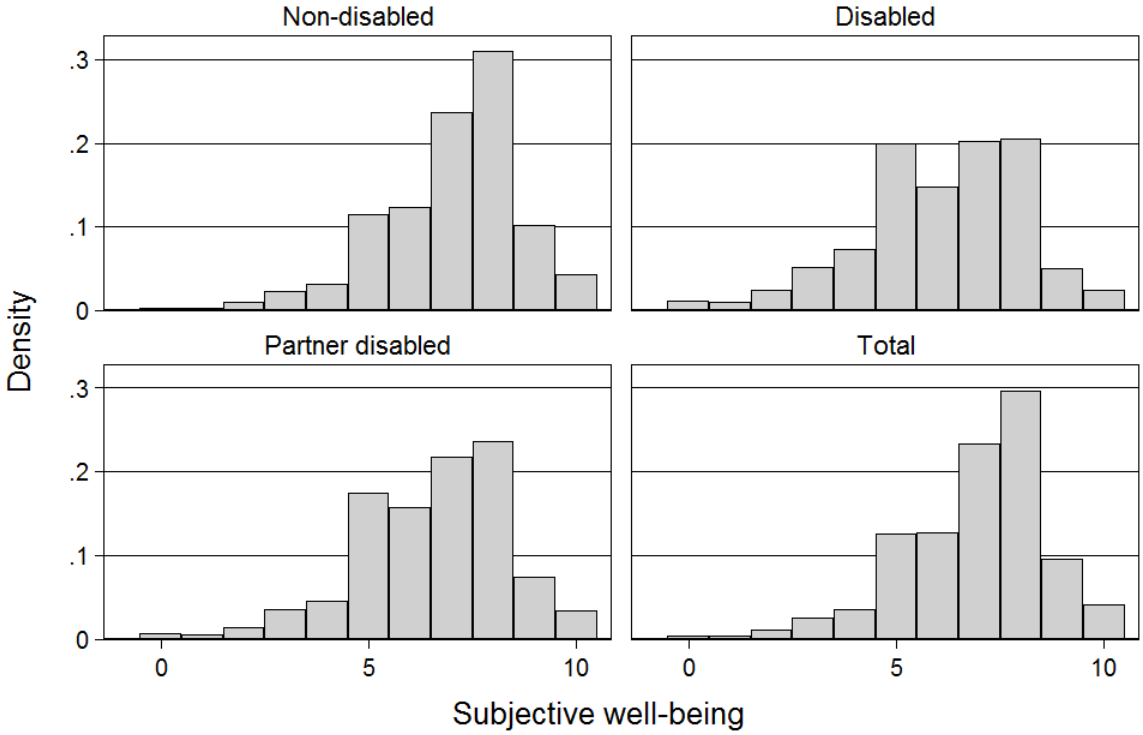
Table 1: Descriptive statistics, estimation sample

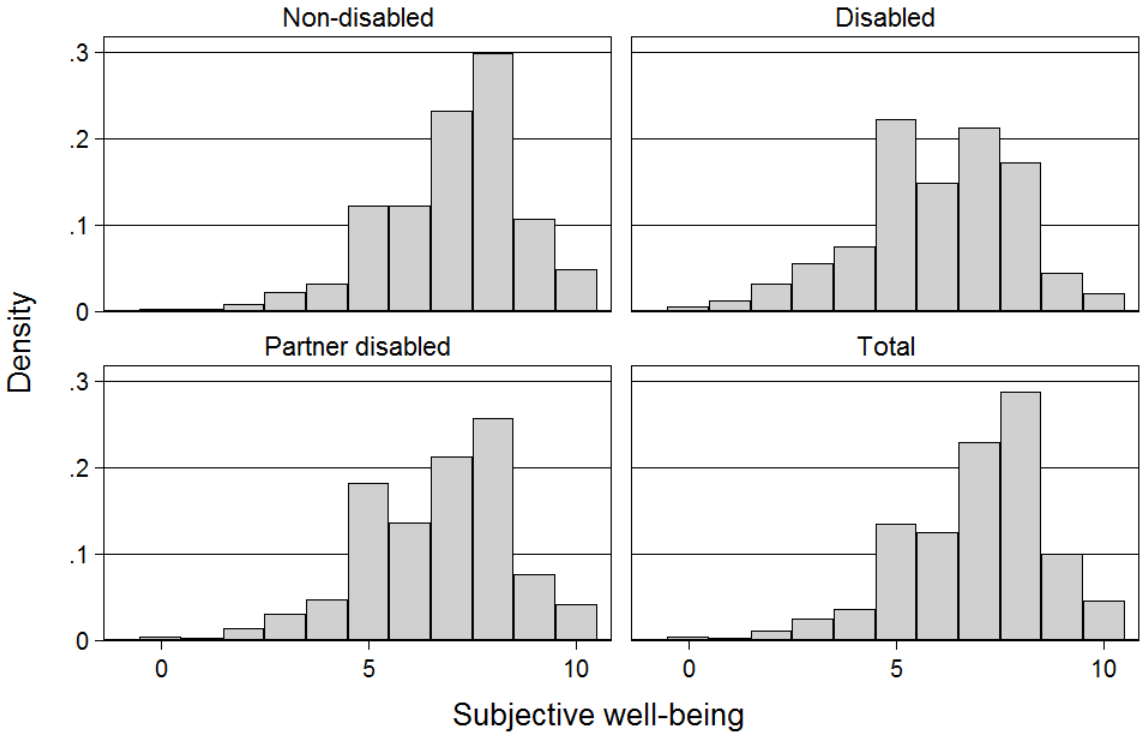
	Men		Women	
	Mean	Std.dev.	Mean	Std.dev.
Subjective well-being (0 to 10)	6.92	1.74	6.93	1.74
Disabled (1 = yes)	0.09	0.28	0.07	0.25
Degree of disability (index from 0 to 100)	4.13	15.02	3.37	14.24
Years disabled	0.41	1.61	0.31	1.44
Partner disabled (1 = yes)	0.08	0.28	0.13	0.34
Partner's degree of disability (index from 0 to 100)	4.42	16.42	6.72	19.37
Partner's years disabled	0.38	1.53	0.62	1.93
Age (years)	47.35	12.96	45.18	13.14
Years of schooling	11.88	2.83	11.45	2.68
Work experience (years)	23.69	11.98	13.23	11.45
Unemployment experience (years)	0.68	1.63	0.77	1.72
German nationality (1 = yes)	0.76	0.43	0.77	0.42
Married (1 = yes)	0.90	0.31	0.90	0.30
Real monthly net household income (€, 2000 prices)	2493.40	1518.09	2479.63	1528.21
Real monthly gross labor income (€, 2000 prices)	2657.91	2009.85	1544.64	1175.10
Actual weekly working hours	44.19	10.02	33.54	12.84
Employed (1 = yes)	0.73	0.45	0.55	0.50
Out of the labor force (1 = yes)	0.06	0.25	0.21	0.41
Retired (1 = yes)	0.10	0.30	0.09	0.28
Unemployed (1 = yes)	0.08	0.27	0.07	0.26
Other labor force status (1 = yes)	0.13	0.34	0.17	0.37
Couple without children (1 = yes)	0.36	0.48	0.37	0.48
Couple with children younger than 16 (1 = yes)	0.33	0.47	0.32	0.47
Couple with children older than 16 (1 = yes)	0.17	0.37	0.17	0.37
Couple with children younger and older than 16 (1 = yes)	0.10	0.30	0.10	0.30
Multiple generation household (1 = yes)	0.03	0.16	0.03	0.16
Other combination (1 = yes)	0.01	0.10	0.01	0.10
Observations (whole sample)	49,078		49,312	
Observations (wage sample)	28,973		22,697	
Observations (hours sample)	28,014		21,824	
Individuals	8,177		8,369	

Figure 1a
Distribution of subjective well-being measure by disability, men



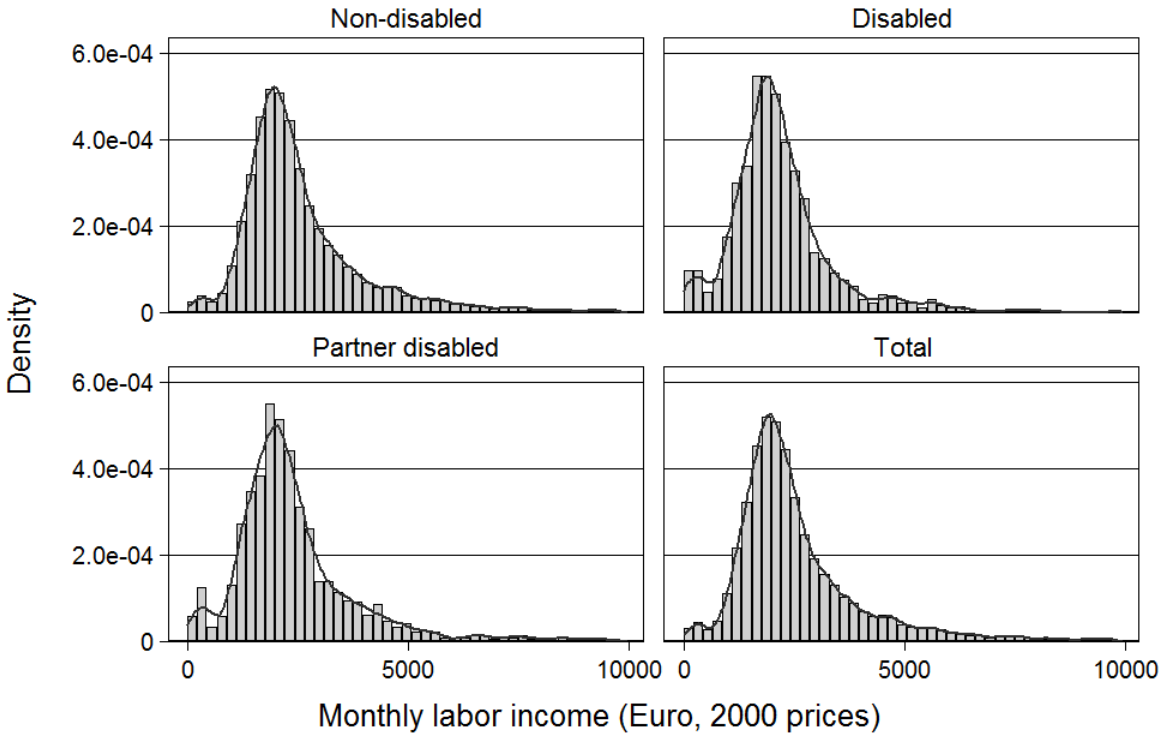
Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Figure 1b
Distribution of subjective well-being measure by disability, women



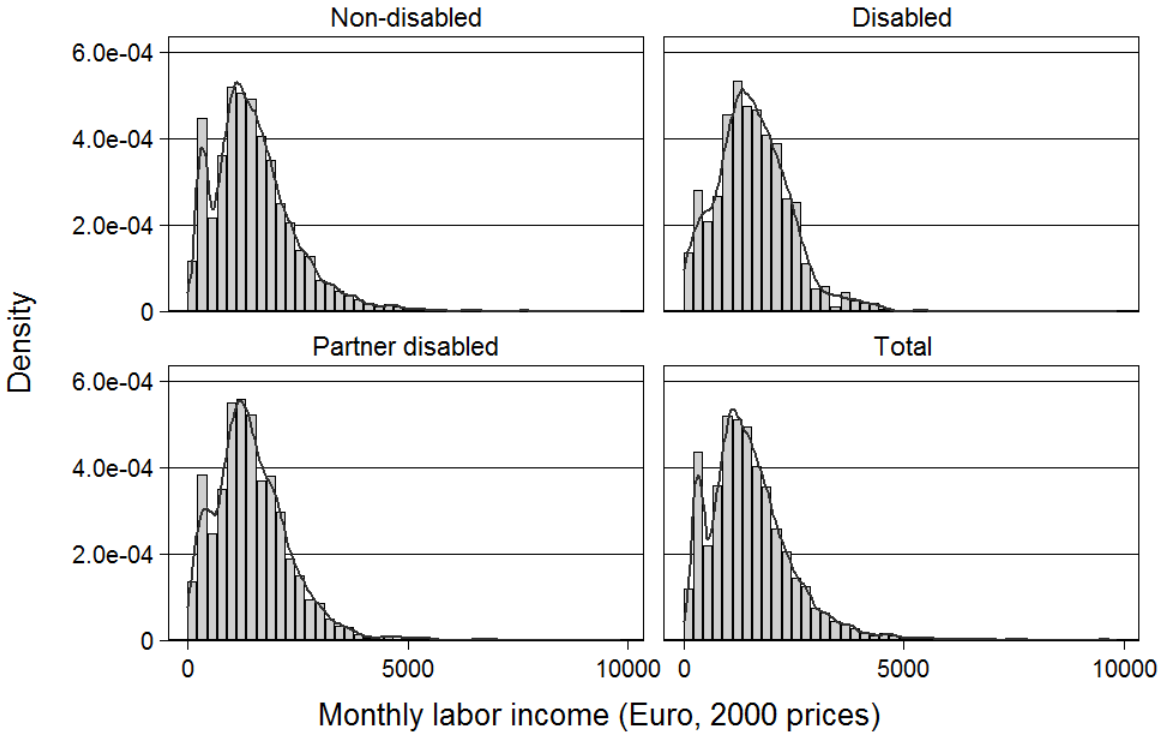
Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Figure 2a
Distribution of gross real monthly labor income by disability, men



Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Figure 2b
Distribution of gross real monthly labor income by disability, women



Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Figure 3a
Employment by disability, men

Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Figure 3b
Employment by disability, women

Source: German Socio-Economic Panel, pooled over years 1984 to 2006

Table 2.a: Impact of own and partner's disability on employment probabilities, working hours and gross monthly labor income, male sample, only individuals without partner change after onset of disability

	Employment probability (Conditional logit estimates)				**Weekly actual working hours** (Fixed effects estimates)				**Ln(gross monthly real labor income)** (Fixed effects estimates)			
	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.
Income effects not controlled for												
Disabled (1 = yes)	-1.7287*** (0.2092)	-0.6631** (0.2368)			-0.7716+ (0.4596)	0.3554 (0.4611)			-0.0934*** (0.0230)	-0.0093 (0.0241)		
Degree of disability (index from 0 to 100)			-0.0371*** (0.0040)	-0.0103** (0.0039)			-0.0145 (0.0120)	0.0035 (0.0091)			-0.0017*** (0.0005)	-0.0006 (0.0005)
N	10918	7853	10918	7853	31426	25775	31426	25775	32494	26637	32494	26637
Income effects controlled for using ln(monthly net household income)												
Disabled (1 = yes)	-1.5851*** (0.2299)	-0.5992* (0.2716)			-0.7288 (0.4580)	0.4031 (0.4605)			-0.0845*** (0.0220)	0.0001 (0.0235)		
Degree of disability (index from 0 to 100)			-0.0357*** (0.0043)	-0.0096* (0.0048)			-0.0136 (0.0120)	0.0044 (0.0091)			-0.0015** (0.0005)	-0.0004 (0.0004)
N	10918	7853	10918	7853	31426	25775	31426	25775	32494	26637	32494	26637

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies and year effects..

Table 2.b: Impact of own and partner's disability on working hours and gross monthly labor income, female sample

	Employment probability (Conditional logit estimates)				**Weekly actual working hours** (Fixed effects estimates)				**Ln(gross monthly real labor income)** (Fixed effects estimates)			
	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.
Income effects not controlled for												
Disabled (1 = yes)	-2.1367*** (0.2425)	-0.6176*** (0.1726)			-1.5750** (0.5924)	-0.4420 (0.4836)			-0.0779** (0.0257)	-0.0056 (0.0212)		
Degree of disability (index from 0 to 100)			-0.0451*** (0.0053)	-0.0106** (0.0035)			-0.0376* (0.0154)	0.0003 (0.0087)			-0.0018** (0.0007)	0.0002 (0.0003)
N	16558	13245	16558	13245	24699	19644	24699	19644	25633	20402	25633	20402
Income effects controlled for using ln(monthly net household income)												
Disabled (1 = yes)	-2.1005*** (0.2497)	-0.4218* (0.1762)			-1.5577** (0.5857)	-0.3495 (0.4849)			-0.0756** (0.0254)	0.0038 (0.0210)		
Degree of disability (index from 0 to 100)			-0.0445*** (0.0054)	-0.0069* (0.0035)			-0.0369* (0.0153)	0.0015 (0.0087)			-0.0017** (0.0007)	0.0003 (0.0003)
N	16558	13245	16558	13245	24699	19644	24699	19644	25633	20402	25633	20402

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies and year effects.

Table 3.a: Impact of own and partner's disability on subjective well-being, male sample, fixed effects regressions

	Model I: Disability dummy		**Model II: Degree of disability**	
	Own disab.	Partner's disab.	Own disab.	Partner's disab..
Income effects not controlled for				
Disabled	-0.3029***	0.0262		
(1 = yes)	(0.0612)	(0.0638)		
Degree of disability (			-0.0076***	-0.0003
index from 0 to 100)			(0.0012)	(0.0011)
N	49,078	49,078	49,078	49,078
Income effects controlled for using ln(monthly net household income)				
Disabled	-0.2837***	0.0327		
(1 = yes)	(0.0616)	(0.0636)		
Degree of disability			-0.0073***	-0.0002
(index from 0 to 100)			(0.0012)	(0.0011)
N	49,078	49,078	49,078	49,078

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies, year effects and the following labor market states: unemployment, out of the labor force, retires, other (with working being the base alternative). Full estimation results are available on request.

Table 3.b: Impact of own and partner's disability on subjective well-being, female sample, fixed effects regressions

	Model I: Disability dummy		**Model II: Degree of disability**	
	Own disab.	Partner's disab.	Own disab.	Partner's disab..
	Income effects not controlled for			
Disabled	-0.2772***	-0.1532**		
(1 = yes)	(0.0702)	(0.0569)		
Degree of disability (			-0.0066***	-0.0033***
index from 0 to 100)			(0.0014)	(0.0010)
N	49312	49312	49312	49312
	Income effects controlled for using ln(monthly net household income)			
Disabled	-0.2809***	-0.1093+		
(1 = yes)	(0.0696)	(0.0569)		
Degree of disability			-0.0066***	-0.0027**
(index from 0 to 100)			(0.0014)	(0.0010)
N	49312	49312	49312	49312

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies, year effects and the following labor market states: unemployment, out of the labor force, retires, other (with working being the base alternative). Full estimation results are available on request.

Table 4.a: Adaption of happiness to own and partner's disability status, male sample, fixed effects regressions

	Model I: Disability dummy		**Model II: Degree of disability**		**Model III: Degree of disability + year interaction**	
	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.
			Income effects not controlled for			
Disabled	-0.3508***	0.0366				
(1 = yes)	(0.0658)	(0.0676)				
Degree of disability			-0.0086***	-0.0003	-0.0085***	0.0005
(index from 0 to 100)			(0.0013)	(0.0011)	(0.0014)	(0.0011)
Years disabled	0.0183	-0.0037	0.0236+	0.0002	0.0251	0.0319
	(0.0126)	(0.0120)	(0.0122)	(0.0115)	(0.0191)	(0.0198)
Interaction: degree and duration of disability					-0.0000	-0.0006+
					(0.0004)	(0.0003)
N	49078	49078	49078	49078	49078	49078
			Income effects controlled for using ln(monthly household income)			
Disabled	-0.3384***	0.0450				
(1 = yes)	(0.0661)	(0.0673)				
Degree of disability			-0.0084***	-0.0002	-0.0084***	0.0006
(index from 0 to 100)			(0.0013)	(0.0011)	(0.0015)	(0.0011)
Years disabled	0.0210+	-0.0044	0.0267*	-0.0004	0.0291	0.0307
	(0.0127)	(0.0120)	(0.0123)	(0.0115)	(0.0193)	(0.0199)
Interaction: degree and duration of disability					-0.0001	-0.0006+
					(0.0004)	(0.0003)
N	49078	49078	49078	49078	49078	49078

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies, year effects and the following labor market states: unemployment, out of the labor force, retires, other (with working being the base alternative). Full estimation results are available on request.

Table 4.b: Adaption of happiness to own and partner's disability status, female sample, fixed effects regressions

	Model I: Disability dummy		**Model II: Degree of disability**		**Model III: Degree of disability + year interaction**	
	Own disab.	Partner's disab.	Own disab.	Partner's disab.	Own disab.	Partner's disab.
			Income effects not controlled for			
Disabled	-0.3817***	-0.1104+				
(1 = yes)	(0.0786)	(0.0602)				
Degree of disability			-0.0083***	-0.0032**	-0.0079***	-0.0031**
(index from 0 to 100)			(0.0015)	(0.0011)	(0.0016)	(0.0011)
Years disabled	0.0311*	-0.0119	0.0343*	-0.0084	0.0483*	-0.0054
	(0.0143)	(0.0109)	(0.0137)	(0.0109)	(0.0225)	(0.0173)
Interaction: degree and duration of disability					-0.0003	-0.0001
					(0.0004)	(0.0003)
N	42705	42705	42705	42705	42705	42705
			Income effects controlled for using ln(monthly household income)			
Disabled	-0.3822***	-0.0680				
(1 = yes)	(0.0781)	(0.0599)				
Degree of disability			-0.0083***	-0.0026*	-0.0080***	-0.0024*
(index from 0 to 100)			(0.0015)	(0.0010)	(0.0016)	(0.0011)
Years disabled	0.0309*	-0.0106	0.0338*	-0.0064	0.0432+	0.0006
	(0.0144)	(0.0107)	(0.0137)	(0.0107)	(0.0224)	(0.0172)
Interaction: degree and duration of disability					-0.0002	-0.0001
					(0.0004)	(0.0003)
N	42705	42705	42705	42705	42705	42705

Coefficients, standard errors that are adjusted for clustering on the person level in parentheses. ***/**/*/+ denote significance on the .1%, 1%, 5% and 10% level. All estimates control for age and age squared, education in years, lifetime full-time work and unemployment experience, German nationality, marital status, 6 household type dummies, year effects and the following labor market states: unemployment, out of the labor force, retires, other (with working being the base alternative). Full estimation results are available on request.

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