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THE TIME-CRUNCH PARADOX

Jose Ignacio Gimenez-Nadal and Almudena Sevilla-Sanz

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The Time-crunch Paradox*

Jose Ignacio Gimenez-Nadal
University of Zaragoza

Almudena Sevilla-Sanz
University of Oxford

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Abstract

Previous research has shown little difference in the average leisure time of men and women. This finding is a challenge to the second shift argument, which suggests that increases in female labor market hours have not been compensated by equal decreases in household labor. This paper presents time-use and leisure satisfaction data for a variety of western European countries, and shows that accounting for individual heterogeneity is vital for understanding gender differences. In particular, working mothers have leisure levels that are much lower than those of working fathers and singles. Working mothers are also most likely to report the least satisfaction with free time. Finding that time stress and leisure time are positively correlated within socio-demographic groups suggests that the second shift argument is still valid, and that feelings of time stress are indeed associated with the lack of leisure time.

JEL Classification: C33, D13, D14, D31, J12, J16
Keywords: *Second Shift*, Work-life balance, Time Use, Leisure satisfaction

*Correspondence to Sevilla Sanz. University of Oxford. Department of Economics, Manor Road, OX 02115. Phone:+441865281740 Email: almudena.sevilla@economics.ox.ac.uk.

1 Introduction

Despite increases in female labor force participation, women continue to specialize in non-market work (e.g., Bittman 1999, Bianchi, Milkie, Sayer, and Robinson 2000, Baxter 2002). In most developed countries women devote about 6 hours per day to housework and child care activities, while men spend about half this time in these activities (Gauthier, Smeeding, and Furstenberg 2004). This unequal division of home labor suggests that women may have added employment obligations to their previously existing domestic responsibilities, giving rise to a *second shift* or *dual burden* (e.g., Hochschild and Machung 1989, Schor 1991). The *second shift* argument may help explain why, despite reporting more satisfaction in other domains of life (e.g., Alesina, Di Tella, and McCulloch 2004, Clark 1997), women consistently sexpress discontent with their leisure time(Robinson and Godbey 1999, Bittman and Wajcman 2000, Mattingly and Bianchi 2003, Sayer 2005, Mattingly and Sayer 2006).

The idea that women are working longer total hours than men - and thus enjoying less leisure - has, however, been challenged. Sociologists have used evidence from time-use diary data to show that the sum of men's and women's paid and unpaid work, and indeed leisure time, is broadly equal across gender.[1] Economists have recently started documenting this *iso-work* pattern (e.g., Burda, Hamermesh, and Weil 2008), and their findings cast some serious doubts on the *second shift* argument, suggesting that women's feelings of time pressure may not be related to time poverty after all.

This paper contributes to this debate in two ways. First, we offer a more unified picture by not only looking at "objective" data on how much free time people report in time diaries, but also at "subjective" interview data on how satisfied respondents are with their leisure time. Because we draw on evidence from multiple European counties, our results potentially reflect a generalizable if not universal pattern. Second, we move beyond previous investigations that mostly focus on comparing average measures of time use, and instead pay special attention to sample composition effects and the determinants of leisure time and leisure satisfaction by gender. This analysis allows us to uncover which socio-economic groups are at a higher risk of experiencing leisure poverty, and whether leisure deprivation is indeed associated with lower levels of leisure satisfaction.

[1] See Robinson and Godbey (1999), and Bianchi, Robinson, and Milkie (2006) for evidence for the US, Beaujot (2001) for evidence for Canada, and Gershuny (2000) for evidence for Britain. A comparison of time use in 10 OECD countries replicates these findings (e.g., Bittman and Wajcman 2000).

In the first part of our analysis we use multivariate models to show that the average gender comparisons obscure the heterogeneity that is present in the men and women samples. We show that average comparisons underestimate the real difference between men and women with regards to leisure time. Once observed heterogeneity is taken into account the gender differential in free time favoring men increases from approximately 3 hours per week to almost 5 hours and a half. Although this difference can hardly count as a *double burden*, one could still argue that it is a significant gap (e.g., Gershuny 2000). Sample composition effects are even stronger in the case of leisure satisfaction. Whereas average gender comparisons show that women have higher levels of leisure satisfaction, once men and women with similar characteristics are compared it is women, not men, who are less satisfied with their leisure time.

We further document that labor market activity is the most important confounding factor in average gender comparisons of leisure time and leisure satisfaction. Working full-time is strongly associated with less leisure time (reducing leisure time by about 9 hours) and lower levels of leisure satisfaction. Given that a significantly lower number of women are in full-time jobs compared to men, average comparisons of men and women that do not take into account labor force status underplay the true differences across gender.

The second part of the analysis accounts for heterogeneous effects across gender to identify what socio-economic groups are at a greater risk of experiencing time poverty. We find that full-time working mothers have the lowest levels of leisure time and leisure satisfaction. In particular, a mother working full-time with two children has about 6 hours less leisure than a comparable father, and about 11 hours less of leisure per week than a single man working full-time. This group of women also report the greatest discontent with the amount of leisure.

Throughout our analysis we consistently find that the variables that are important for leisure time seem to be equally important for leisure satisfaction. Leisure and leisure satisfaction both display a U-shape pattern with age. Working in the market (either full or part-time), being married, and having children all contribute to lower levels of leisure time and leisure satisfaction. Thus, feelings of time stress do indeed seem to be associated with a lack of leisure time, which is consistent with the *second shift* argument. The relative importance of these factors does, however, vary by gender, highlighting different experiences of leisure time according to gender, and suggesting that there might be other factors beyond the amount of leisure time that could also be important determinants of leisure satisfaction, such as the quality of leisure.

By combining data on time use and satisfaction with leisure time, our work adds to the existing literature on the analysis of the allocation of time and welfare comparisons. The key issue in this literature is how to compare alternative activities without considering prices. The classical approach is the revealed preference approach: a person has a certain amount of time available and chooses certain activities. Thus, these activities must be preferred to other available activities, and do not affect the budget constraint, and are not chosen (e.g., Ghez and Backer 1975, Juster and Stafford 1991, Robinson and Godbey 1999, Bittman and Wajcman 2000, Gershuny 2000, Aguiar and Hurst 2007). An alternative methodology is to use self-reported measures of how enjoyable activities are, which uses time-use diaries together with the intensity of pain and pleasure that arises during an experience to assess individuals' subjective well-being (e.g., Juster and Stafford 1991, Kahneman and Krueger 2006, Krueger 2007). Each of these alternative theories has advantages and limitations. In this paper we rely on both pieces of information - how much leisure individuals *choose* to have, and how satisfied they are with their level of leisure - to assess the extent individuals experience time poverty.

This paper is organized as follows. Section 2 describes the two data sets used in the analysis, the Multinational Time Use Study (MTUS) and the European Community Household Panel Data (ECHP). Section 3 shows the biases associated with the comparison of gender averages, and Section 4 looks at the determinants of leisure by gender. Section 5 presents the main conclusions.

2 Data

To our knowledge no survey covers the range of countries considered for this study that simultaneously contains both information on time-use and detailed levels of general satisfaction.[2] We, thus, use two separate surveys in our analysis; the Multinational Time Use Survey (MTUS), to look at differences in leisure time by gender; and 8 waves from the European Community Household Panel (ECHP), for the analysis of satisfaction with leisure. The MTUS is an ex post harmonized cross-time, cross-national comparative time-use database, and is coordinated by the Center for Time Use Research at the University of Oxford. It is constructed from national

[2]The Harmonized European Time Use Surveys do contain information on whether individuals feel pressure for time, as do some American Time Use surveys (e.g., Robinson and Godbey 1999). However the question of interest in this paper is about satisfaction with leisure in a broader sense, which might not be entirely captured by feelings of time stress. More importantly, all these surveys are cross-sectional studies.

random-sampled time-diary studies, with common series of background variables and total time spent in 40 activities (Gershuny 2009). The MTUS has been widely used across the social sciences. Examples of papers using the MTUS for the analysis of time-use include Gershuny (2000), Gershuny and Sullivan (2003), Gauthier, Smeeding, and Furstenberg (2004), Guryan, Hurst, and Kearney (2008) and Gershuny (2009).[3] The ECHP is a survey carried out in 15 European Union countries in the period 1994-2001, and is a standardized multi-purpose annual longitudinal survey that contains information on demographics and other socio-economic characteristics. Importantly for this study, the ECHP contains satisfaction measures with various domains in life. Unlike the MTUS, the ECHP is a panel survey that follows individuals over time, which is particularly useful to identify the underlying factors of leisure satisfaction Peracchi (2002). Examples of recent papers using the ECHP to analyze satisfaction questions include Cabral-Vieira (2005), O'Connell (2005), Skalli, Theodossiou, and Vasileiou (2008), Clark, Kristensen, and Westergard-Nielsen (2009), Diaz-Serrano (2009) and Origo and Pagani (2009).

For the sake of comparison with previous studies, and to minimize the role of time allocation decisions that have a strong inter-temporal component over the life cycle (such as education and retirement), we restrict the samples to non-retired/non-student individuals between the ages of 24 and 65 (inclusive). Our results can thus be interpreted as being "per working-age adult" (e.g., Aguiar and Hurst 2007). In order to make a parallel analysis between time allocation and leisure satisfaction, we use observations from similar countries and years. For the analysis of leisure time using the MTUS we use observations from Austria 1992, France 1998, Germany 1991/92, Italy 2003, Norway 1990/91 and 2000, Spain 2002/03, the Netherlands 1990/1995/2000, and the United Kingdom 1995/2000. For the analysis of leisure satisfaction using the ECHP we analyze 13 European countries, from 1994 to 2001: Austria (1995-2001), Belgium, Denmark, Finland (1996-2001), France, Germany (1994-1996), Greece, Ireland, Italy, Portugal, Spain, the Netherlands and the United Kingdom (1994-2000). We exclude Luxembourg from the analysis because the size of the country is very small, and Sweden because the data does not have a panel structure. For Austria, Finland, Germany and the United Kingdom, we have no information for all the years.

Our two dependent variables are the amount of free time and the level of satisfaction with

[3]Information on the variables, and on how to access the data, is available on the MTUS website: //www.timeuse.org/mtus/. See Gauthier, Gershuny, Fisher, Bortnik, Fedick, Jones, Lu, Lui, Macrae, Pauls, and Victorino (2002) for a full description of the MTUS documentation. We use version W5.5.2.

leisure. Our definition of *Leisure* relies on the 40-activity classification used in the MTUS, and it includes the following categories: Gardening; Leisure travel; Excursions; Active sport; Passive sport; Walking; Religious activities; Civic activities; Cinema, theater; Dances, parties; Social club; Pub; Visit friends; Listen to radio; TV, video; Listen to tapes, etc; Reading books; Reading papers, magazines; Relaxing; Conversation; Entertaining friends; Knitting, sewing, etc; Other hobbies and pastimes. We have also repeated the analysis with two broader definitions of leisure, one definition that excludes religious, social and organizational time, and another definition that conceptualizes leisure as the residual of total (paid and unpaid) work. Main results follow and are available upon request.[4]

In order to measure leisure satisfaction, we use the answers to the following question in the ECHP: "How satisfied are you with the amount of leisure time you have?". Responses take values from not satisfied at all (1), to completely satisfied (6). The satisfaction question is based entirely on individuals own perception, since it is not concrete in terms of comparison groups and does not provide great detail about what each category of satisfaction means. There is, however, ample evidence that self-reported satisfaction data correlate with many observed variables with the expected signs (see Dolan, Peasgood, and White (2008) for a review of papers analyzing life satisfaction questions), and thus provides some value for interpersonal comparison using subjective data.

3 Sample Composition Effects and Gender Differences in Leisure Time and Leisure Satisfaction

Contenders of the second-shift argument base their case on comparisons of averages across very heterogeneous groups of men and women that do not take into account sample composition effects. However, the gender variation in leisure time and leisure satisfaction observed in the average may well be confounded by the variation in other socio-economic variables that are also important determinants of leisure and leisure satisfaction. Table 1 shows the characteristics of men and women in the two surveys. It is remarkable to see that, despite men and women being very similar along many of the dimensions described in the Table, there is one particular

[4]Interestingly, the magnitude of the female dummy reported in Sections 3 and 4 is very similar regardless of the different definition of leisure used, which suggest that sample compositional effects play a greater role in explaining the differences in leisure time between men and women than the concept of leisure used.

dimension in which men and women greatly differ: approximately 40 percent of women work full-time, whereas more than 70 per cent of men do so. To the extent that the amount of leisure and leisure satisfaction are negatively correlated to paid work, we may observe, in the average at least, that women have more leisure and higher levels of leisure satisfaction than men.

To account for compositional effects we use Ordinary Least Squares regression analysis to investigate time spent in leisure and leisure satisfaction by each socio-economic group of men and women, holding other factors constant. In particular we estimate the following specification, where L_{ik} is our dependent variable of interest, either the time devoted to leisure, or leisure satisfaction, for each individual i:

$$L_i = \beta_0 + FemaleD_i\beta_1 + X_i\beta_2 + \varepsilon_i \tag{1}$$

The coefficient of interest is the one associated with the female dummy $FemaleD_{ik}$ (denoted by β_1), which measures the gender differences in leisure and leisure satisfaction net of other socio-economic characteristics. To analyze how important heterogeneity across the male and female sample is, we compare the coefficient on the female dummy variable by estimating Equation 1 with no controls included in the model, to the coefficient associated with the female dummy variable with a vector of control variables X_{ik} included in the model. These controls are age, age squared (divided by 100), a dummy variable that takes value one if the individual is married, two dummy variables for university, and secondary education, two dummies for working part-time, and working full-time, and a variable indicating the number of children in the household.[5] All of these variables have been shown to be correlated with leisure and feelings of time stress (e.g., Robinson and Godbey 1999, Bittman and Wajcman 2000, Mattingly and Sayer 2006, Craig 2007). In the analysis of leisure time we also include a dummy variable to control for the 90-95 period, and dummy variables to control for the day of the week (the base category being Monday). In the analysis of leisure satisfaction we also control for health status. All specifications include country dummies (reference category the UK), and the error term ε_{ik} is assumed to be normally distributed and independent across individuals of different countries but correlated for individuals of the same country.[6]

[5] A detailed description of the control variables can be found in Appendix A.

[6] Appendix B shows the results presented in Section 3 and 4 for each country. For expositional purposes we only present the results for the pooled sample in the main text. The main conclusion from the pool country regressions

Panels A and B in Table 2 show the results from estimating equation (1) when the dependent variables are the time devoted to leisure time and leisure satisfaction, respectively. Column (1) in both panels does not include any socio-economic variables as controls, and thus the coefficient associated with the female dummy variable can be interpreted as the average comparison between men and women, as reported in most of the previous research on this topic. Column (2) accounts for observed individual heterogeneity, and thus tells us how a man compares to a woman *of similar socio-economic characteristics* in relation to leisure time and leisure satisfaction.

The coefficient associated with the female dummy variable shown in Column (1) of Panel A is negative and significant, indicating that women have roughly 3 hours and 10 minutes less leisure time than men on average. This three-hour difference supports findings reported in other studies (e.g., Bittman and Wajcman 2000, Aguiar and Hurst 2007, Burda, Hamermesh, and Weil 2008).[7] Although this difference hardly counts as a *double burden*, one could still argue that it is a significant gap (e.g., Gershuny 2000). More interesting, however, is the fact that the coefficient associated with the female dummy variable almost doubles once individual heterogeneity is introduced in the analysis, suggesting that average comparisons underestimate the real difference between men and women with regards to leisure time. Once observed heterogeneity is taken into account the gender differential favoring men increases to 5 hours and 20 minutes per week (see Column (2) of Panel A).

Comparisons of Columns (1) and (2) in Panel B of Table 2 show an even starker picture for leisure satisfaction. Column (1) shows that the coefficient on the female dummy variable is positive and statistically significant, suggesting that women have, on average, 0.1 points more on the leisure satisfaction scale.[8] Once observed heterogeneity is taken into account, however, the gender differential in leisure satisfaction is not only reduced, as happened in the analysis of leisure in Panel A, but changes sign. The female dummy coefficient becomes negative, indicating that women have 0.12 fewer points on the leisure satisfaction scale when compared to similar men.

That the average comparisons of leisure satisfaction are highly biased, and once men and

are generalizable to each country individually. It is beyond the scope of the present paper to categorize countries according to different behaviors. Rather, we highlight a general pattern across all countries in the sample.

[7]Most studies have found average differences between men and women that range from about 1 to 4 hours per week. The divergence across these estimates lie on the definition of leisure. For instance, Aguiar and Hurst (2007) rely on 4 definitions of leisure in their analysis, from the narrower that includes leisure activities such as TV Watching and sports, to the wider that is defined as the residual of total work. Burda, Hamermesh, and Weil (2008) use one of definition of leisure that excludes the time devoted to sleep and personal care.

[8]Leisure satisfaction has been multiplied by 100 for consistency with other tables.

women with similar characteristics are compared, it is women, not men, who have lower levels of leisure satisfaction challenges findings in the satisfaction literature. Evidence using satisfaction data for other domains in life, such as job satisfaction, financial satisfaction and overall life satisfaction, show that women typically report being happier than men on average and when sample composition effects are taken into account (e.g., Clark and Oswald 1996, Clark 1997, Alesina, Di Tella, and McCulloch 2004, Blanchflower and Oswald 2004, Caporale, Georgellis, Tsitsianis, and Ping Yin 2009). For example, Clark (1997) shows, using a sample of British individuals, that women tend to report 0.40 points more on the job satisfaction scale than men on average, and that women still report significantly higher job satisfaction than men after controlling for demographics and job characteristics. Caporale, Georgellis, Tsitsianis, and Ping Yin (2009) show that women tend to report higher levels of life satisfaction than men, both on average and once observed and unobserved heterogeneity are taken into account. Thus, the general perception in the literature that women are generally happier than men seems to hold for most domains in life, except for satisfaction with leisure.

The coefficients associated with the remaining control variables in Columns (2) and (4) of Table 2 are a good indication of the source of heterogeneity across gender. As already noted, working full-time stands out as being one of the decisive factors confounding the average gender differences reported in previous studies. Working full-time is associated with a decrease in leisure time of 7 and a half hours, and with 0.66 points lower in leisure satisfaction. Being married or cohabiting, and the number of children in the household, are negatively correlated with both leisure and leisure satisfaction. Being in a couple and an additional child are associated, on average, with 1 hour and a half, and 4 hours and 45 minutes less of leisure, respectively, and a 0.12 and 0.17 fewer points in leisure satisfaction. Age shows a U-shape pattern for leisure time and leisure satisfaction. The only exception is education, which is not correlated with leisure time, but is correlated with leisure satisfaction (we discuss this in Section 4). Similarly, having good and very good health are associated with an increase of 0.22 and 0.43 points in leisure satisfaction, respectively.[9]

The main conclusion to be drawn from this analysis is that average gender comparisons obscure the heterogeneity that is present in the male and female samples. Average gender comparisons seem to suggest that women have a greater satisfaction from leisure despite women

[9]The MTUS does not contain health information, making it impossible for us to test whether health is important for leisure time as well.

having roughly 3 hours less leisure than men per week. However, once men and women with similar socio-economic characteristics are compared it is women, not men, who feel less happy about their leisure time, and the differences between men and women in terms of leisure time increase to 5 hours and 20 minutes per week. We also find that working full-time is the most important confounding factor in average gender comparisons. Given that a significant lower number of women are in full-time employment compared to men, and that paid work is strongly associated with less leisure time and lower levels of leisure satisfaction, average comparisons between men and women that do not distinguish labor force status will always underplay the true differences across the sexes. Furthermore, we find that the variables that are important for leisure time seem to be equally important for leisure satisfaction, suggesting that feelings of time stress are indeed associated with a lack of leisure time, reinforcing the *second shift* argument (discussed further in the next Section).

4 Determinants of Leisure Time and Leisure Satisfaction across Gender

In this Section we allow for heterogeneous effects across gender and estimate separate models for men and women. This approach allows us to identify what socio-economic groups associated with gender are at risk of experiencing leisure poverty, and whether leisure poverty is indeed associated with lower levels of leisure satisfaction. We estimate the following equation:

$$L_i = \beta_0 + X_i\beta_1 + \varepsilon_i \tag{2}$$

As before, L_i is the dependent variable of interest, either the time devoted to leisure or leisure satisfaction, for individual "i". The error term ε_i is assumed to be normally distributed and independent across individuals of different countries but correlated for individuals of the same country. The vector of control variables X_i are the same as in Equation 1.

Panel A in Table 3 shows the results from estimating an OLS model of equation 3 when the dependent variable is leisure time.[10] Working full-time is the most important determinant of leisure time, although the effect is gendered. Whereas a woman working full-time faces a penalty

[10]Wald-type tests reject the null hypothesis that the men and women's coefficients are the same.

of 8 and a half hours of leisure per week, a full-time male worker faces a penalty of 6 hours of leisure. Similarly, a woman working part-time faces a penalty of almost 6 hours of leisure per week, whereas there is no penalty for a man working part-time. A child decreases a mother's leisure time by about 1 hour more than it decreases a father's leisure time. However, a woman in a cohabiting or married couple has 35 minutes per week more leisure than her male counterpart. Similarly, a higher education increases a woman's leisure time but decreases a man's leisure time (which might explain the insignificant coefficient on education when both men and women are pooled in the same regression as in Table 2).

Panel B in Table 3 shows the coefficients having estimated equation 2 when leisure satisfaction is the dependent variable. Rather than estimating an OLS specification as in the case of leisure, we take advantage of the panel nature of the survey and estimate a fixed-effect specification that not only accounts for observed heterogeneity as in Panel A, but also for permanent unobserved heterogeneity.[11] Estimating a fixed effects specification is particularly important when using subjective enjoyment data of this nature. Non-observable personality traits might be important in determining individuals leisure satisfaction and are a major source of individual heterogeneity, which may bias OLS coefficients (e.g., Stutzer and Frey 2008). Furthermore, respondents may have a different perception of the same scale when answering the satisfaction question, and thus cross-sectional estimates might be biased (e.g., Diaz-Serrano 2009).

Similar to our leisure results (Panel A), we find that employment status (working part or full-time), partnership status, and number of children all contribute to lower levels of leisure satisfaction. Compared with non-working men (women), working full-time is associated with a decrease of 0.75 (0.58) points in leisure satisfaction. The number of children also has a negative effect on leisure satisfaction, and as with the case of free time the effect, is much stronger for women. Each additional child is associated with 0.04 and 0.17 points less of leisure satisfaction for men and women, respectively. Similarly, being married erodes women's leisure satisfaction 1.4 times more than men's. Although marriage is not as negative as working full time in terms of leisure satisfaction, being married decreases a woman's leisure the same as 0.6 children would, and a man's leisure the same as 1.7 children would.[12]

[11] Whereas the time-invariant factors related to observables are very important in explaining happiness, assuming cardinality or interpersonal ordinality of the satisfaction answers seems to make little difference to the results in explaining happiness. We thus use a OLS specification as opposed to an ordered probit specification (e.g., Ferrer-i-Carbonell and Fritjers 2004)

[12] There are no significant differences between the male and female coefficients for the rest of the control variables. Both leisure and leisure satisfaction have a U-shape in age. Education does not show up as an

A comparison of Panel A and B reveals an important main conclusion to be drawn from the analysis in this Section, namely that there are certain male and female socio-economic groups who have different amounts of leisure and experience leisure differently. For example we find that mothers that work full-time and have children have the lowest levels of leisure time and leisure satisfaction. In particular, a mother working full-time with two children has about 6 hours less leisure than a comparable father, and about 11 hours less leisure per week than a single man working full-time. This group of women also shows the greatest discontent with their amount of leisure.

Another important observation from this analysis is that, as already found in Section 3, the important variables that help determine leisure time seem to be equally important for leisure satisfaction, suggesting that feelings of time stress are associated with real lack of leisure time. Having a full-time job, having children, and being married all decrease the amount of free time and leisure satisfaction for men and women. However, the relative importance of these factors varies by gender. Having children is more negatively associated with leisure and leisure satisfaction for women than for men. However, although being married does not decrease a woman's leisure time as much as it does a man's: marriage affects women's leisure satisfaction more negatively than men's. In contrast, whereas working women have 2 hours and 25 minutes less leisure time per week than working men, working women enjoy 0.16 more points of leisure satisfaction than working men.

All in all, our results suggest that although leisure time may be an important component of leisure satisfaction, there are other dimensions of leisure that are also related to how individuals experience their free time, determining their leisure satisfaction levels. There is evidence from the US showing that marriage increases the probability that a woman engages in free time simultaneously with non-leisure activities (e.g., Mattingly and Bianchi 2003). This finding may explain why marriage has a more negative impact on leisure satisfaction for women than for men, despite the marriage penalty in leisure time being lower for women than men. The same paper however finds that participating in the labor market increases the quality of leisure for men but not for women. This result is harder to reconcile with our findings that working full-time does not have such a negative effect in terms of leisure satisfaction for women as it has for men. These authors however conceptualize the quality of leisure as the fragmentation of leisure

statistically determinant of leisure satisfaction for either gender after unobserved heterogeneity is taken into account. Additionally, poorer health is associated with lower levels of leisure satisfaction.

activities, the contamination of leisure activities, and the presence of children when engaging in leisure activities. There might be other factors that could contribute to leisure quality that are not included in this definition, and could thus account for our results.

5 Conclusion

Understanding the distribution of free time across individuals has direct implications for welfare. Feelings of "time poverty" are usually associated with negative consequences for workers' health and workplace performance (Netemeyer, Boles, and McMurrian 1996, Kossek and Ozeki 1999, Allen, Herst, Bruck, and Sutton 2000, Byron 2005, Mesmer-Margnus and Viswesvaran 2005a, Mesmer-Margnus and Viswesvaran 2005b). The increased popularity of workplace flexibility programs and supportive work-family policies precisely reflects the intensification of the conflict between work and household responsibilities in a world where dual earner households have increasingly become the norm. The distribution of free time has also direct implications on the distribution of income, because time is essential to be able to enjoy the monetary resources spent on most goods and services (e.g., Zeckhauser 1973). However, whereas inequality in income, earnings, and expenditure has received a great deal of attention (Atkinson 1997, Gottschalk and Smeeding 1997, Atkinson and Brandolini 2001, Alderson and Nielsen 2002, Erikson and Goldthorpe 2002, Krueger and Perri 2006), the disparities regarding the amount of leisure time are usually not discussed (e.g., Vickery 1997, Bittman and Goodin 2000).

We use "objective" data on free time and "subjective" interview data on how satisfied people are with their leisure time, to show that average gender comparisons obscure the heterogeneity that is present in male and female samples. We document that full-time work is the most important confounding factor in average gender comparisons of leisure time and leisure satisfaction. Given that a significantly lower number of women are in full-time jobs compared to men, and that work for pay is strongly associated with less leisure time and lower levels of leisure satisfaction, average comparisons of men and women that do not distinguish labor force participation status underplays the true differences across gender.

Allowing for heterogeneous effects across gender reveals that certain socio-economic groups are more likely to suffer from leisure poverty. We find that full-time working mothers have the lowest levels of leisure time and leisure satisfaction. In particular, a full-time working mother with two children has 9 hours less leisure per week than a working father. This group also

shows the greatest discontent with their amount of leisure time. Although not a *second shift* in the literal sense, this estimate is a sizeable figure and almost doubles average gender differences usually reported in other studies.

The variables that are important determinants of leisure time seem to be equally important for leisure satisfaction, suggesting that feelings of time stress are indeed associated with a real lack of leisure time. Having a full-time job, having children, and being married all decrease the amount of free time and leisure satisfaction for men and women. The relative importance of these factors however varies by gender. All in all, our results suggest that, although leisure time might be an important component of leisure satisfaction, there are other dimensions of free time, such as leisure fragmentation, contamination of leisure activities by non-leisure activities, and the presence of children during leisure episodes, which may also explain leisure satisfaction. Our findings highlight the need for time-use diary data with richer information on enjoyment in order to further explore the mechanisms behind the multiple dimensions of leisure and leisure satisfaction.

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Table 1: Summary Statistics, MTUS and ECHP [1,2,3,4]

	MTUS		ECHP	
	(1)	(2)	(1)	(2)
	Men	Women	Men	Women
Age	40.7	41.3	41.5	42.2
	(10.5)	(10.9)	(10.5)	(11.0)
Marital Status	71.2	73.2	76.1	78.9
	(45.3)	(44.3)	(42.7)	(40.8)
Secondary Education	45.7	43.5	32.9	30.4
	(49.8)	(49.6)	(47.0)	(46.0)
University Education	22.2	20.0	20.8	18.2
	(41.6)	(40.0)	(40.6)	(38.6)
Working part-time	2.6	14.7	2.9	13.2
	(15.9)	(35.4)	(16.8)	(33.9)
Working full-time	74.0	37.6	85.4	45.5
	(43.9)	(48.4)	(35.3)	(49.8)
Number of children 0-18	0.8	0.8	0.8	0.8
	(1.0)	(1.0)	(1.0)	(1.1)
Very Poor Health	-	-	1.1	1.3
	-	-	(10.2)	(11.2)
Poor Health	-	-	3.8	5.5
	-	-	(19.2)	(22.9)
Fair Health	-	-	19.6	23.7
	-	-	(39.7)	(42.5)
Good Health			49.0	47.0
			(50.0)	(49.9)
Very Good Health	-	-	26.5	22.5
	-	-	(44.1)	(41.8)
N	53,365	61,202	225,977	249,159

Notes: [1] Sample consists of respondents between 24 and 65 years old who are not retired, not students [2] Leisure is measured in hours per week. Our definition of leisure includes the following MTUS categories: Gardening; Leisure travel; Excursions; Active sport; Passive sport; Walking; Religious activities; Civic activities; Cinema, theatre; Dances, parties; Social club; Pub; Visit friends; Listen to radio; TV, video; Listen to tapes, etc; Reading books; Reading papers, magazines; Relaxing; Conversation; Entertaining friends; Knitting, sewing, etc; Other hobbies and pastimes [3] Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] If the p value is smaller than 0.05, we accept the hypothesis that the difference between men and women in the variable of interest is statistically significant at the 5 percent level.

Table 2: OLS on Leisure Time and Leisure Satisfaction [1,2,3,4,5]

	Panel A Leisure Time		Panel B Leisure Satisfaction	
	(1)	(2)	(1)	(2)
Female	-3.2***	-5.4***	9.7***	-12.4***
	(0.1)	(0.1)	(0.5)	(0.5)
Working full-time	-	-7.4***	-	-65.6***
	-	(0.2)	-	(0.6)
Working part-time	-	-3.3***	-	-16.8***
	-	(0.2)	-	(0.9)
Number of children 0-18	-	-1.5***	-	-16.6***
	-	(0.1)	-	(0.3)
Marital Status	-	-4.7***	-	-11.5***
	-	(0.2)	-	(0.6)
Age	-	-0.6***	-	-2.1***
	-	(0.1)	-	(0.2)
Age Squared	-	0.8***	-	3.5***
	-	(0.1)	-	(0.2)
Secondary Education	-	0.3	-	3.9***
	-	(0.2)	-	(0.6)
University Education	-	0.2	-	-1.5**
	-	(0.2)	-	(0.6)
Very Poor Health	-	-	-	-34.0***
	-	-	-	(2.7)
Poor Health	-	-	-	-5.8***
	-	-	-	(1.2)
Good Health	-	-	-	22.4***
	-	-	-	(0.6)
Very Good Health	-	-	-	43.4***
	-	-	-	(0.7)
Constant	32.4***	54.5***	407.4***	487.1***
	(0.5)	(1.2)	(1.0)	(3.7)
Country Dummies	Yes	Yes	Yes	Yes
R sq.	0.17	0.22	0.06	0.14
N	114,567	114,567	475,136	475,136

Notes: [1] Standard errors in brackets [2] Sample consists of respondents in the MTUS between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Our definition of leisure includes the following MTUS categories: Gardening; Leisure travel; Excursions; Active sport; Passive sport; Walking; Religious activities; Civic activities; Cinema, theatre; Dances, parties; Social club; Pub; Visit friends; Listen to radio; TV, video; Listen to tapes, etc; Reading books; Reading papers, magazines; Relaxing; Conversation; Entertaining friends; Knitting, sewing, etc; Other hobbies and pastimes [4] * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level [5]We estimate the following equation by Ordinary Least Squares: $Y_{itk} = \alpha + X_{itk}\beta_1 + \varepsilon_{itk}$ where Y_{itk} is hours of leisure per week and X_{itk} is a vector of controls including gender, age, age2, medium education, high education, marital status, working part-time, working full-time, health status (and country dummies in Column 1). The omitted country dummy in the pooled sample is the United Kingdom.

TABLE 3: LEISURE TIME AND LEISURE SATISFACTION, BY GENDER [1,2,3,4,5]

	Panel A Leisure Time		Panel B Leisure Satisfaction	
	(1) men	(2) women	(1) men	(2) women
Working full-time	-6.2***	-8.6***	-74.6***	-58.2***
	(0.3)	(0.2)	(1.5)	(1.2)
Working part-time	0.3	-4.9***	-35.5***	-22.0***
	(0.6)	(0.2)	(2.3)	(1.2)
Number of children	-1.1***	-2.1***	-4.1***	-17.1***
	(0.1)	(0.1)	(0.6)	(0.6)
Marital Status	-5.1***	-4.5***	-6.9***	-9.5***
	(0.3)	(0.2)	(1.8)	(1.8)
Age	-0.6***	-0.6***	-4.8***	-4.6***
	(0.1)	(0.1)	(0.6)	(0.5)
Age Squared	0.8***	0.8***	5.9***	5.4***
	(0.1)	(0.1)	(0.7)	(0.6)
Secondary Education	0.0	0.7***	-0.6	-1.0
	(0.3)	(0.2)	(1.1)	(1.1)
University Education	-0.5*	1.1***	0.9	0.4
	(0.3)	(0.3)	(1.7)	(1.8)
Very Poor Health	-	-	-20.9***	-20.6***
	-	-	(4.0)	(3.2)
Poor Health	-	-	-4.1**	-4.9***
	-	-	(1.8)	(1.4)
Good Health	-	-	11.3***	12.3***
	-	-	(0.8)	(0.8)
Very Good Health	-	-	21.9***	26.5***
	-	-	(1.1)	(1.0)
Constant	51.4***	51.5***	541.2***	529.1***
	(1.9)	(1.4)	(11.8)	(10.8)
Country Dummies	Yes	Yes	No	No
R sq.	0.24	0.22	0.03	0.03
N	53,365	61,202	238,989	260,897

Notes: [1] Standard errors in brackets [2] Sample consists of respondents in the ECHP between 24 and 65 years old who are not retired, not student [3] * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level [4] We estimate the following equation by Fixed-Effects: $Y_{itk} = \alpha_{ik} + X_{itk}\beta_1 + \varepsilon_{itk}$ where Y_{itk} is Leisure Satisfaction and X_{itk} is a vector of controls including age, age2, medium education, high education, marital status, working part-time, working full-time number of children under 16 and health status [5] Coefficients are multiplied by 100 for consistency with previous tables.

Appendix A

ECHP

- *Leisure satisfaction*: This corresponds with the pk004 -satisfaction with the amount of leisure time- question of the ECHP, an ordered variable taking values from 1 to 6 (from not satisfied to very satisfied).
- *Man*: Gender of the individual. It takes value "1" for men and "0" for women. This corresponds with the PD003 question of the ECHP.
- *Age*: Age at the time of the interview. This corresponds with the PD003 question of the ECHP. We compute the *Age Squared* to allow for non-linearities in the effect of age.
- *Marital Status*: We control for the marital status (married or cohabiting) of the individuals. Dummy variable (0-1). This variable takes value "1" if the individual is married or cohabiting, and "0" otherwise (PD005 and PD008).
- *University Education*: The highest level of general or higher education completed is the recognized third level. This corresponds with the PT022=1 question of the ECHP. Dummy variable (0-1).
- *Secondary Education*: The highest level of general or higher education completed is the second stage of secondary level of education. This corresponds with the PT022=2 question of the ECHP. Dummy variable (0-1).
- *Low Education*: The highest level of general or higher education completed is less than the second stage of secondary level of education. This corresponds with the PT022=3 question of the ECHP. Dummy variable (0-1). This is the omitted variable in the regressions.
- *Working part-time*: To indicate whether the reference person is working part time (1) or not (2). Corresponds to the value "2" in the PE005C variable.
- *Working full-time*: To indicate whether the reference person is working full time (1) or not (2). Corresponds to the value "1" in the PE005C variable.
- *Number of children 0-16*: We control for the number of children aged under 16 within the household (HL001+HL004).
- *Health*: Self-assessment of the individual's health. Dummy variable that takes values from "1" (Very Good Health) to "5" (Very Poor Health). We create a dummy variable for each value (*Very Poor Health*, *Poor Health*, *Good Health*, *Very Good Health*) and the omitted value or the reference value is that corresponding to very poor health.

MTUS

- *Man*: Gender of the individual. It takes value "1" for men and "0" for women. This corresponds with the SEX question of the MTUS.
- *Age*: Age at the time of the interview. This corresponds with the AGE2 question of the MTUS. We compute the *Age Squared* to allow for non-linearities in the effect of age.

- *Marital Status*: We control for the marital status (married or cohabiting) of the individuals. Dummy variable (0-1). This variable takes value "1" if the individual is married or cohabiting, and "0" otherwise (CIVSTAT=1 in the MTUS).

- *University Education*: The highest level of general or higher education completed is the recognized third level. This corresponds with the EDUCTRY=3 question of the MTUS. Dummy variable (0-1).

- *Secondary Education*: The highest level of general or higher education completed is the second stage of secondary level of education. This corresponds with the EDUCTRY=2 question of the MTUS. Dummy variable (0-1).

- *Low Education*: The highest level of general or higher education completed is less than the second stage of secondary level of education. This corresponds with the EDUCTRY=1 question of the MTUS. Dummy variable (0-1). This is the omitted variable in the regressions.

- *Working part-time*: To indicate whether the reference person is working part time (1) or not (2). Corresponds to the value "2" and "3" in the EMPSTAT3 variable of the MTUS.

- *Working full-time*: To indicate whether the reference person is working full time (1) or not (2). Corresponds to the value "1" in the EMPSTAT3 variable of the MTUS.

- *Number of children 0-18*: We control for the number of children aged under 18 within the household (NCHILD).

- *Period 90-95*: Since some authors have found a significant increase in the amount of leisure in recent years (Aguiar and Hurst (2007)), we include a dummy variable to control for the period when the survey was carried out, so that we are able to see whether the amount of leisure has changed (increased or decreased) over the years, in the countries that have observations in both periods.

Table B-1: Time Devoted to Leisure, by Country [1,2,3]

Leisure Time	Austria	France	Germany	Italy	Norway	Spain	The Netherlands	The United Kingdom
Female	-8.0***	-5.0***	-6.5***	-5.8***	-2.6***	-5.4***	-4.8***	-4.6***
	(0.5)	(0.4)	(0.4)	(0.3)	(0.5)	(0.3)	(0.7)	(0.5)
Working full-time	-8.0***	-7.0***	-12.2***	-3.0***	-10.0***	-7.5***	-12.7***	-15.3***
	(0.6)	(0.5)	(0.5)	(0.3)	(0.8)	(0.3)	(0.8)	(0.7)
Working part-time	-3.0	-3.2***	-5.1***	-1.6***	-5.5***	-5.0***	-6.8***	-10.2***
	(2.0)	(0.7)	(0.5)	(0.5)	(0.8)	(0.5)	(0.7)	(0.7)
Number of children	-1.5***	-0.5***	-1.6***	-2.5***	-1.7***	-1.8***	-1.8***	-1.7***
	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.2)
Marital Status	-3.9***	-4.3***	-3.6***	-4.9***	-3.9***	-4.5***	-3.6***	-3.8***
	(0.6)	(0.5)	(0.5)	(0.4)	(0.6)	(0.3)	(0.8)	(0.5)
Age	-0.3*	-0.9***	0.0	-1.0***	-0.2	-0.7***	0.2	-0.5**
	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)
Age Squared	0.4*	1.0***	0.1	1.2***	0.3	0.9***	0.0	0.7***
	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.3)	(0.2)
Secondary Education	0.8	-2.8***	0.2	0.8*	0.2	0.1	-0.3	0.5
	(0.5)	(0.6)	(0.6)	(0.5)	(0.7)	(0.3)	(0.6)	(0.5)
University Education	1.9**	-4.1***	-0.2	1.0*	-0.8	1.4***	0.4	0.9
	(0.8)	(0.6)	(0.7)	(0.6)	(0.8)	(0.3)	(0.7)	(0.5)
Constant	41.8***	54.4***	43.6***	55.1***	50.2***	49.3***	50.7***	54.5***
	(3.6)	(3.6)	(3.2)	(2.5)	(3.6)	(2.0)	(4.4)	(3.6)
Country Dummies	No	No	No	No	No	No	No	No
R sq.	0.26	0.17	0.29	0.19	0.22	0.20	0.22	0.20
N	13,048	8,655	16,840	26,490	8,114	27,259	4,422	9,739

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.

Table B-2: Leisure Satisfaction, by Country [1,2,3]

Leisure Satisfaction	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Portugal	Spain	The Netherlands	The United Kingdom
Female	-16.8***	-24.3***	10.7***	8.2***	-9.2***	-16.8***	-21.5***	-1.7	-14.2***	-3.6**	-35.4***	-20.9***	-7.9***
	(2.6)	(2.1)	(2.1)	(2.1)	(1.3)	(2.6)	(1.7)	(2.7)	(1.3)	(1.5)	(1.6)	(1.5)	(2.0)
Working full-time	-78.0***	-93.6***	-84.2***	-71.9***	-61.6***	-78.0***	-91.3***	-34.9***	-48.3***	-50.7***	-89.8***	-80.0***	-51.2***
	(3.2)	(2.9)	(3.5)	(3.1)	(1.5)	(3.2)	(1.9)	(3.1)	(1.5)	(2.1)	(1.8)	(2.0)	(2.6)
Working part-time	-19.4***	-19.9***	-17.9***	-23.5***	-7.2***	-19.4***	-44.2***	-6.6*	-2.9	-13.4***	-33.1***	-26.4***	-14.2***
	(3.7)	(3.7)	(4.3)	(5.2)	(2.4)	(3.7)	(3.6)	(3.7)	(2.8)	(3.2)	(3.2)	(2.0)	(3.3)
Number of children	-21.8***	-15.0***	-13.8***	-16.8***	-13.9***	-21.8***	-16.2***	-18.5***	-16.9***	-10.4***	-16.8***	-14.9***	-22.4***
	(1.3)	(1.0)	(1.1)	(1.0)	(0.6)	(1.3)	(0.9)	(1.0)	(0.9)	(1.0)	(0.9)	(0.7)	(1.0)
Marital Status	-11.4***	-2.3	2.4	-8.0***	-9.4***	-11.4***	-23.0***	-4.1	-24.1***	2.5	-27.2***	4.6***	-0.7
	(3.0)	(2.7)	(2.8)	(2.7)	(1.5)	(3.0)	(2.3)	(2.9)	(1.8)	(2.1)	(1.9)	(1.8)	(2.3)
Age	1.1	-3.8***	-1.9**	3.2***	-2.8***	1.1	1.0*	-1.3	-1.8***	-2.0***	-2.0***	-4.3***	-4.2***
	(0.9)	(0.8)	(0.8)	(0.9)	(0.5)	(0.9)	(0.6)	(0.9)	(0.5)	(0.5)	(0.5)	(0.5)	(0.7)
Age Squared	0.2	5.7***	4.6***	-1.2	3.6***	0.2	-0.3	3.6***	2.2***	2.3***	3.9***	6.3***	6.3***
	(1.1)	(1.0)	(1.0)	(1.1)	(0.6)	(1.1)	(0.6)	(1.0)	(0.6)	(0.6)	(0.6)	(0.5)	(0.8)
Secondary Education	-3.8	-10.8***	-10.1***	-8.3***	-6.0***	-3.8	2.3	-1.8	19.2***	2.1	5.8***	4.4***	-22.2***
	(2.6)	(2.6)	(2.8)	(2.8)	(1.4)	(2.6)	(1.8)	(2.5)	(1.3)	(2.3)	(2.2)	(1.4)	(2.4)
University Education	-22.7***	-18.5***	-18.3***	-31.0***	-20.0***	-22.7***	6.9***	2.0	26.3***	3.7	18.0***	-15.2***	1.1
	(3.3)	(2.6)	(2.9)	(2.9)	(1.5)	(3.3)	(2.0)	(3.0)	(2.1)	(2.6)	(1.9)	(1.9)	(2.1)
Very Bad Health	-7.1	-38.2***	-27.6	-33.9	-56.0***	-7.1	17.8*	-12.3	-23.3***	-12.6*	-34.7***	-37.9***	-54.3***
	(14.6)	(14.7)	(23.6)	(27.7)	(4.6)	(14.6)	(9.3)	(20.1)	(8.4)	(6.8)	(7.4)	(12.4)	(8.6)
Bad Health	-1.1	2.1	-13.8*	-8.7	-22.6***	-1.1	11.8**	-4.4	-1.7	-3.0	-5.5*	-14.2***	-9.0**
	(6.3)	(6.2)	(8.4)	(7.0)	(4.1)	(6.3)	(5.1)	(7.8)	(3.2)	(2.5)	(3.1)	(4.3)	(4.5)
Good Health	26.9***	22.4***	4.7	23.4***	41.1***	26.9***	-3.1	19.2***	25.0***	7.7***	22.1***	18.5***	27.3***
	(2.9)	(2.7)	(3.4)	(2.6)	(1.3)	(2.9)	(2.7)	(3.6)	(1.4)	(1.6)	(2.0)	(1.7)	(2.5)
Very Good Health	57.2***	54.5***	26.9***	55.4***	67.8***	57.2***	9.3***	53.5***	38.1***	16.4***	45.4***	34.3***	43.7***
	(3.9)	(3.2)	(3.3)	(3.2)	(2.1)	(3.9)	(2.7)	(3.5)	(2.0)	(4.2)	(2.5)	(2.1)	(2.6)
Constant	416.6***	535.5***	508.8***	373.9***	500.1***	416.6***	410.2***	430.0***	427.6***	447.5***	446.8***	540.4***	509.4***
	(18.6)	(17.1)	(17.4)	(19.1)	(9.7)	(18.6)	(12.1)	(17.4)	(10.0)	(10.5)	(11.2)	(10.2)	(14.3)
Country Dummies	No	No	No	No	No	No	No	No	No	No	No	No	No
R sq.	0.10	0.13	0.12	0.12	0.10	0.10	0.12	0.08	0.06	0.05	0.11	0.13	0.08
N	17,199	23,025	21,341	23,542	46,895	17,199	35,244	28,034	72,373	48,585	56,704	49,355	27,798

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.

Table B-3: Time Devoted to Leisure by Men, by Country [1,2,3]

Leisure Time	Austria	France	Germany	Italy	Norway	Spain	The Netherlands	The United Kingdom
Working full-time	-12.3***	-4.6***	-14.5***	-0.5	-11.9***	-6.3***	-15.8***	-21.5***
	(1.9)	(0.8)	(1.1)	(0.5)	(1.6)	(0.4)	(1.3)	(1.1)
Working part-time	-10.5	3.8**	-4.1**	4.7***	-5.5***	-2.1*	-12.1***	-11.6***
	(7.9)	(1.8)	(1.8)	(1.5)	(2.0)	(1.2)	(1.8)	(2.0)
Number of children	-1.3***	-0.3	-1.0***	-1.5***	-1.3***	-1.3***	-1.3***	-1.1***
	(0.4)	(0.3)	(0.3)	(0.3)	(0.4)	(0.2)	(0.3)	(0.3)
Marital Status	-2.8***	-3.9***	-4.4***	-5.6***	-4.4***	-5.5***	-3.3***	-3.2***
	(1.1)	(0.9)	(0.9)	(0.6)	(1.0)	(0.5)	(1.1)	(0.8)
Age	0.3	-0.8***	0.2	-1.0***	-0.2	-0.8***	0.6	-0.2
	(0.3)	(0.3)	(0.2)	(0.2)	(0.3)	(0.2)	(0.4)	(0.3)
Age Squared	-0.4	1.0**	-0.2	1.2***	0.2	1.1***	-0.5	0.3
	(0.4)	(0.4)	(0.3)	(0.2)	(0.3)	(0.2)	(0.4)	(0.3)
Secondary Education	-1.2	-3.1***	-0.6	0.8	0.1	0.2	-0.5	1.1
	(0.9)	(1.0)	(1.5)	(0.8)	(1.2)	(0.5)	(1.0)	(0.7)
University Education	1.7	-4.8***	-2.0	0.2	-0.6	0.5	-0.5	1.5*
	(1.2)	(1.0)	(1.5)	(1.0)	(1.2)	(0.5)	(0.9)	(0.8)
Constant	34.0***	50.8***	39.1***	51.2***	50.6***	50.3***	46.3***	53.0***
	(6.8)	(6.2)	(5.1)	(4.1)	(5.9)	(3.4)	(6.9)	(5.1)
Country Dummies	No	No	No	No	No	No	No	No
R sq.	0.29	0.19	0.35	0.21	0.25	0.22	0.23	0.25
N	5,920	4,115	7,922	12,575	3,832	12,494	1,852	4,655

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.

Table B-4: Time Devoted to Leisure by Women, by Country [1,2,3]

Leisure Time: Women	Austria	France	Germany	Italy	Norway	Spain	The Netherlands	The United Kingdom
Working full-time	-7.3***	-9.7***	-11.7***	-5.9***	-8.9***	-8.9***	-11.5***	-11.0***
	(0.6)	(0.6)	(0.6)	(0.4)	(0.9)	(0.4)	(1.0)	(0.8)
Working part-time	-2.3	-5.4***	-5.1***	-3.7***	-5.2***	-6.1***	-5.5***	-8.1***
	(2.1)	(0.7)	(0.5)	(0.6)	(0.9)	(0.5)	(0.7)	(0.8)
Number of children	-1.7***	-0.9***	-2.2***	-3.6***	-1.9***	-2.3***	-2.3***	-1.9***
	(0.3)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)	(0.4)	(0.3)
Marital Status	-4.6***	-4.8***	-2.6***	-5.0***	-3.3***	-4.0***	-3.5***	-3.7***
	(0.7)	(0.7)	(0.6)	(0.5)	(0.8)	(0.4)	(1.1)	(0.7)
Age	-0.7***	-0.7***	-0.3	-1.0***	-0.2	-0.5***	0.0	-0.7***
	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.1)	(0.3)	(0.3)
Age Squared	0.9***	0.8***	0.3	1.1***	0.4	0.7***	0.2	1.0***
	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.1)	(0.4)	(0.3)
Secondary Education	2.4***	-2.4***	0.2	1.6***	0.4	0.1	-0.4	0.1
	(0.7)	(0.7)	(0.7)	(0.6)	(0.9)	(0.4)	(0.7)	(0.7)
University Education	2.0*	-3.1***	0.7	3.1***	-1.0	2.6***	1.1	0.0
	(1.0)	(0.8)	(0.8)	(0.8)	(1.0)	(0.4)	(1.0)	(0.7)
Constant	41.2***	48.8***	42.5***	51.9***	47.9***	41.9***	48.8***	53.2***
	(4.2)	(4.3)	(4.2)	(3.1)	(4.4)	(2.4)	(5.4)	(5.1)
Country Dummies	No	No	No	No	No	No	No	No
R sq.	0.22	0.16	0.25	0.18	0.20	0.18	0.22	0.16
N	7,128	4,540	8,918	13,915	4,282	14,765	2,570	5,084

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.

Table B-5: Leisure Satisfaction by Men, by Country [1,2,3]

Leisure Satisfaction: Men	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Portugal	Spain	The Netherlands	The United Kingdom
Working full-time	-68.0***	-88.3***	-69.6***	-83.0***	-52.2***	-68.0***	-101.8***	-33.1***	-83.0***	-29.0***	-98.8***	-65.5***	-47.1***
	-11.2	-9	-7.9	-6.7	-4.4	-11.2	-5.1	-7.3	-3.8	-4	-3.5	-5.4	-9.1
Working part-time	-21.9	-35.7***	-32.4**	-32.3***	-22.0***	-21.9	-62.8***	-15.1*	-45.2***	-8.5	-47.2***	-20.3***	-15.5
	-18.6	-13.1	-12.7	-10.2	-7.3	-18.6	-7.8	-8.8	-5.3	-6.4	-6.8	-6.7	-12
Number of children	-20.8***	-5.1**	-5.8**	-8.6***	-5.1***	-20.8***	1	-5.9**	-2.2	-1.4	-4.9**	-2.7	-13.4***
	-5.7	-2.6	-2.6	-3	-1.8	-5.7	-2.1	-2.7	-1.8	-1.3	-2	-1.8	-4.1
Marital Status	-23.7*	-17.9**	4.4	13.0*	-5.6	-23.7*	-5.8	-37.9***	-5.8	-9.0*	-24.9***	-10.9**	0.4
	-13.4	-7.7	-6.3	-7.3	-4.9	-13.4	-7.5	-13.9	-5.8	-4.8	-7.8	-4.5	-7.4
Age	0.1	-1.9	-2.4	-10.1***	-4.7***	0.1	-3.3*	-3.9	-9.3***	-0.6	-4.0**	-6.4***	-3
	-6.8	-2.5	-2.4	-3.2	-1.8	-6.8	-1.9	-2.8	-1.5	-1.1	-1.7	-1.6	-4.1
Age Squared	-8.5	2.5	3.1	13.2***	6.3***	-8.5	2.1	5.7*	9.3***	1.1	6.9***	7.9***	3.5
	-7.8	-2.9	-2.8	-3.7	-2.1	-7.8	-2.2	-3.1	-1.7	-1.3	-2	-1.9	-4.9
Secondary Education	0	10.9**	-0.4	-10	-6.8**	0	-0.9	-10.7*	1.5	-10.8**	-0.7	5.2**	-7.1
	0	-5	-6.6	-6.5	-2.7	0	-4.2	-6	-3.8	-4.3	-4.3	-2.2	-7.6
University Education	0	15.3*	2.7	-9.6	-4.3	0	4.5	-0.4	-14.1	-22.9**	2.4	0.6	-2.8
	0	-8.2	-7.5	-8.1	-8	0	-6.4	-10.3	-10.1	-9.7	-5.9	-2.8	-8
Very Bad Health	-13	-55.5**	27	-24.9	-39.8***	-13	-13.2	39.5	-29.3**	2.4	-25.4**	-8.8	-35.3**
	-20.6	-23.3	-29.1	-29.2	-8.6	-20.6	-16.6	-27.9	-11.9	-7.1	-11.7	-16.3	-15.5
Bad Health	0.6	-2.8	3.7	4.4	-20.7***	0.6	-0.3	14.8	-7.9*	0.2	-4.7	-1.3	-9.9
	-11.5	-8.9	-13.5	-8.5	-5.9	-11.5	-9	-13.5	-4.8	-2.9	-5.1	-6.9	-6.9
Good Health	10.8**	7.4*	2.4	12.4***	27.4***	10.8**	-8.2*	6	14.2***	7.6***	8.6***	5.7**	7.7**
	-5.1	-4.1	-4.7	-3.6	-2	-5.1	-4.6	-5.1	-1.9	-1.6	-2.6	-2.6	-3.6
Very Good Health	23.6***	13.6***	13.3***	29.6***	44.4***	23.6***	-3.5	17.7***	23.0***	15.3***	23.3***	12.0***	12.5***
	-7	-5	-5.1	-4.9	-3.1	-7	-4.7	-5.5	-2.6	-4	-3.3	-3.3	-4.6
Constant	634.0***	507.1***	529.1***	647.3***	514.9***	634.0***	536.0***	537.7***	634.1***	410.2***	491.0***	599.7***	515.7***
	(148.7)	(51.1)	(52.1)	(67.4)	(36.1)	(148.7)	(39.4)	(60.9)	(30.2)	(24.4)	(34.7)	(33.0)	(81.7)
Country Dummies	No	No	No	No	No	No	No	No	No	No	No	No	No
R sq.	0.03	0.02	0.02	0.04	0.03	0.03	0.04	0.01	0.03	0.01	0.05	0.02	0.01
N	8,421	11,488	11,527	11,611	23,285	8,421	17,033	12,973	37,309	25,338	29,558	22,933	15,103

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.

Table B-6: Leisure Satisfaction by Women, by Country [1,2,3]

Leisure Satisfaction: Women	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Portugal	Spain	The Netherlands	The United Kingdom
Working full-time	-67.4***	-75.9***	-87.0***	-47.2***	-57.9***	-67.4***	-78.0***	-34.7***	-55.0***	-26.8***	-72.8***	-62.9***	-52.4***
	(8.2)	(6.6)	(5.6)	(5.0)	(3.2)	(8.2)	(3.5)	(5.0)	(3.1)	(2.4)	(3.5)	(4.0)	(7.6)
Working part-time	-22.8***	-28.8***	-30.5***	-5.8	-13.3***	-22.8***	-46.1***	-10.4**	-28.1***	-9.8***	-31.4***	-23.1***	-8.2
	(6.6)	(6.1)	(6.1)	(6.1)	(3.4)	(6.6)	(5.0)	(4.4)	(3.7)	(2.9)	(4.2)	(2.9)	(6.2)
Number of children	-27.5***	-16.5***	-18.5***	-24.9***	-16.0***	-27.5***	-14.6***	-12.4***	-17.5***	-5.5***	-26.4***	-20.2***	-26.9***
	(7.3)	(2.8)	(2.9)	(3.1)	(1.8)	(7.3)	(2.3)	(2.3)	(1.8)	(1.3)	(2.0)	(1.8)	(4.8)
Marital Status	6.3	-19.4**	1.5	-17.3**	-9.8**	6.3	-14.8**	-15.0	-2.0	-4.7	-28.6***	-1.2	-9.7
	(12.4)	(8.3)	(6.9)	(7.9)	(4.4)	(12.4)	(7.1)	(10.6)	(5.6)	(4.0)	(5.8)	(4.3)	(9.0)
Age	-6.3	3.1	1.1	-2.4	-3.2**	-6.3	-5.9***	-0.5	-9.2***	-2.4**	-4.0***	-6.3***	-5.5
	(6.4)	(2.3)	(2.4)	(3.0)	(1.5)	(6.4)	(1.6)	(2.4)	(1.4)	(1.1)	(1.5)	(1.4)	(3.9)
Age Squared	-1.7	-2.5	-1.9	3.9	4.5***	-1.7	5.0***	1.7	9.7***	2.2*	6.1***	6.7***	6.0
	(7.2)	(2.8)	(2.8)	(3.5)	(1.7)	(7.2)	(1.8)	(2.6)	(1.6)	(1.2)	(1.7)	(1.6)	(4.7)
Secondary Education	0.0	6.4	0.5	-8.9	-0.4	0.0	-11.8***	-10.2*	2.2	9.8**	-1.5	0.7	-15.4**
	(0.0)	(5.3)	(7.0)	(5.9)	(2.8)	(0.0)	(4.5)	(5.3)	(4.1)	(4.7)	(4.4)	(2.2)	(7.0)
University Education	0.0	3.7	-5.7	-3.9	-2.9	0.0	-5.5	-25.4***	16.8*	2.7	18.3***	-3.9	-10.2
	(0.0)	(8.3)	(7.6)	(7.9)	(7.6)	(0.0)	(6.6)	(8.9)	(10.0)	(8.0)	(6.1)	(3.1)	(8.3)
Very Bad Health	-38.2	-26.2	2.4	13.2	-37.5***	-38.2	11.1	-14.9	-20.1**	-6.5	-29.1***	-24.2	-22.0
	(29.3)	(20.2)	(20.3)	(30.3)	(6.0)	(29.3)	(13.5)	(26.8)	(9.2)	(5.3)	(9.5)	(15.4)	(14.0)
Bad Health	-13.0	-1.7	7.2	8.6	-12.7***	-13.0	5.1	-5.0	-6.9*	-6.3***	-9.2**	3.5	-7.0
	(10.1)	(8.3)	(9.2)	(8.3)	(4.8)	(10.1)	(6.3)	(10.2)	(3.9)	(2.2)	(4.1)	(5.0)	(6.9)
Good Health	11.7**	4.7	4.8	14.8***	26.6***	11.7**	-0.2	9.0**	14.1***	4.6***	14.8***	9.7***	6.6*
	(4.7)	(3.8)	(4.4)	(3.4)	(1.9)	(4.7)	(3.6)	(4.3)	(1.8)	(1.5)	(2.5)	(2.3)	(3.7)
Very Good Health	19.0***	17.4***	20.0***	32.0***	45.8***	19.0***	14.4***	21.6***	24.9***	15.6***	35.6***	22.1***	12.7***
	(6.9)	(4.9)	(4.7)	(4.7)	(3.0)	(6.9)	(3.8)	(4.6)	(2.8)	(5.3)	(3.4)	(3.1)	(4.8)
Constant	748.2***	382.6***	514.8***	512.6***	494.4***	748.2***	567.5***	465.1***	587.1***	459.1***	468.3***	603.7***	590.5***
	(141.6)	(47.2)	(51.6)	(63.0)	(31.3)	(141.6)	(33.5)	(53.3)	(29.4)	(24.3)	(30.1)	(31.1)	(77.9)
Country Dummies	No	No	No	No	No	No	No	No	No	No	No	No	No
R sq.	0.03	0.03	0.06	0.04	0.05	0.03	0.04	0.01	0.02	0.01	0.04	0.03	0.02
N	8,910	12,813	11,240	12,764	26,162	8,910	19,589	16,126	39,714	27,165	31,216	26,422	15,143

Notes: [1] Robust standard errors in brackets [2] Sample consists of respondents between 24 and 65 years old who are not retired, not student [3] Leisure is measured in hours per week. Leisure satisfaction is scaled from 1 (not satisfied at all) to 6 (fully satisfied) [4] Coefficients for Male, Marital Status, Secondary Education, University Education, Working Part-Time and Working Full-Time are shown in percentage points.