

# 2014

# working paper series

THE WORK-LIFE CONFLICT AND WELL-BEING OF TURKISH EMPLOYEES

Cem Başlevent

Working Paper No. 827



# THE WORK-LIFE CONFLICT AND WELL-BEING OF TURKISH EMPLOYEES

Cem Başlevent

Working Paper 827

May 2014

Send correspondence to: Istanbul Bilgi University Turkey cbaslevent@bilgi.edu.tr First published in 2014 by The Economic Research Forum (ERF) 21 Al-Sad Al-Aaly Street Dokki, Giza Egypt www.erf.org.eg

Copyright © The Economic Research Forum, 2014

All rights reserved. No part of this publication may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher.

The findings, interpretations and conclusions expressed in this publication are entirely those of the author(s) and should not be attributed to the Economic Research Forum, members of its Board of Trustees, or its donors.

#### Abstract

Using data drawn from the 2004 European Social Survey, we examine the determinants of the life satisfaction of employees in Turkey. The data reveals that the majority of Turkish wage and salary workers is under- or over-employed. The share of matched workers in the full sample is only 22 percent while about half the workers have to work longer than they desire. Gender is closely linked with the hours mismatch status, as the share of over-employment is 8 percentage points higher among female workers than men. Ordered probit model estimates reveal that over-employment (measured as the difference of the actual and preferred weekly number of hours) has a negative impact on well-being. We attribute the lack of a statistically significant finding with regard to under-employment to the small sample size. We also find no statistically significant difference between male and female employees with regard to the impact of the working hours mismatch. This finding suggests that the gender differences which would have been expected in this context are already incorporated in the respondents' subjectively determined desired hours of work.

JEL Classification: 13, J6

Keywords: Life satisfaction, Turkey, European Social Survey.

#### ملخص

باستخدام البيانات المستخلصة من المسح الاجتماعي الأوروبي لعام 2004، ندرس محددات الرضا عن الحياة للعاملين في تركيا. تكشف البيانات أن غالبية العاملين الأتراك بأجر و راتب أما ان تكون عمالة ناقصة أو عمالة زائدة. حصة العمال المتطابقة في العينة الكاملة هي 22 في المئة فقط في حين أن حوالي نصف العمال يشتغلون لمدة أطول مما يفضلون. وير تبط النوع الاجتماعي بشكل و ثيق مع حالة عدم تطابق ساعات العمل، كما أن حصة الإفراط في العمل هو أعلى 8 نقاط مئوية بين العاملات النساء أكثر من الرجال. تكشف تقديرات نموذج الاحتمالية أن الإفراط في العمل ( التي تقاس على أنها الفرق في عدد الساعات الأسبو عية الفعلية و المفضلة بالنسبة لساعات العمل) له تأثير سلبي على الرفاهية. ونعزو عدم وجود النتيجة ذات دلالة إحصائية فيما يتعلق بالعمالة الناقصة إلى صغر حجم العينة . لا نجد أيضا أي فروق ذات دلالة إحصائية بين الموظفين الذكور والإناث فيما يتعلق بالعمالة الناقصة إلى العمل. وتشير هذه النتيجة إلى أن الفروق بين الجنسين الذي كان متوقع في هذا السياق قد أدرجت بالفعل في ساعات المشتركين المرجوة من العمل.

#### 1. Introduction

The concept of work-life conflict is used to describe the situation many employees find themselves in as they struggle to allocate adequate time to leisure or household activities. A large body of empirical literature provides convincing evidence that deviations of actual hours of work from desired hours are common among the employed in many countries and also that these 'work hours mismatches' – rather than the duration of the typical work week – are responsible for reductions in the overall life satisfaction of employees (Bell and Freeman, 2001; Böheim and Taylor, 2004; Clark, 2005; Dickens and Lundberg, 1993; Euwals and Van Soest, 1999; Grözinger et al., 2008; Heineck and Möller, 2012; Holly and Mohnen, 2012; Jacobs and Gerson, 2004; Reynolds, 2004; Reynolds and Aletraris, 2006; Stewart and Swaffield, 1997; Stier and Lewin-Epstein, 2003).

Excessive working time usually comes at the expense of time spent with family and friends or taking care of household responsibilities. Part-time jobs, on the other hand, are generally of low quality in terms of compensation and fringe benefits, and are associated with low levels of job security and the lack of opportunities for career development; implying that the negative impact of underemployment on life satisfaction could be as significant as that of overemployment. Empirical evidence on whether positive or negative deviations from desired hours lead to greater losses in life satisfaction is mixed. While Wooden et al. (2009) find that overemployment is a more serious problem than underemployment, Wunder and Heineck (2012) argue that underemployment causes a stronger response in well-being, particularly among males. The explanation Wunder and Heineck offer for this finding is that underemployed individuals are deprived from utility gains resulting from monetary and nonmonetary job aspects, such as the potential of developing skills and the social interaction with colleagues or customers.

The cross-country study by Otterbach (2010) demonstrates the relevance of macroeconomic factors in the context of the work hours mismatch. Otterbach finds that country differences in hours constraints – measured by the share of workers who are dissatisfied with their current hours of work – are interrelated with unemployment rates, GDP per capita, and income inequality. To be specific, higher percentages of workers desire additional work hours and earnings in countries where unemployment rates are higher, while wealthy countries are also characterized by larger shares of workers who desire to work more and earn more. Apparently, worries about losing a job in the face of high unemployment rates in a certain country have a strong impact on the desire for additional work hours and earnings. Possible explanations for this relationship could be that people work longer hours to avoid being laid off during recessions (Bell and Freeman, 2001) or seek additional earnings for income smoothing (Bluestone and Rose, 1998).

Working with data from the European social survey, Steiber (2009) finds that – controlling for a set of individual-level factors pertaining to family and work – countries with aboveaverage levels of work-family conflict in Europe are comparatively affluent and have high rates of unemployment, despite having a good childcare infrastructure and an egalitarian gender culture. Having also obtained the paradoxical result that work-life conflict is not lower in countries with more extensive welfare and accommodating employment regimes, Gallie and Russell (2009) attribute this finding to the high level of 'work pressure' in some of the Nordic societies where full-time employment is more common among female employees.<sup>1</sup> McGinnity and Whelan (2009) also point to the differences across Europe regarding the shape and nature of employment and the regulatory structures that influence work-life conflicts. In their extensive review of the related literature, the authors report that cross-

<sup>&</sup>lt;sup>1</sup> Gallie and Russell (2009) define work pressure in terms of four central components: the length and scheduling of the hours of work, the intensity of work, the safety of work conditions, and job security.

country studies on the level and determinants of work-life conflict have stressed the importance of considering the full range of mediating institutional/cultural factors (Crompton and Lyonette, 2006; Scherer and Steiber, 2007). However – as Steiber (2009) notes – working with a relatively small number of countries (i.e. around 25) constrains the attempts to investigate potential cross-country differences in how the work-family conflict is generated.

Regarding the gender differences in the impact of the work-life conflict on life satisfaction, Başlevent and Kirmanoğlu (2013) find that the life satisfaction effect of the hours mismatch is the same for male and female workers, i.e the reduction in life satisfaction for each hour of deviation from desired hours is statistically the same. Since female employees are expected to place more importance on being able to combine work and family responsibilities than males - which makes sense because many time-consuming household activities are performed by women -, one would initially think that reductions in life satisfaction due to hours mismatches should be larger for females. The explanation Başlevent and Kirmanoğlu offer for their finding is that the absolute difference between the actual and desired hours of work variables serves as an accurate measure of the extent of the work-life conflict, such that any gender differences that exist are captured by this variable. To test this hypothesis formally, they run a regression model in which 'desired weekly hours of work' is the dependent variable. It turns out that the desired hours of females are considerably less than those of males, and also that the negative effects of living with a partner and the presence of children at home on desired hours are present only in the case of female employees. The authors interpret this result as evidence that the deviation variables are good measures of not only work-life conflicts, but also of preferences for labor market work.

Boye (2009) focuses on the gender differences in the association between paid and unpaid working hours and well-being. The results based on a cross-section of 25 European countries suggest that women's well-being increases with increased paid working hours and decreases with increasing housework hours. Gender differences in time spent on paid work and housework account for a third of the European gender difference in well-being and are thus one reason that women are found to have lower well-being than men (Frankenhaeuser et al., 1989; Karasek et al., 1987; McDonough and Walters, 2001; Mirowsky and Ross, 1995). These findings are also in line with those obtained elsewhere that housework hours are associated with higher levels of stress among women (Coltrane, 2000; Glass and Fujimoto, 1994; Roxburgh, 2004).

The Wunder and Heineck (2012) study also points to the importance of focusing on gender differences in the extent of work-life conflict and its consequences. In light of the works of Lazear and Rosen (1990) and Booth et al. (2003) – which deal with gender inequalities in the labor market – and Paull (2008) and Anxo et al. (2011) – where the time allocation patterns of married women are examined –, Wunder and Heineck assume that women, particularly those with children, experience difficulties in reconciling their careers with family life. Their empirical results provide clear evidence of a gender-specific relationship between well-being and working time preferences.

As the literature review above suggests, the work-life conflict and its implications have been widely studied in the literature, but similar studies on Turkish workers have not been produced due to the lack of data on actual and preferred hours of work. To the best of our knowledge, the ESS-2004 (to be presented in the next section) is the only survey in which this information is available for Turkish workers, and it has not been utilized in the context of life satisfaction. According to an OECD report, Turkey is by far the country with the highest proportion of employees working very long hours, with almost half of them regularly working over 50 hours a week (OECD, 2010). Thus, it is likely to be the case that a large

proportion of Turkish workers are unhappy about their work hours and that significant life satisfaction effects of over-employment are present.

The purpose of the current study, therefore, is to produce empirical evidence on the impact of over- and underemployment on the life satisfaction of Turkish employees with a primary interest in female workers. More specifically, we aim to observe whether (i) the life satisfaction effects of over- and under-employment are the same and (ii) the magnitude of their effect differs for married and non-married workers as well as those with and without children. Our hope is to be able to complement the empirical findings in the existing literature using data for a predominantly Muslim country where the female labor participation rate is quite low, the labor market is relative less flexible, and the traditional views about the division of labor within the household are still very common.

#### 2. The Data and Research Methodology

The data used in the empirical will be drawn from the second round of the European Social Survey (ESS).<sup>2</sup> Turkey is one of the 26 countries that took part in the survey which took place in 2004. The ESS is a cross-country survey conducted biannually since 2002 to monitor attitudes and behaviors across countries and over time. In the main questionnaire of the ESS, there are several questions that aim to measure the life satisfaction of the respondents as well as items related to the respondents' labor market involvement. In addition to information about the 'macro' aspects of employment such as industrial and occupational categorizations, other bits of information specific to the respondent such as union membership status are also provided. The second round of the survey also includes a rotating module titled "Work, Family and Well-being" designed by a team led by Duncan Gallie.<sup>3</sup> The aim of the module is to examine theoretical claims about the factors affecting work, family experience and wellbeing in Europe. The module also inquires about the ideal hours that people would wish to work. The exact wording of the survey question is as follows:

"How many hours a week, if any, would you choose to work, bearing in mind that your earnings would go up or down according to how many hours you work?"

In measuring the extent to which ideal hours deviate from the actual time spent in the labor market, we bring this bit of information together with the response provided to another survey question worded as follows:

"Regardless of your basic or contracted hours, how many hours do/did you *normally work* a week (in your main job), including any paid or unpaid overtime?"

In the empirical work, we will first carry out a descriptive analysis in which we will observe the mean values of actual and desired weekly hours of work and weekly hours spent on housework. Due to the small number of female respondents in other employment states (i.e. self-employment and unpaid family work), our sample will be restricted to respondents who are currently engaged in paid work as an employee. Students and those with permanent disabilities will also be excluded from the sample. We will also observe the shares of those doing housework among married and non-married women as well as those with and without children. We will then estimate a single equation model that examines whether and how individual characteristics explain the overall life satisfaction of an individual. The responses to the question on overall life satisfaction, which will serve as our measure of well-being and

<sup>&</sup>lt;sup>2</sup> The data set is available at <u>http://ess.nsd.uib.no/ess/round2/</u>.

<sup>&</sup>lt;sup>3</sup> The same module was repeated in the fifth round of the survey in 2010, but Turkey was not among the participating countries.

the dependent variable of our model, are given on an 11-point scale from 0 to 10 with larger values indicating greater satisfaction. The wording of the related survey item is as follows:

"All things considered, how satisfied are you with your life as a whole nowadays?"

Since the given scores have a clear ordering, the ordered probit model is an appropriate estimation technique to be utilized in this context. The interpretation of the coefficients on the explanatory variables is the same as in standard regression models: Positive coefficients imply a positive association between life satisfaction and the variable in question.

In building our empirical model, we will rely on the findings of existing studies on the relationship between life satisfaction and a wide range of variables. As far as the role of basic demographics is concerned, we control for a U-shaped level of life satisfaction throughout the life cycle as demonstrated in Blanchflower and Oswald (2008) and Yang (2008). Previously-conducted studies also report that women have higher life satisfaction levels than men (Hayo, 2004; Frey and Stutzer, 2002), and married people have higher life satisfaction levels than others (Clark and Oswald, 1994; Clark, 1997; McBride, 2001; Alesina et al., 2004).

Education has also been shown to be an important socio-demographic determinant that is positively associated with life satisfaction (Easterlin, 2001; Blanchflower and Oswald, 2004; Yang, 2008; Cuñado and Pérez de Gracia, 2012). However, this pattern may have to do with the higher levels of income that usually accompany higher schooling levels. In fact, Easterlin (1974), Albert and Davia (2005), and Becchetti et al. (2006) are among those who have found that people with higher income levels have higher levels of life satisfaction. Being in good health and subjective well-being have also been found to be positively and significantly related (Okun et al., 1984; Hooker and Siegler, 1993; Peck and Merighi, 2007).

The individual characteristics controlled for in the model will include the gender and the age of the respondent along with 'age squared' to allow for the possibility of a non-linear relationship. Education will be measured using a continuous variable that equals the years of full-time education completed. Economic well-being will be controlled for using a household income variable measured on a 10-point scale (from 1 to 10) such that larger values correspond to higher incomes. The subjective general health of the respondents will be measured on a scale from 1 to 5 such that larger values indicate better health. The ESS data identifies individuals who live with a partner (which includes husbands/wives), which is probably a more relevant indicator than marital status in the European context, but since cohabiting is very uncommon in Turkey we will use the married vs. non-married distinction.

Information on the wages of the respondents and compensation schemes for overtime work could have been useful in controlling for the impact of pecuniary factors on the life satisfaction effects of especially over-employment. Generous overtime payments, for instance, are likely to mitigate the distress associated with excessive working hours. However, wage information is not available in the ESS data. One survey item which promises to be relevant is the respondents' feelings about the income of their household. These are derived from the question worded and categorized as follows:

"Which (is the) closest to how you feel about your household's income nowadays?"

Living comfortably on present income = 1

Coping on present income = 2

Finding it difficult on present income = 3

Finding it very difficult on present income = 4

A straightforward way of observing the impact of the hours mismatch on life satisfaction is to use a dummy variable that indicates the 'matched' respondents whose actual and desired hours are the same. This variable can be interacted with the female dummy to see if any gender differences exist. Another way of measuring the impact of the hours mismatch on life satisfaction is to use an explanatory variable that equals the absolute difference between actual and desired hours of work. However, in order to observe the possible differences between the effects of under- and over-employment, we have constructed two separate deviation variables that indicate negative and positive deviations from desired hours.

For example, in the case of an over-employed person whose actual weekly hours of work are 3 hours more than his/her desired hours, the 'positive deviation' variable takes on the value of 3 while the 'negative deviation' variable takes on the value of zero. Similarly, for an underemployed person whose actual hours of work are 5 hours less than his/her desired hours, the 'negative deviation' variable takes on the value of 5 while the 'positive deviation' variable equals zero. In the case of 'matched' individuals, both the 'positive deviation' and 'negative deviation' variables take on the value of zero. These two deviation variables are also interacted with the 'female' dummy to see if the life satisfaction effects of hours mismatches differ by gender.

There are two other survey items that can also be utilized to quantify the respondents' selfevaluation of the amount of work-life conflict they are experiencing. These items are worded as follows:

"How often do you.. ..find that your job prevents you from giving the time you want to your partner or family? ..find it difficult to concentrate on work because of your family responsibilities?

What makes the availability of these items valuable for our analysis is that they may be instrumental in demonstrating whether work-to-family or family-to-work conflicts are more relevant in the context of life satisfaction. As explained in Gareis et al. (2009), work-life (or work-family) conflict is a bi-directional term that includes both work-to-family and family-to-work conflict. For example, long work hours may predict work-to-family conflict, whereas heavy elder-care demands may predict family-to-work conflict. Gutek et al. (1991), Frone et al. (1992), and Voydanoff (2005) are among the studies that have shown that each direction of influence can have different antecedents and different consequences. Using the survey items presented above, we generated two indicators for those who response to each of these questions was "never / hardly ever". The first one is meant to account for work-to-family conflict is present. However, since these variables are likely to be correlated with the difference between actual and desired hours, we will estimate our model with and without them and see if different patterns emerge.

Our ordered probit model in which the level of life satisfaction is the dependent variable is estimated on the pooled sample of male and female workers to ensure that the sample size is not too small to obtain reliable results and so that gender differences can be tested formally. Along with the gender variable, the model includes several interaction terms in order to be able to observe whether there are statistically significant gender differences in how life satisfaction relates to the key factors considered in our analysis.

#### **3. Empirical Findings**

We begin the presentation of the empirical findings by summarizing the basic patterns regarding the work hours mismatch in our sample of employees drawn from the ESS.

Unfortunately, we need to work with a relatively small sample of 294 workers, 213 of whom are males. About half of the women in the working sample are married as opposed to 73 percent among men. The larger share of married workers among females is consistent with the general pattern that many Turkish women drop out of the labor force after marriage.

The figures given below in Table 1 reveal that the share of matched workers in the full sample is only 22 percent while about half the workers are over-employed. Marital status does not appear to have a big impact on the hours mismatch status, but the share of matched workers in the subsample of single respondents is somewhat larger at 25 percent. Gender, on the other hand, has a significant impact on the hours mismatch status as the share of over-employment is 8 percentage points higher among female workers than men. Also, the share of under-employed women is 11 percentage points lower than the corresponding figure for men. Similar figures are obtained when gender differences are measured among single and married workers separately.

Looking at the difference between actual and desired weekly hours by hours mismatch status (see Table 2), we find that desired hours per week exceed actual hours by almost 18 hours among the under-employed while the difference among the over-employed is just as large. On the whole, weekly actual hours exceed desired hours by 4 (= 48 - 44).

More detailed information on actual and desired hours by gender and marital status provided in Table 3 reveals that there is almost no difference in the actual weekly working hours of single male and female workers. However, married men work 5 hours more than their female counterparts. Due to the smaller number of hours married women would like to work (= 37), the gap between actual and desired hours is large in their case. However, the gap is even larger among single females whose desired weekly hours are only 42 as opposed to 47 among single men.

It might be argued that the average of the absolute value of the difference between actual and desired hours is a more informative measure of the hours mismatch as it makes sure that positive and negative deviations do not cancel each other out. It turns out that the absolute difference is quite uniform across genders and marital statuses with averages of around 9 hours. What this result implies is that if the life satisfaction effect of under-employment is close to that of over-employment, we may not observe substantial differences in the satisfaction levels of males and females and the single and the married. In fact, the average figures reported in the last column of Table 3 reveal that the life satisfaction of males exceeds that of females by 0.2 while the same difference exists between married and single respondents. Nevertheless, it remains to be seen in the regression context whether the hours mismatches or demographic factors have a larger impact on life satisfaction.

Another way of examining the distribution of actual and desired weekly hours in the sample is to make use of histograms that display the amount of dispersion in these variables. In Figures 1 and 2, where actual and desired weekly hours presented are by gender, we observe that the distribution of both variables is similar in the male and female subsamples. One noteworthy finding here is that about one-third of both male and female workers would like to have a standard 40-hour work week whereas only about one-fifth of workers are at the 40-hour mark.

In Figures 3 and 4, where actual and desired weekly hours are presented by gender and marital status, we find that both variables are similarly dispersed in the male and female subsamples. While part-time work is more common among married women than singles, the standard work week is more common among married men. Single men are more likely to have excessive working hours. In terms of desired hours, married male respondents are more likely to desire the standard 40-hour work week while singles are more likely to want to work

longer hours. This is probably because they want to accumulate savings before getting married. Nearly 40 percent of single women desire the standard 40-hour work week whereas part-time work is a more desirable option for married women, as would be expected.

The figures given in Tables 4a and 4b reveal that marital status does not have a big impact on the prevalence of either work-to-family or family-to-work conflict: about half of both married and single employees never (or hardly ever) experience work-to-family conflict, while the corresponding figure for family-to-work conflict is around 60 percent. Gender, on the other hand, has a significant impact the distribution of the conflict variables when the sample is broken down by marital status, especially in the case of work-to-family conflict. The share of those never experiencing work-to-family conflict is 20 percentage points higher among single female workers than among single men. Among married workers, however, the figure for females is 20 percentage points lower.

With respect to family-to-work conflict, the largest difference is observed between married males and females such that the share of those never experiencing this type of conflict is 18 percentage points lower among female employees. While there are no male workers experiencing family-to-work conflict "often", the share among both single and married women is more than 10 percent.

#### 3.1 Econometric results

The ordered probit results obtained for five different versions of the empirical model are presented in Table 5. In the first specification, labeled with (1) in the table, the potential impact of work-life conflict is accounted for using only the two dummy variables that indicate respondents who claim to be never experiencing work-to-family and family-to-work conflict. In the second specification, the impact of work-life conflict is measured by a dummy variable that indicates respondents whose actual and desired hours are the same. This dummy is also interacted with the female dummy to observe whether gender differences exist. In the third specification, both sets of variables in (1) and (2) are included. In the fourth specification, the impact of work-life conflict is accounted for using two continuous variables that equal the positive/negative deviations of actual hours from desired hours. Once again, both variables are interacted with the female dummy to observe gender differences. Specification (5) includes both the deviation variables and and the conflict dummies included in (1) and (3).

It turns out that the age, gender, years of education, and marital status of the respondent do not have statistically significant effects on life satisfaction. The self-reported health of the respondent, on the other hand, has a significant positive effect in all versions of the model (See the appendix for marginal effects). The coefficients on the household income dummies all have the expected negative sign, and they get larger as self-evaluations of the current economic situation of the household become more negative. Of the two dummy variables that indicate respondents who never experience work-to-family and family-to-work conflict, only the latter is found to have a significant impact on life satisfaction. Apparently, family responsibilities interfering with one's work is a more important source of distress for labor market participants than the other way around. Considering that the fulfillment of family responsibilities involves interactions with people one has stronger emotional ties with, it makes sense that excessive amounts of this type of conflict have greater repercussions for life satisfaction.

The dummy variable that indicates respondents whose actual and desired hours are the same has the expected positive sign, but is not statistically significant regardless of whether the conflict variables are included in the model or not. Of the two continuous variables that measure the positive/negative deviations of actual hours from desired hours, the one representing positive deviations has a statistically significant negative sign while the negative deviations variable is statistically insignificant. Also insignificant are the interaction terms that measure the difference between male and female respondents with respect to the effect of the hours mismatch. This finding is consistent with that of Başlevent and Kirmanoğlu (2013) find – using data from another round of the ESS - that the life satisfaction effect of the hours mismatch is the same for male and female workers. The interpretation of this result is that even though female employees are expected to place more importance on being able to combine work and family responsibilities than males, the absolute difference between the actual and desired hours of work variables serves as an accurate measure of the extent of the work-life conflict, such that any gender differences that are present are captured by the deviation variable.<sup>4</sup>

#### 4. Concluding Remarks

Our examination of micro data from the 2004 European Social Survey has revealed that the majority of Turkish wage and salary workers are under- or over-employed. The share of matched workers in the full sample was only 22 percent while about half the workers had to work longer than they desired. Gender was found to be closely linked with the hours mismatch status, as the share of over-employment was 8 percentage points higher among female workers than men. Marital status, however, did not appear to have a big impact on the hours mismatch status - which was a bit surprising especially in the case of women. Two factors seem to be contributing to this result: One is that married women have shorter work hours than single women, and the other is that being an 'employed and married' woman implies some degree of selectivity into that state.

In view of the possibility of the presence of selection bias due to working with a sample of employees only, it might be argued that the econometric models presented here need to involve a selectivity correction to obtain reliable estimates. After all, it is unlikely that employees constitute a random sample with respect to the life satisfaction effects of hours mismatches. Employees are not only likely to have stronger preferences towards market work, but they are also likely be less distressed by the mismatch than the average person in the population. Furthermore, individuals whose desired and actual hours differed in the past by very large amounts are likely to have dropped out of employment. However, given the practical difficulties to properly accounting for selectivity bias and the fact that our estimates are meant to hold for actual labor market participants, we chose not to deal with the selection process into employment.

The key finding of the econometric work was that larger levels of mismatch in the overemployment direction are associated with larger reductions in life satisfaction. These effects were not substantial, but still statistically significant. The lack of a significant life satisfaction effect in the case of under-employment was an unexpected result in light of an earlier finding obtained for a large sample of European countries. Assuming that the main reason that people would be unhappy about being underemployed is that they can not make enough money, it is possible that the household income variables included in the model mediate the relationship between underemployment and life satisfaction. In order to entertain this possibility, we reestimated the model after excluding the three income dummies. However, the coefficient on negative deviations remained insignificant despite this exclusion. In view of this finding, we conclude that either underemployment does not have a significant life satisfaction effect in the case of Turkish employees or the small sample size precludes us from observing it.

Our empirical work has provided concrete evidence regarding the presence of the life satisfaction effects of excessive working hours. However, data limitations have precluded us

<sup>&</sup>lt;sup>4</sup> The patterns observed in the empirical models remain unchanged when estimations are repeated after the exclusion of health and income variables. Similar patterns are also observed when the OLS method is used in place of Ordered Probit. (See Appendices 2 and 3.)

from analyzing other possible consequences such as losses in labor market productivity, long term psychological and physiological effects, and even the adverse effects on the quality of child-rearing. Such potential impacts can be the subject of further research in various fields. In interpreting the results, one should also keep in mind the possibility of the endogeneity of the outcome variable, i.e. that the subjective evaluations utilized as independent variables may have been influenced by the level of overall life satisfaction. It also remains to be seen whether working with larger data sets leads to sharper empirical results that demonstrate the gender differences in this context as well as the differences between married and single employees. Specially designed survey should be instrumental in dealing with these points as well as examining the life satisfaction effects of job characteristics other than the work-hours conflict such as informality, flexibility of weekly hours, and discriminatory or hostile behavior against certain groups.

#### References

- Alesina, A., R. Di Tella, and R. MacCulloch (2004) "Inequality and happiness: Are Europeans and Americans different?", *Journal of Public Economics*, 88 (9-10), pp. 2009–2042.
- Albert, C. and M. A. Davia (2005) "Education, wages and job satisfaction", Paper presented at the Epunet-2005 Conference, Colchester, UK.
- Anxo, D., L. Mencarini, A. Pailhe, A. Solaz, M. L.Tanturri, L. and Flood (2011) "Gender differences in time use over the life course in France, Italy, Sweden, and the US", *Feminist Economics*, 17 (3), pp. 159–195.
- Başlevent and Kirmanoğlu (2013) "The Impact of deviations from desired hours of work on the life satisfaction of employees", *Social Indicators Research*, forthcoming.
- Becchetti, L., S. Castriota, and D. Londoño (2006) "Climate, happiness and the Kyoto protocol: Someone does not like it hot", CEIS Working Paper, No: 247.
- Bell, L. A. and R. B. Freeman (2001) "The Incentive for working hard: explaining hours worked differences in the US and Germany", *Labour Economics*, 8 (2), pp. 181–202.
- Blanchflower, D. G. and A. J. Oswald (2004) "Money, sex and happiness: An Empirical study", *Scandinavian Journal of Economics*, 106 (3), pp. 393-415.
- Blanchflower, D. G. and A. J. Oswald (2008) "Is well-Being U-Shaped over the life cycle?", Social Science & Medicine, 66 (8), pp. 1733-1749.
- Bluestone, B. and S. Rose (1998) "Macroeconomics of work time", *Review of Social Economy*, 56 (4), pp. 425–441.
- Booth, A. L., M. Francesconi, and J. Frank, (2003) "A Sticky floors model of promotion, pay, and gender", *European Economic Review*, 47 (2), pp. 295–322.
- Boye, K. (2009) "Relatively Different? How do Gender Differences in Well-Being Depend on Paid and Unpaid Work in Europe?", *Social Indicators Research*, 93 (3), pp. 509–525.
- Böheim, R. and M. P. Taylor (2004) "Actual and preferred working hours", *British Journal* of Industrial Relations, 42(1), pp. 149–166.
- Clark, A. E. (1997) "Job satisfaction and gender: Why are women so happy at work?", *Labor Economics*, 4 (4), pp. 341-372.
- Clark, A. E. (2005) "What makes a good job? Evidence from OECD countries", in: S. Bazen, C. Lucifora, W. Salverda (eds.), *Job quality and employer behaviour*, Basingstoke: Palgrave Macmillan, pp. 11-30.
- Clark, A. E. and A. J. Oswald (1994) "Unhappiness and unemployment", *The Economic Journal*, 104 (424), pp. 648-659.
- Coltrane, S. (2000) "Research on household labor: Modeling and measuring the social embeddedness of routine family work", *Journal of Marriage and the Family*, 62 (4), pp. 1208–1233.
- Crompton, R. and C. Lyonette (2006) "Work-Life 'Balance' in Europe", Acta Sociologica, 49(4), pp. 379-393.
- Cuñado, J. and F. Pérez de Gracia (2012) "Does education affect happiness? Evidence for Spain", *Social Indicators Research*, 108 (1), pp 185-196.
- Dickens, W. T. and S. J. Lundberg (1993) "Hours restrictions and labor supply", *International Economic Review*, 34 (1), pp. 169–192.

- Easterlin, R. (1974) "Does economic growth improve the human lot? Some Empirical Evidence", in: P.A. David and M.W. Reder (eds.), *Nations and Households in Economic Growth: Essays in Honour of Moses Abramovitz*, New York: Academic Press, pp. 89-125.
- Easterlin, R. A. (2001) "Life cycle welfare: Trends and differences", *Journal of Happiness Studies*, 2 (1), pp. 1–12.
- Euwals, R. and A. Van Soest (1999) "Desired and actual labour supply of unmarried men and women in the Netherlands", *Labour Economics*, 6 (1), pp. 95–118.
- Frankenhaeuser, M., Lundberg, U., Fredrikson, M., Melin, B., Tuomisto, M., Myrsten, A. L., et al. (1989) "Stress on and off the job as related to sex and occupational-status in whitecollar workers", *Journal of Organizational Behavior*, 10 (4), pp. 321–346.
- Frey, B. S. and A. Stutzer (2002) *Happiness and Economics*, Princeton University Press, Princeton.
- Frone, M. R., M. Russell, and L. M. Cooper (1992) "Antecedents and outcomes of workfamily conflict: Testing a model of the work-family interface", *Journal of Applied Psychology*, 77, 65 – 78.
- Gallie, D. and H. Russell (2009) "Work-Family Conflict and Working Conditions in Western Europe", *Social Indicators Research*, 93 (3), pp. 445–467.
- Gareis, K. C., R. C. Barnett, K. A. Ertel, Karen A.; L. F. Berkman (2009) "Work-Family Enrichment and Conflict: Additive Effects, Buffering, or Balance?", *Journal of Marriage* and Family, 71 (3), pp. 696–707.
- Glass, J., and T. Fujimoto (1994) "Housework, paid work, and depression among husbands and wives", *Journal of Health and Social Behavior*, 35 (2), pp. 179–191.
- Grözinger, G., W. Matiaske, and V. Tobsch (2008) "Arbeitszeitwünsche, Arbeitslosigkeit und Arbeitszeitpolitik", SOEP Papers, No. 103, DIW Berlin.
- Gutek, B. A., S. Searle, and L. Klepa (1991) "Rational versus gender role explanations for work-family conflict", *Journal of Applied Psychology*, 76 (4), pp. 560–568.
- Hayo, B. (2004) "Happiness in Eastern Europe", Marburg Working Papers on Economics 200412, Philipps-Universität Marburg.
- Heineck, G. and J. Möller (2012) "Geschlechtsspezifisches Arbeitsmarktverhalten, Verdienste und Wohlbefinden im Familienkontext", in: H. Bertram and M. Bujard (eds), Zeit, Geld, Infrastruktur – zur Zukunft der Familienpolitik, Soziale Welt – Sonderband 19, Nomos, Baden-Baden.
- Holly, S. and A. Mohnen (2012) "Impact of working hours on work-life balance", SOEP Papers, No. 471, DIW Berlin.
- Hooker, K. and I. C. Siegler (1993) "Life goals, satisfaction, and self-rated health: Preliminary Findings", *Experimental Aging Research*, 19 (1), pp. 97-110.
- Jacobs, J. and K. Gerson (2004) *The time divide: Work, family, and gender inequality.* Cambridge: Harvard University Press.
- Karasek, R., B. Gardell, and J. Lindell (1987) "Work and non-work correlates of illness and behavior in male and female Swedish white-collar workers", *Journal of Occupational Behavior*, 8 (3), pp. 187–207.
- McBride, M. (2001) "Relative-income effects on subjective well-being in the cross-section", *Journal of Economic Behavior & Organization*, 45 (3), pp. 251–278.

- McGinnity, F. and C. T. Whelan (2009) "Comparing Work-Life Conflict in Europe: Evidence from the European Social Survey", *Social Indicators Research*, 93 (3), pp. 433-444.
- McDonough, P. and V. Walters (2001) "Gender and health: Reassessing patterns and explanations", *Social Science and Medicine*, 52 (4), pp. 547–559.
- Mirowsky, J. and C. E. Ross (1995) "Sex differences in distress—Real or artifact", *American Sociological Review*, 60 (3), pp. 449–468.
- Lazear, E. P. and S. Rosen (1990) "Male-female wage differentials in job ladders", *Journal of Labor Economics*, 8 (1), pp. S106–23.
- OECD (2010) "Labour Force Statistics: Summary tables", *OECD Employment and Labour Market Statistics* (database), *http://dx.doi.org/10.1787/data-00286-en*; and Swiss Federal Statistics Office.
- Okun, M. A., W. A. Stock, M. J. Haring and R. A. Witter (1984) "Health and subjective wellbeing: A meta-analysis", *International Journal of Aging and Human Development*, 19 (2), pp. 111–132.
- Otterbach, S. (2010) "Mismatches between actual and preferred work time: Empirical evidence of hours constraints in 21 countries", *Journal of Consumer Policy*, 33 (2), pp. 143–161.
- Paull, G. (2008) "Children and women's hours of work", *Economic Journal*, 118 (526), pp. F8–F27.
- Peck, M. D. and J. R. Merighi, (2007) "The Relation of social comparison to subjective wellbeing and health status in older adults", *Journal of Human Behavior in the Social Environment*, 16 (3), pp. 121–142.
- Reynolds, J. (2004) "When too much is not enough: Actual and preferred work hours in the United States and abroad", Sociological Forum, 19 (1), pp. 89–120.
- Reynolds, J. and L. Aletraris (2006) "Pursuing Preferences: The Creation and Resolution of Work Hour Mismatches", *American Sociological Review*, 71 (4), pp. 618-638.
- Roxburgh, S. (2004) "'There just aren't enough hours in the day': The mental health consequences of time pressure", *Journal of Health and Social Behavior*, 45 (2), pp. 115–131.
- Scherer, S. and N. Steiber (2007) "Work and family in conflict? The impact of work demands on family life in six European countries", in: D. Gallie (Ed.), *Employment systems and the quality of working life*, Oxford: Oxford University Press, pp. 137–178.
- Steiber, N. (2009) "Reported Levels of Time-based and Strain-based Conflict Between Work and Family Roles in Europe: A Multilevel Approach", *Social Indicators Research*, 93 (3), pp. 469-488.
- Stewart, M. B. and J. K. Swaffield (1997) "Constraints on the desired hours of work of British men", *Economic Journal*, 107 (441), pp. 520–535.
- Stier H. and N. Lewin-Epstein (2003) "Time to Work: A Comparative Analysis of Preferences for Working Hours", *Work and Occupations*, 30 (3), pp. 302-326.
- Voydanoff, P. (2005) "Work Demands and Work-to-Family and Family-to-Work Conflict: Direct and Indirect Relationships", *Journal of Family Issues*, 26 (6), pp. 707–726.
- Wooden, M., D. Warren, and R. Drago (2009) "Working time mismatch and subjective wellbeing" *British Journal of Industrial Relations*, 47 (1), pp. 147-179.

- Wunder, C. and G. Heineck (2012) "Working time preferences, hours mismatch and wellbeing of couples: Are there spillovers?", SOEP Papers, No. 471, DIW Berlin.
- Yang, Y. (2008) "Social inequalities in happiness in the United States, 1972 to 2004: An ageperiod-cohort analysis", *American Sociological Review*, 73 (2), pp. 204–226.

Figure 1: Actual Weekly Hours by Gender



Figure 2: Desired Weekly Hours by Gender





Figure 3: Actual Weekly Hours by Gender and Marital Status



Figure 4: Desired Weekly Hours by Gender and Marital Status

Table 1: Hours Mismatch Status by Gender and Marital Status (Sample shar	es in %)

	Single			Married				All		
	Male	Female	All	Male	Female	All	Male	Female	All	
Under-employed	29.3	19.5	25.3	31.0	20.0	28.7	30.5	19.8	27.6	
Matched	25.9	24.4	25.3	19.4	22.5	20.0	21.1	23.5	21.8	
Over-employed	44.8	56.1	49.5	49.7	57.5	51.3	48.4	56.8	50.7	

Table 2: Average Actual and Desired Hours by Hours Mismatch Status

	Actual hours per week (A)	Desired hours per week (B)	Difference between A and B
Under-employed	34.2	52.0	-17.8
Matched	45.6	45.6	0
Over-employed	56.6	38.8	17.7
All	48.0	43.9	4.1

 Table 3: Difference between Actual and Desired Hours by Gender and Marital Status

	Frequency	Actual hours per week (A)	Desired hours per week (B)	Difference between A and B	Absolute difference between A and B	Life satisfaction
Male						
Single	58	49.8	46.6	3.1	8.8	6.2
Married	155	48.1	45.2	3.0	8.9	6.4
All	213	48.6	45.6	3.0	8.9	6.3
Female						
Single	41	49.8	42.3	7.5	9.3	6.0
Married	40	43.2	37.0	6.2	9.1	6.2
All	81	46.5	39.7	6.9	9.2	6.1

 Table 4a: Frequency of Work-to-Family Conflict (Sample Shares in %)

	Single				Married			All		
	Male	Female	All	Male	Female	All	Male	Female	All	
Never	30.2	50.0	39.0	39.5	20.0	35.4	37.4	33.8	36.4	
Hardly ever	11.6	8.8	10.4	16.5	17.5	16.7	15.4	13.5	14.9	
Sometimes	41.9	23.5	33.8	29.0	32.5	29.7	31.8	28.4	30.9	
Often	14.0	8.8	11.7	9.9	20.0	12.0	10.8	14.9	11.9	
Always	2.3	8.8	5.2	5.3	10.0	6.3	4.6	9.5	6.0	

 Table 4b: Frequency of Family-to-Work Conflict (Sample Shares in %)

	Single				Married			All	
	Male	Female	All	Male	Female	All	Male	Female	All
Never	47.1	48.2	47.5	48.3	30.0	44.5	48.1	37.3	45.2
Hardly ever	23.5	25.9	24.6	23.2	25.0	23.6	23.2	25.4	23.8
Sometimes	29.4	11.1	21.3	27.8	32.5	28.8	28.1	23.9	27.0
Often	0.0	14.8	6.6	0.0	12.5	2.6	0.0	13.4	3.6
Always	0.0	0.0	0.0	0.7	0.00	0.5	0.5	0.0	0.4

	(1)	(2)	(3)	(4)	(5)
•	-0.012	-0.009	-0.017	-0.002	-0.009
Age	0.759	0.817	0.672	0.962	0.820
A	0.028	0.023	0.033	0.014	0.023
Age sq.	0.586	0.644	0.522	0.779	0.649
E-mal-	0.097	0.030	0.046	0.113	0.097
Female	0.485	0.849	0.771	0.546	0.605
Veers of advection	0.011	0.008	0.009	0.002	0.003
Tears of education	0.492	0.622	0.585	0.906	0.858
Morriad	0.047	0.105	0.068	0.091	0.060
Marrieu	0.777	0.521	0.682	0.581	0.717
$\mathbf{H}_{\mathbf{r}}$	0.242	0.250	0.244	0.246	0.241
Health (1 to 5)	0.012	0.009	0.011	0.011	0.013
Household income	-0.407	-0.312	-0.360	-0.373	-0.422
=2 (coping)	0.056	0.144	0.095	0.080	0.050
Household income	-0.587	-0.469	-0.538	-0.493	-0.567
=3 (difficult)	0.015	0.051	0.027	0.042	0.021
Household income	-0.650	-0.558	-0.592	-0.698	-0.725
=4 (very difficult)	0.037	0.074	0.059	0.028	0.023
Work-to-family	-0.054		-0.056		-0.099
(no conflict)	0.689		0.679		0.468
Family-to-work	0.345		0.328		0.313
(no conflict)	0.013		0.018		0.025
Matabad		0.157	0.138		
Matched		0.385	0.447		
Famala y Matahad		0.247	0.212		
Female × Matched		0.439	0.507		
Positive deviations				-0.012	-0.011
Positive deviations				0.040	0.053
Female ×				-0.004	-0.002
Positive deviations				0.718	0.879
Nagativa deviations				0.001	0.002
regative deviations				0.876	0.813
Female ×				0.010	0.012
Negative deviations				0.661	0.612
Pseudo-R <sup>2</sup>	0.019	0.016	0.020	0.020	0.024

#### **Table 5: Ordered Probit Results**

Note: The number of observations is 294. The dependent variable is 'overall life satisfaction' with values ranging from zero to 10. The figures in each cell are the coefficients (top) and the *p*-values of the two-sided tests of significance (bottom). The reference category for household income dummies is "Living comfortably on present income (=1)". The threshold estimates have been omitted from the output. The design weights available in the data set have been used to obtain nationally representative figures.

### **Appendix 1: Marginal effects of the variables for Ordered Probit specification (5)**

Change in the probability of dependent variable = 0:

#### . mfx, predict (p outcome(0))

```
Marginal effects after oprobit
    y = Pr(stflife==0) (predict, p outcome(0))
    = .04471068
```

variable	dy/dx	Std. Err.	z	P> z	[ 95%	C.I. ]	X
agea	.0008683	.00381	0.23	0.820	006604	.00834	34.0086
agesq	0021824	.00482	-0.45	0.650	011623	.007258	12.7243
female*	0087943	.01648	-0.53	0.594	041097	.023509	.288157
eduyrs	0002739	.00152	-0.18	0.857	003262	.002714	9.45786
partner*	0057028	.01596	-0.36	0.721	036979	.025573	.612943
health	0227391	.01002	-2.27	0.023	042376	003102	3.84249
jobnever*	.0093663	.01315	0.71	0.476	0164	.035133	.470085
famnever*	0313342	.01594	-1.97	0.049	062584	000084	.601955
_Ihinc~2*	.0367756	.01893	1.94	0.052	000317	.073868	.627595
_Ihinc~3*	.0715601	.04126	1.73	0.083	009304	.152424	.201466
_Ihinc~4*	.1130638	.07312	1.55	0.122	030248	.256375	.067155
diffno~s	.0010668	.00058	1.82	0.068	000079	.002213	8.75215
fdiff	.0001537	.00101	0.15	0.879	001825	.002133	2.61294
ndiffn~s	0001478	.00063	-0.24	0.813	001374	.001078	4.62638
fndiff	0011048	.00219	-0.51	0.613	005392	.003182	.655681
(*) dy/dx	is for discrete	change of	dummy	variable	from 0 to	 > 1	

<u>Change in the probability of dependent variable = 10:</u>

#### . mfx, predict (p outcome(10))

Marginal e y =	effects after = Pr(stflife== = .14068496	oprobit 10) (predict	, p out	come(10)	)		
variable	dy/dx	Std. Err.	Z	P> z	[ 95%	C.I. ]	X
agea agesq female* eduyrs partner* health jobnever* [hinc~2* _Thinc~4* diffno~s fdiff ndiffnc~s	0020565 .0051686 .0220273 .0006486 .0132515 .0538517 0219853 .0674985 0996307 1048193 1120961 0025265 0003639 .0003501	.00901 .01134 .0435 .00361 .03635 .02194 .03023 .02952 .05395 .03777 .0329 .00132 .00239 .00148	-0.23 0.46 0.51 0.18 0.36 2.45 -0.73 2.29 -1.85 -2.78 -3.41 -1.92 -0.15 0.24	0.819 0.649 0.613 0.858 0.715 0.014 0.467 0.022 0.065 0.006 0.001 0.055 0.879 0.813	$\begin{array}{c}019715\\017062\\063227\\006434\\058\\ .010852\\081235\\ .009639\\20537\\178845\\176574\\005105\\005047\\002549\end{array}$	.015602 .027399 .107282 .007731 .084503 .096852 .037264 .125358 .006109 030793 047619 .000052 .004319 .004319	34.0086 12.7243 .288157 9.45786 .612943 3.84249 .470085 .601955 .627595 .201466 .067155 8.75215 2.61294 4 62638
fndiff	.0026165	.00517	0.51	0.612	007508	.012741	.655681

(\*) dy/dx is for discrete change of dummy variable from 0 to 1  $\,$ 

	(1)	(2)	(3)	(4)	(5)
Ago	-0.019	-0.021	-0.027	-0.015	-0.019
Age	0.623	0.580	0.492	0.706	0.623
	0.036	0.038	0.044	0.030	0.036
Age sq.	0.459	0.433	0.364	0.537	0.465
Fomala	0.026	-0.050	-0.037	0.124	0.113
Tenlate	0.850	0.744	0.809	0.503	0.541
Vears of education	0.024	0.020	0.021	0.017	0.018
rears of education	0.108	0.183	0.164	0.279	0.250
Married	-0.028	0.050	0.008	0.026	-0.010
	0.859	0.753	0.963	0.868	0.952
Work-to-family	-0.055		-0.060		-0.104
(no conflict)	0.677		0.652		0.440
Family-to-work	0.323		0.307		0.285
(no conflict)	0.018		0.026		0.039
Matched		0.180	0.165		
Watched		0.316	0.359		
Female × Matched		0.283	0.256		
I chiare ~ Watched		0.373	0.420		
Positive deviations				-0.010	-0.010
rositive deviations				0.071	0.088
Female ×				-0.010	-0.008
Positive deviations				0.348	0.433
Negative deviations				0.001	0.001
Regative deviations				0.923	0.854
Female ×				-0.002	-0.001
Negative deviations				0.941	0.981
Pseudo-R <sup>2</sup>	.008	.007	.011	.011	.014

# Appendix 2: Ordered probit results (health and income variables excluded)

Note: The number of observations is 294. The dependent variable is 'overall life satisfaction' with values ranging from zero to 10. The figures in each cell are the coefficients (top) and the *p*-values of the two-sided tests of significance (bottom). The threshold estimates have been omitted from the output. The design weights available in the data set have been used to obtain nationally representative figures.

# **Appendix 3: OLS Results**

	(1)	(2)	(3)	(4)	(5)
A. 70	-0.026	-0.018	-0.038	0.002	-0.017
Age	0.810	0.863	0.720	0.983	0.873
A	0.063	0.054	0.076	0.029	0.051
Age sq.	0.639	0.686	0.569	0.832	0.704
Famala	0.317	0.119	0.159	0.329	0.286
Temare	0.391	0.778	0.704	0.507	0.563
Voors of advention	0.047	0.039	0.041	0.023	0.026
rears of education	0.264	0.356	0.329	0.585	0.540
Married	0.201	0.351	0.251	0.315	0.233
Warned	0.645	0.425	0.567	0.472	0.595
Health $(1 \text{ to } 5)$	0.660	0.680	0.660	0.668	0.651
Health (1 to 5)	0.010	0.008	0.010	0.009	0.011
Household income	-0.076		-0.076		-0.192
=2 (coping)	0.831		0.832		0.592
Household income	0.902		0.855		0.819
=3 (difficult)	0.014		0.020		0.026
Household income	-1.011	-0.787	-0.887	-0.941	-1.045
=4 (very difficult)	0.072	0.167	0.119	0.095	0.064
Work-to-family	-1.414	-1.139	-1.281	-1.197	-1.360
(no conflict)	0.026	0.076	0.046	0.062	0.034
Family-to-work	-1.809	-1.596	-1.667	-1.951	-1.999
(no conflict)	0.027	0.054	0.043	0.020	0.017
Matchod		0.358	0.297		
Watched		0.455	0.534		
Female × Matched		0.736	0.651		
Temate ~ Wateried		0.386	0.440		
Positivo dovistions				-0.031	-0.029
r ositive deviations				0.044	0.060
Female ×				-0.008	-0.001
Positive deviations				0.791	0.961
Negative deviations				0.003	0.004
Regative deviations				0.867	0.809
Female ×				0.028	0.031
Negative deviations				0.652	0.609
Constant	3.727	3.721	3.861	4.022	4.152
constant	0.110	0.112	0.098	0.087	0.076
<b>R</b> <sup>2</sup>	0.087	0.075	0.094	0.093	0.109

Note: The number of observations is 294. The dependent variable is 'overall life satisfaction' with values ranging from zero to 10. The figures in each cell are the coefficients (top) and the p-values of the two-sided tests of significance (bottom).

# Marginal effects of the variables for OLS specification (5)

y = Fitted values (predict)

= 6.3150185

variable	dy/dx	Std. Err.	z	P> z	[ 95%	C.I. ]	X
agea	0169598	.10621	-0.16	0.873	225131	.191211	34.0086
agesq	.0507585	.13369	0.38	0.704	211263	.31278	12.7243
female*	.2858635	.49317	0.58	0.562	680724	1.25245	.288157
eduyrs	.0261216	.0426	0.61	0.540	057366	.109609	9.45786
partner*	.2325966	.43659	0.53	0.594	623102	1.0883	.612943
health	.650526	.25386	2.56	0.010	.152964	1.14809	3.84249
jobnever*	1922507	.35876	-0.54	0.592	895416	.510915	.470085
famnever*	.8193683	.36705	2.23	0.026	.099963	1.53877	.601955
_Ihinc~2*	-1.044608	.56265	-1.86	0.063	-2.14739	.058174	.627595
_Ihinc~3*	-1.359997	.63992	-2.13	0.034	-2.61421	10578	.201466
_Ihinc~4*	-1.999073	.82982	-2.41	0.016	-3.6255	372648	.067155
diffno~s	0289446	.01532	-1.89	0.059	058969	.00108	8.75215
fdiff	0013994	.02836	-0.05	0.961	056981	.054182	2.61294
ndiffn~s	.004236	.01749	0.24	0.809	030052	.038524	4.62638
fndiff	.031321	.06116	0.51	0.609	088545	.151187	.655681

(\*) dy/dx is for discrete change of dummy variable from 0 to 1