University of Warsaw

Faculty of Economic Sciences

Emilia Selwa, Bartłomiej Ramotowski

Job Satisfaction, happiness, and work-life balance: Econometric Analysis of European Values Survey.

Project prepared for:
Advanced Econometrics

Warsaw, May 2024

Abstract

This study investigates the relationship between job satisfaction and various factors using data from the European Social Survey. Through the application of multiple econometric models, we determined that the Ordinal Logit Model outperforms the Ordinal Probit Model in explaining job satisfaction. Our findings reveal a positive correlation between happiness and job satisfaction. While gender alone does not significantly influence job satisfaction, the interaction between gender and happiness indicates differing impacts across genders. Additionally, religiosity and participation in skill-enhancing courses positively affect job satisfaction. Interestingly, flexibility at work and longer working hours are associated with higher job satisfaction. Job-related fatigue and the neglect of family due to work demands negatively impact job satisfaction. These results underscore the critical importance of promoting work-life balance to enhance job satisfaction and overall well-being.

1. Introduction

Job satisfaction is a broad term studied from different perspectives, including psychology, sociology, management sciences, and economics. This complex feeling is important not only for individuals but also has a significant impact on various aspects of organisational life. Research shows that job satisfaction influences employee productivity, loyalty, and helps in preventing absenteeism (Gazioglu, 2006). Additionally, high levels of job satisfaction can lead to better teamwork, lower turnover rates, and improved overall performance within organisations. Therefore, from the employer's perspective, it is crucial that employees feel satisfied with their work. On the other hand, since work occupies a significant part of our lives, job satisfaction seems an important component of individual life satisfaction.

Looking at the bigger picture, job satisfaction can be connected with a more general feeling of happiness. The concept of happiness is an even more complex term, difficult to define and quantify. It can be considered in many ways philosophically and psychologically, but for the sake of this work, we will focus on the declared sense of happiness and the factors that may contribute to it. Based on the research, we can generalise that relatively stable life circumstances play a significant role in producing happiness. "Subjective well-being is on average higher among those who are married, embedded in supportive social networks, employed, participate in religious and leisure activities, earn more money, are of higher social and occupational status, believe they are healthy, and live in prosperous, democratic and individualistic countries as opposed to poorer collectivist countries" (Fisher, 2010: 392). This leads us to the question: how does work influence our well-being, and what are the most important components of work that impact it?

In this research, we aim to determine whether a general feeling of happiness contributes to job satisfaction. Happiness and job satisfaction could be correlated, but the direction of causality is not clear. It is possible that higher job satisfaction leads to greater happiness, or that happier individuals are more satisfied with their jobs, or both variables might influence each other simultaneously. In this specific research we aim to analyse whether more happy people are more satisfied with their work. Using data from the European Social Survey and applying an econometric ordered choice model, we will test this hypothesis and identify other factors that contribute to job satisfaction. We want to examine whether gender, type of work, level of education and ability to maintain work-life balance, affect the levels of job satisfaction and well-being among Europeans.

2. Literature review

It is worth starting our analysis by describing Ronald Inglehart's theory about the transition from material to post-material values, which has changed the approach to work and work-related priorities. In Western, developed societies, there has been a shift from values related to the possession of goods, economic and physical security, to values centred on self-expression, autonomy, and personal fulfilment. We now attach greater importance to the quality of life, aesthetic, and intellectual satisfaction. Based on Inglehart's work, it can be concluded that while we still care about income and a good standard of living, we give lower priority to high earnings and place more value on having an interesting job. This shift suggests that we now prioritise fulfilment at work, satisfaction, comfort and the ability to separate work from everyday life (Inglehart, 1997).

According to the European Social Survey reports, "work-life balance" is one of the important drivers of people's general well-being. Factors such as working conditions, working hours, autonomy and flexibility are crucial for managing the demands of work alongside personal and family life (ESS, 2015: 13). This balance, in turn, is important for overall life satisfaction, indicating that the way we manage our work and personal lives significantly affects our happiness.

If the ability to maintain work-life balance is significant for an individual's well-being, we want to verify whether job satisfaction and a sense of fulfilment at work are connected with happiness. Our intuition suggests that after the transition of values, technological revolution, generational change, and changes in labour markets, job satisfaction may be an increasingly important component of people's happiness. According to the literature, job satisfaction varies by gender, wage growth, age, comparison income, unemployment, work environment, relations with managers, job matching, and service sector (Gazioglu, 2006). Therefore, our aim is to examine the determinants of job satisfaction, taking into account both individual and field characteristics.

Gender differences

The rising participation of women in the workforce, single parenthood, declining birth rates, and an ageing population, have all underscored the challenge of combining work commitments with caregiving responsibilities (ESS, 2015: 13). Those changes may influence the differences in job satisfaction on individual levels.

In the literature, there is research evidence suggesting that women tend to be more satisfied with their jobs than men. Studies from 1997 and 2006 indicated that despite the presence of a pay gap, women exhibited higher levels of job satisfaction. The resolution to this paradox was proposed to lie in the significance of expectations in well-being: individuals who have lower expectations from work are generally more satisfied with any given job. Specifically, women, those with lower levels of education, and individuals in the younger or older age groups reported significantly higher levels of job satisfaction compared to men, those with higher levels of education, and individuals in the middle-aged group, respectively (Clark, 1997).

When the research was conducted, women were typically less educated than men. However, a significant shift occurred as women began to outpace men in college graduation rates. For instance, in 2013, across OECD countries, six million students graduated from higher education institutions with a bachelor's degree, with 58% of them being women (OECD, 2015). Consequently, the argument that lower levels of education lead to lower expectations, influencing job satisfaction, may no longer be applicable given this change in educational attainment between genders.

It's significant to note that Clark demonstrated that for certain groups, where the gender gap in job expectations is less pronounced, the disparity in job satisfaction between genders disappears. These groups include the young, the better-educated, professionals, individuals in male-dominated workplaces, and those whose mothers held professional jobs (Clark, 1997). This finding suggests a dependency where the difference in job satisfaction diminishes due to higher education levels among women and their increased participation in the labour market. However, despite these advancements, the persistence of the gender pay gap (Eurostat, 2021) and the historical disadvantaged position of women in the labour market, might still influence women's job expectations. Consequently, their job satisfaction could potentially remain higher due to adjusted expectations stemming from past disparities.

Gazioglu and Tansel offered different explanations of this phenomenon. The comparison groups of women and men may vary, impacting how they respond to questions about job satisfaction. Additionally, differences in the types of jobs and qualifications between men and women could contribute to the finding that women tend to report higher job satisfaction than men. Furthermore, there may be a participation effect at play - in cases where women are secondary breadwinners, they may find it easier to exit the labour market, resulting in a higher proportion of satisfied women continuing to work compared to dissatisfied women (Gazioglu, 2006).

Various explanations for the phenomenon that women are more satisfied with their work make it necessary to analyse this relationship on current data.

Employment regime

European Social Survey reports indicate differences in the types of employment regimes between some groups of countries: Nordic (i.e. Sweden), Continental (i.e. Germany), Transitional (i.e. Poland), Liberal (i.e. UK) and Southern (i.e. Spain). In more worker-oriented regimes (such as Nordic and Continental) working hours are lower, job flexibility and feelings of job control higher, which may contribute to higher job satisfaction. These differences in working conditions help to explain the significant variation in perceptions of work-life balance found across Europe (ESS, 2015).

According to the research, employment regime type clearly matters: satisfaction with work-life balance is highest in the Nordic countries, followed by Continental and Liberal countries. Satisfaction is the lowest in Southern European countries and Transition countries.

These findings point to some clear conclusions for the topic of work-life balance and job satisfaction. Predictable working hours that are not too long, employee autonomy, and the ability to decide when to start and finish work, are all likely to enhance work-life balance. This could mean that factors which contribute to work-life balance increase levels of job satisfaction and happiness.

3. Data

The data for this research project originates from the European Social Survey (ESS) 2020 edition, which is an academically driven cross-national survey that has been conducted across Europe since 2001. Every two years ESS gathers data on attitudes, beliefs, and behaviour patterns of diverse populations.

According to the differences in employee regimes between diverse European societies, we selected data from three countries - Poland, Sweden and Germany. Those countries seemed interesting from a comparative perspective. Poland represents a transitioning economy with significant changes in labour market dynamics over recent decades. Sweden exemplifies a highly developed welfare state with a strong emphasis on work-life balance, employee rights, and social security. Germany has a robust economy characterised by its industrial base, strong labour unions, and well-established apprenticeship programs. This comparative analysis may provide valuable insights into the factors that contribute to job satisfaction and how they vary across diverse European contexts.

The ESS 2020 data covers a wide range of variables, but this research focuses specifically on variables related to job satisfaction, general well-being, and overall life satisfaction. The key variables used in this analysis are:

- **stmfjob** - Job satisfaction, answers for a question: “How satisfied are you in your main job?” from 0 - “Extremely unsatisfied” to 10 - “Extremely satisfied”.
- **happy** - General happiness, answers for a question: “Taking all things together, how happy would you say you are?” from 0 - “Extremely unhappy” to 10 - “Extremely happy”.

Table 1. Socioeconomic variables:

Variable	Description	Type
inprdsc	Number of people with whom respondent can discuss intimate and personal matters	Ordinal
health	Subjective general health	Ordinal
hlthhmp	Hampered in daily activities by illness/disability/infirmity/mental problem	Binary
rlgdgr	Level of religiosity	Ordinal
brncntr	Born in country	Binary
gndr	Gender	Binary
agea	Age of respondent, calculated	Quantitative
rshpsts	Relationship with husband/wife/partner currently living with	Qualitative
domicil	Domicile	Qualitative
edulvlb	Highest level of education	Ordinal
eduyrs	Years of full-time education completed	Quantitative

Table 2. Job-related variables

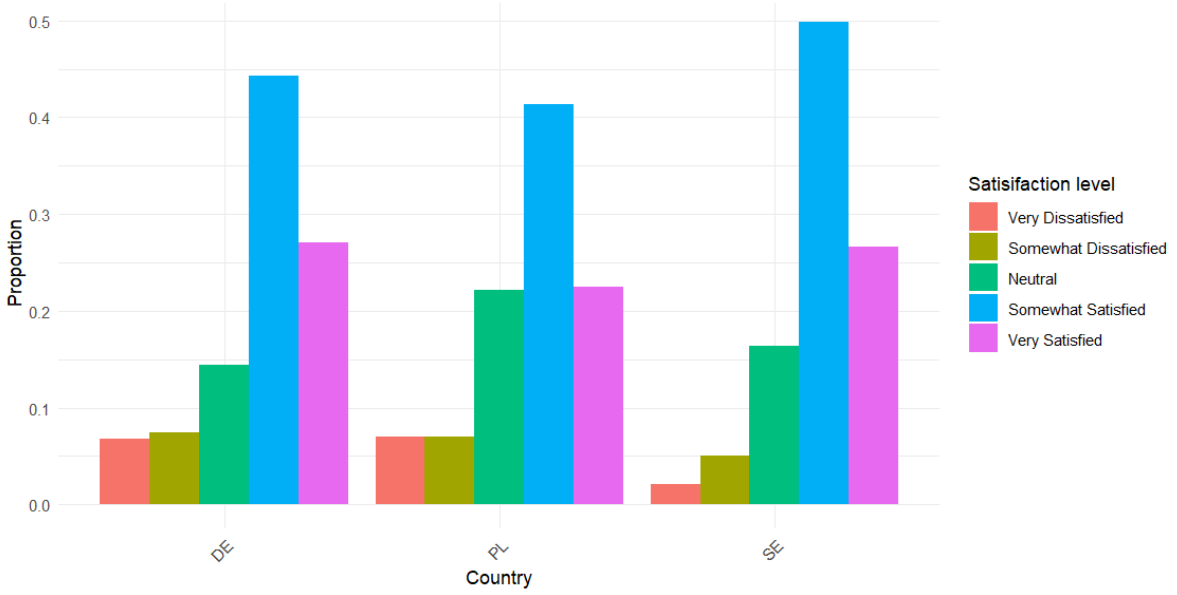
Variable	Description	Type
uempla	Unemployed, actively looking for job (last 7 days)	Binary
uempli	Unemployed, not actively looking for job (last 7 days)	Binary
rtrd	Retired (last 7 days)	Binary
hswrk	Housework, looking after children (last 7 days)	Binary
emplrel	Employment relation: employee, self-employed, working for own family business	Qualitative
wrkctra	Employment contract unlimited or limited duration	Binary
estsz	Establishment size	Quantitative
nacer2	Job industry	Qualitative
tporgwk	Type of organisation respondent work/worked for	Qualitative
uemp3m	Ever unemployed and seeking work for a period more than three months	Binary
atncrse	Improve knowledge/skills: course/lecture/conference (last 12 months)	Binary
hincsrca	Main source of household income	Qualitative
hinctnta	Household's total net income, all sources	Quantitative

Table 3. Work-life balance variables

Variable	Description	Type
wkdcorga	Allowed to decide how daily work is organised	Ordinal
wkhtot	Total hours normally worked per week in main job (overtime included)	Quantitative
emprelp	Partner's employment relation	Qualitative
trdawrk	Too tired after work to enjoy things like doing at home (how often)	Ordinal
jbprtfp	Job prevents you from giving time to partner/family (how often)	Ordinal
pfmfdjba	Partner/family fed up with pressure of your job (how often)	Ordinal
dcsfwrka	Current job: can decide time start/finish work	Ordinal

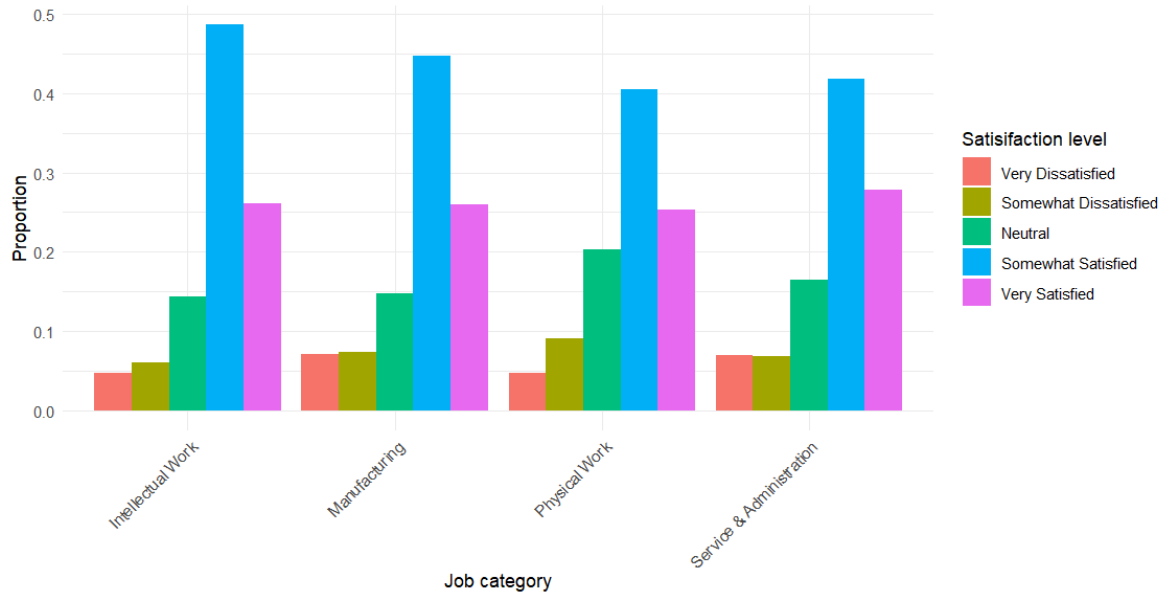
One of the key variables in this analysis is **stfmjob**, which captures the response to the question: "How satisfied are you in your main job?". To facilitate the econometric analysis, stfmjob was transformed into a Likert scale with five categories: Very Dissatisfied (0-2), Dissatisfied (3-4), Neutral (5-6), Satisfied (7-8), Very Satisfied (9-10). The transformed variable categorised into distinct Likert scale groups, serves as the dependent variable in our ordinal choice model. This transformation not only simplifies the analysis but also enhances the interpretability of the results, allowing us to clearly describe different levels of job satisfaction.

Figure 1. Job satisfaction levels across countries



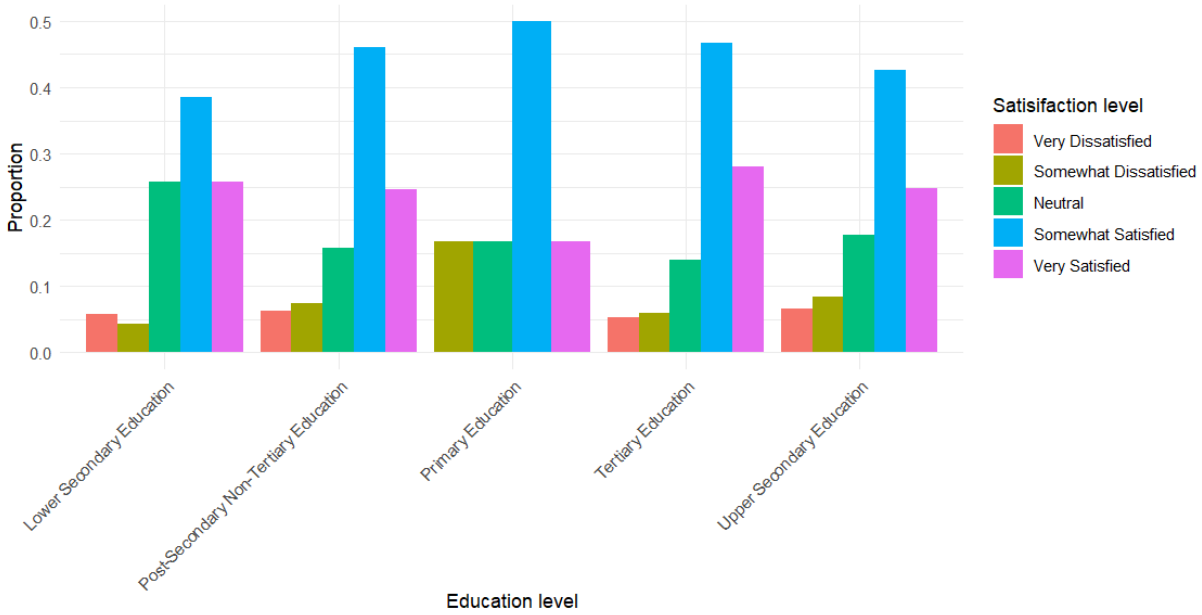
Another transformed variable was **nacer2**, which described the industries of the firms or organisations where respondents work or have worked. This variable included 100 different fields of industry, which was too detailed for our analysis of job satisfaction. To make the data more manageable, nacer2 was transformed into the following five categories: Physical Work (i.e. Mining of coal and lignite), Manufacturing (i.e. Manufacture of textiles), Intellectual Work (i.e. computer programming), Service & Administration (i.e. Food and beverage service activities). This transformation allows for a more focused analysis by grouping industries into categories that are more relevant to the context of job satisfaction.

Figure 2. Job satisfaction levels across different types of work



The final variable transformation involved **edulvlb**, which indicated the highest level of education attained by respondents, based on the International Standard Classification of Education (ISCED). Originally, this variable included a detailed range of educational levels, which we simplified into five categories for ease of analysis and interpretation: Primary Education, Lower Secondary Education, Upper Secondary Education, Post-Secondary Non-Tertiary Education, Tertiary Education.

Figure 3. Job satisfaction levels across different educational level



In order to prepare the dataset for analysis, it was essential to address the issue of missing data and non-informative responses. The original dataset comprised 13,077 observations, but not all responses were usable for our analysis. The dataset included specific codes for non-informative responses: Other, Refusal, Don't know, No answer, Not applicable. Variables that had the biggest percentage of non-informative responses were crucial for our study. At the same time filling missing data for those variables would be challenging due to the subjective and personal nature of these responses. Taking these factors into account, we decided to exclude observations with missing values. By omitting these responses, we aimed to ensure that the analysis was based on complete and informative data, thus maintaining the integrity and reliability of the results. After excluding non-informative and missing responses, the dataset was significantly reduced. From the original 13,077 observations, we retained 2,684 observations.

4. Method/Model.

In this section, we develop a statistical model to identify key factors influencing job satisfaction. Job satisfaction, measured on a five-level ordinal scale, will be modelled using one of the Ordered Choice Models commonly employed in econometrics for ordinal dependent variables. Ordered Choice Models are particularly well-suited for this analysis as they accommodate the ordered nature of the response variable while not assuming equal intervals between levels of job satisfaction. This model allows us to evaluate the probability of an employee's job satisfaction level as a function of various predictor variables.

Both Ordinal Logit Model and Ordinal Probit Model are designed to handle ordinal data, but they differ in their underlying assumptions about the distribution of the error terms. The logit model assumes a logistic distribution, while the probit model assumes a normal distribution. By comparing these two models with Akaike Information Criterion (AIC), we aim to identify the most appropriate and robust model for our data.

In further analysis we will use the 5% significance level.

Testing different models played a significant role in the whole process of modelling. At first, we compared the Ordinal Logit and Ordinal Probit models on a dataset containing 37 variables. The Logit model produced an AIC value of 6467.17, while the Probit model gave an AIC value of 6516.82, indicating better performance of the Logit model for our data.

After conducting over 20 steps of removing the least significant variables, each time testing hypotheses about joint insignificance, evaluating the assumptions and testing the fit, we obtained models shown in Table 5. To evaluate the jointly insignificant hypothesis we have used Likelihood-ratio test. To assess proportional odds assumption we have used a Brant test. The goodness of fit was evaluated using the Lipsitz test, which was the primary method, as well as the Hosmer–Lemeshow and Pulkstenis and Robinson tests.

With this tests we assess the hypothesis:

H0 : The fit of the model is correct

H1 : The fit of the model is incorrect

Among the models evaluated, Model (1) emerges as the best in terms of goodness of fit. This model holds a p-value of 0.09171 in the Lipsitz test, which is greater than the conventional threshold of 0.05. This result indicates that the specification of Model (1) is

correct. However it consists of insignificant variable ‘hinctnta’ which we should get rid of. Also AIC value is 6428.337 which is beaten by further models.

To refine our model, we tested additional steps, including the deletion of the insignificant variable ‘hinctnta’. This led to the development of Model (2). However, excluding this variable causes the model fit to become incorrect. This inclusion leads to a specification that does not meet the goodness-of-fit criteria but doesn't include insignificant variables. AIC value for this model is 6427.217 which is better than Model (1) but worse than Model (3)

In our analysis, we identified a significant interaction between gender and happiness. This interaction is evident in Model (3). While Model (3) does not pass the fit tests, it is notable for having the lowest AIC value of 6424.471 among all the models considered. The lowest AIC, lack of insignificant variables and significant interaction suggests a better trade-off between model complexity and goodness of fit, indicating that Model (3) might be more parsimonious despite its failure to pass the fit tests. We consider model (3) as our best and final model.

Based on Brant test with:

H0: Parallel Regression Assumption holds

H1: Parallel Regression Assumption does not hold.

We evaluated each model using the Brant test. The p-values for all models presented in Table 5 exceed the significance level of 0.05. This suggests that the parallel regression assumption holds for each model.

Table 4. Akaike Information Criterion

Model	**AIC**
1	6428.337
2	6427.217
3	6424.471

Table 5. Results of g.t.s. approach

	Dependent variable:		
	stfmjob_grouped		
	(1)	(2)	(3)
happy	0.350***	0.353***	0.367***
	(0.023)	(0.023)	(0.024)
rlgdgr	0.028**	0.028**	0.030**
	(0.013)	(0.013)	(0.013)
uempla	-1.525*	-1.585*	-1.617*
	(0.890)	(0.891)	(0.892)
wkdcorga	0.156***	0.159***	0.160***
	(0.016)	(0.015)	(0.015)
wkhtot	0.018***	0.019***	0.017***
	(0.003)	(0.003)	(0.003)
tporgwkA state owned enterprise	0.206	0.211	0.203
	(0.194)	(0.194)	(0.195)
tporgwkCentral or local government	0.171	0.175	0.200*
	(0.114)	(0.114)	(0.114)
tporgwkN/A	0.196	0.183	0.205
	(0.192)	(0.191)	(0.191)
tporgwkOther public sector (ex. education and health)	0.294***	0.297***	0.333***
	(0.100)	(0.100)	(0.101)
tporgwkSelf employed	0.343	0.333	0.362
	(0.356)	(0.356)	(0.356)
hinctnta	0.020		
	(0.022)		
atncrse	0.387***	0.397***	0.398***
	(0.078)	(0.077)	(0.077)
trdawrkHardly ever	-0.027	-0.022	-0.017
	(0.271)	(0.271)	(0.271)
trdawrkSometimes	-0.278	-0.277	-0.258
	(0.262)	(0.262)	(0.262)
trdawrkOften	-0.738***	-0.739***	-0.692**
	(0.273)	(0.273)	(0.273)
trdawrkAlways	-1.182***	-1.187***	-1.124***
	(0.327)	(0.327)	(0.328)
jbprtfpHardly ever	-0.282	-0.275	-0.295
	(0.204)	(0.204)	(0.204)
jbprtfpSometimes	-0.371*	-0.366*	-0.399*
	(0.205)	(0.205)	(0.206)
jbprtfpOften	-0.584***	-0.577***	-0.615***
	(0.220)	(0.220)	(0.221)
jbprtfpAlways	-0.706**	-0.701**	-0.743***
	(0.280)	(0.280)	(0.281)
pfmfdjbaHardly ever	-0.198*	-0.195*	-0.203*

	(0.115)	(0.115)	(0.115)
pfmfdjbaSometimes	-0.412***	-0.410***	-0.418***
	(0.121)	(0.121)	(0.121)
pfmfdjbaOften	-0.897***	-0.897***	-0.902***
	(0.163)	(0.163)	(0.163)
pfmfdjbaAlways	-1.274***	-1.282***	-1.310***
	(0.451)	(0.452)	(0.452)
domicilCountry village	0.168	0.159	0.158
	(0.107)	(0.107)	(0.107)
domicilFarm or home in countryside	0.132	0.120	0.115
	(0.197)	(0.196)	(0.196)
domicilSuburbs or outskirts of big city	0.068	0.068	0.077
	(0.124)	(0.124)	(0.124)
domicilTown or small city	0.336***	0.329***	0.331***
	(0.107)	(0.106)	(0.106)
emprelpSelf-employed	0.187	0.189	0.221*
	(0.126)	(0.126)	(0.127)
emprelpWorking for own family business	0.819*	0.798*	0.801*
	(0.465)	(0.463)	(0.463)
happy:gndr			-0.023**
			(0.011)
Observations	2,684	2,684	2,684
Note:	*p<0.1; **p<0.05; ***p<0.0		

The last assumption we have verified is the assumption of no multicollinearity. The statistic used to detect imperfect multicollinearity is called the variance inflation factor (VIF). High VIF values (in the literature, a VIF is considered high if it exceeds 10) for explanatory variables indicate the presence of strong imperfect multicollinearity among the variables. In our case, the maximum VIF value is 2.85 (for the variable 'jbprtfp'), so we assess that there is no issue of imperfect multicollinearity in the model.

Table 6. Variance inflation factor

variable	VIF
happy	1.204452
rlgdgr	1.064192
uempla	1.007930
wkdcorga	1.087165
wkhtot	1.172022
tporgwk	1.155960
atncrse	1.092117
trdawrk	2.412067
jbprtfp	2.847466
pfmfdjba	2.003712
domicil	1.082927
emprelp	1.045971
happy:gndr	1.276755

5. Results.

In this chapter, we present the results of our econometric analysis on the determinants of job satisfaction. Our model aimed to identify and quantify the factors that significantly influence job satisfaction levels. We included a variety of independent variables such as happiness, gender, religiosity and other demographic and job-related characteristics. The analysis provided insights into how these variables interact and contribute to job satisfaction. This chapter provides a detailed discussion of these results, supported by a table that outlines the marginal effects of each variable included in our model.

Table 7. Marginal Effects

	1	2	3	4	5
uemplaTRUE	0.106	0.119	0.149	-0.212	-0.162
tporgwkA state owned enterprise	-0.005	-0.008	-0.021	-0.001	0.036
tporgwkCentral or local government	-0.005	-0.008	-0.021	0	0.035
tporgwkN/A	-0.006	-0.008	-0.022	-0.001	0.036
tporgwkOther public sector (ex. education and health)	-0.009	-0.014	-0.035	-0.002	0.059
tporgwkSelf employed	-0.009	-0.014	-0.037	-0.007	0.067
atncrseTRUE	-0.012	-0.018	-0.043	0.007	0.066
trdawrkHardly ever	0.001	0.001	0.002	0	-0.003
trdawrkSometimes	0.008	0.011	0.028	-0.004	-0.043
trdawrkOften	0.024	0.034	0.077	-0.028	-0.107
trdawrkAlways	0.055	0.071	0.122	-0.112	-0.137
jbprtfpHardly ever	0.009	0.014	0.033	-0.009	-0.047
jbprtfpSometimes	0.012	0.018	0.044	-0.009	-0.065
jbprtfpOften	0.021	0.030	0.068	-0.025	-0.095
jbprtfpAlways	0.030	0.042	0.084	-0.055	-0.101
pfmfdjbaHardly ever	0.006	0.009	0.022	-0.005	-0.033
pfmfdjbaSometimes	0.013	0.019	0.046	-0.010	-0.068
pfmfdjbaOften	0.038	0.052	0.101	-0.069	-0.122
pfmfdjbaAlways	0.073	0.090	0.136	-0.153	-0.146
domicilCountry village	-0.005	-0.007	-0.017	0.001	0.027
domicilFarm or home in countryside	-0.003	-0.005	-0.012	0.001	0.020
domicilSuburbs or outskirts of big city	-0.002	-0.003	-0.008	0.001	0.013
domicilTown or small city	-0.009	-0.014	-0.035	0.001	0.057
emprelpSelf-employed	-0.006	-0.009	-0.023	0	0.039
emprelpWorking for own family business	-0.017	-0.026	-0.073	-0.046	0.162
happy	-0.011	-0.016	-0.040	0.005	0.061
rlgdgr	-0.001	-0.001	-0.003	0	0.005
wkdcorga	-0.005	-0.007	-0.017	0.002	0.027
wkhtot	-0.001	-0.001	-0.002	0	0.003
happy:gndr	0.001	0.001	0.002	0	-0.004

Individual characteristics

Our main hypothesis was that job satisfaction significantly contributes to a general feeling of happiness. According to the results of our model, happiness (happy) is a significant variable in explaining job satisfaction levels. Specifically, an additional unit in the declared level of happiness decreases the probability of being very dissatisfied and dissatisfied with work by 1.1 and 1.6 percentage points, respectively. Conversely, an additional unit in the declared level of happiness increases the probability of being very satisfied with work by 6.1 percentage points. These findings support our main hypothesis, indicating that higher levels of happiness are associated with higher levels of job satisfaction.

According to the literature, we aimed to verify whether job satisfaction is influenced by gender. Our econometric model initially considered gender as a potential explanatory variable for job satisfaction levels. However, our analysis led us to reject the hypothesis that gender is a significant factor in determining job satisfaction. This implies that, contrary to some previous findings, gender does not have a direct influence on job satisfaction in our model.

However, in our model we included an interaction between gender and happiness, which turned out to be statistically significant for explaining job satisfaction. This finding suggests that while happiness positively affects job satisfaction, the strength of this effect is slightly weaker for females, compared to men.

Our econometric analysis led us to reject the hypothesis that education levels or the type of job (physical, intellectual, manufacturing, service and administration) influence job satisfaction. These variables turned out to be insignificant, indicating that neither the level of education nor the nature of the job significantly affects job satisfaction in our model.

There is also an unexpected finding, that job satisfaction significantly differs by declared religiosity levels (rlgdgr). An additional unit in the declared level of religiosity decreases the probability of being very dissatisfied and dissatisfied with work by 0.1 percentage point. An additional unit in the declared level of religiosity increases the probability of being very satisfied with work by 0.5 percentage points.

Another interesting result, was that variable describing whether a respondent has taken any course or attended any lecture or conference to improve knowledge or skills for work (atncrse), was found to be significant in explaining job satisfaction levels. This indicates that participating in courses, lectures, or conferences to improve knowledge and

skills has a meaningful positive impact on job satisfaction - it increases the probability of being very satisfied with one's job by 6.6 percentage points.

Employment regime and work-life balance

We aimed to analyse whether job satisfaction differs between different countries and employment regimes. After excluding missing observations, our sample could be too small to investigate differences between countries. The proportion of observations from those countries differed. Our econometric model made us reject the hypothesis that there are statistically significant differences between Poland, Germany and Sweden according to job satisfaction levels but this hypothesis would require further analysis.

There were several variables connected to work-life balance that turned out to be significant in explaining different job satisfaction levels. First important factor is being allowed to decide how daily work is organised (wkdcorga). The more flexibility and self-organisation at work, the more satisfied one can be. Additional declared level of flexibility increases the probability of being very satisfied with work by 2.7 percentage points.

There was also a counter-intuitive result in our econometric model, that total hours worked per week (wkhtot) are statistically significant in explaining job satisfaction, but that there is a positive relation between more hours of work and being satisfied with one's job. A possible hypothesis to explain this unexpected result is that people who are very satisfied with their jobs tend to work longer hours.. These individuals might be more engaged and motivated, finding personal fulfilment and satisfaction in their professional roles. As a result, they may choose to work more hours, including overtime, as a reflection of their enthusiasm and commitment to their job.

However, there was no surprise in the results of variables that reflect the negative impacts of work on personal well-being and family life. These variables provide insight into how job-related stress and fatigue affect individuals' lives outside of work. Individuals who often feel too tired after work to enjoy activities at home (trdawrk) are less likely to be satisfied with work by 2.8 p.p and very satisfied with work by 10.7 percentage points. As tiredness increases to always feeling too tired (trdawrkAlways), this effect increases to 11.2 and 13.7 percentage points. Similar situation is with the variable indicating that job is the factor that prevents from giving time to partner and family (jbprtfp). The more you neglect your family because of work, the more dissatisfied you become with it. What is also

important is the perception of the impact of work on the respondent's life by his family, which can be noticed by the result of variable (pfmfdjba) - how often a partner or family gets fed up with the pressure of the respondent's job. Experiencing family frustration, decreases the probability of being satisfied with work up to 15.3 percentage points.

These results highlight the relationship between job satisfaction and the negative impacts of work on personal life. This underscores the importance of work-life balance and the need for employers to address issues related to employee tiredness and the interference of job demands with family life to enhance overall job satisfaction. These findings support our hypothesis that being able to maintain work-life balance is an important factor for job satisfaction levels.

6. Findings

The results of our research support the theory that in developed societies, such as those in Europe, job satisfaction is influenced by factors beyond just earnings. While our econometric model included variables measuring total household income (hinctnta), these were not significant in explaining job satisfaction levels. In contrast, variables related to work-life balance, well-being, happiness, and job flexibility were significant.

Although we cannot definitively conclude that earnings have no effect on job satisfaction, it highlights the importance of other factors. The question did not directly address respondents' wages, but our results underscore the significance of non-monetary aspects of work in contributing to job satisfaction. These aspects include the ability to maintain a healthy work-life balance, personal well-being, and overall happiness, which are crucial for employees' satisfaction.

An interesting hypothesis from the literature suggested that job satisfaction varies between females and males. Historically, this phenomenon was attributed to lower expectations among women, who had fewer opportunities in the labour market and participated less frequently in the workforce. Our intuition was that this dependency might change due to increasing equality between men and women.

In our econometric model, gender itself turned out to be insignificant in explaining job satisfaction levels. This finding suggests that the historical lower expectations among women may no longer be a factor, even though the gender pay gap still exists. However, our

model also included an interaction term between happiness and gender, which revealed that happiness has a greater impact on job satisfaction among men than among women.

This result implies that while job satisfaction is important for both genders, it plays a more significant role in the overall happiness of men compared to women. This may suggest that women derive their overall happiness from a broader set of factors, indicating that job satisfaction is a less crucial component of their general happiness compared to men.

We couldn't properly assess the differences in job satisfaction among various countries that represented different employment regimes. However, our econometric model did reveal some unexpected findings. Notably, religiosity significantly impacts job satisfaction levels. This relationship can be intuitively explained in several ways. Many religions promote positive outlooks on life, gratitude, and hope. This positive mindset can influence how individuals perceive their job and workplace challenges, leading to higher job satisfaction. Additionally, religious teachings often emphasise the importance of rest, family, and community life. Individuals who follow these teachings might prioritise work-life balance, leading to better overall satisfaction with their job and life. Nonetheless, to fully understand this phenomenon, further research is required.

Another interesting factor in explaining different job satisfaction levels was the opportunity to take courses, attend lectures, or participate in conferences to enhance one's knowledge and skills for work. This factor turned out to be statistically significant and positively correlated with job satisfaction, highlighting the importance of continuous professional development. This finding underscores the value employees place on having opportunities for ongoing learning and skill enhancement in their jobs.

Overall, our findings contribute to understanding the factors that influence job satisfaction levels. In conclusion, our research underscores that maintaining a healthy work-life balance is paramount for job satisfaction and boosting overall happiness. Future studies should continue to explore these relationships to further validate and expand upon our findings.

Bibliography

- Aziri, B. (2011). Job satisfaction: A literature review. Management research & practice, 3(4).
- Clark, Andrew E. (1997). Job satisfaction and gender: Why are women so happy at work? Labour Economics,Volume 4, Issue 4. https://doi.org/10.1016/S0927-5371(97)00010-9.
- European Social Survey. (2015). Measuring and Reporting on Europeans' Wellbeing: Findings from the European Social Survey. London: ESS ERIC.
- Eurostat. (2021). Gender pay gaps in the European Union – a statistical analysis – 2021 edition. Publication No. KS-TC-21-004-EN-N). European Commission. https://ec.europa.eu/eurostat/documents/3888793/13484385/KS-TC-21-004-EN-N.pdf/69965821-22ed-7c56-c859-cd7b10e011c5?t=1633341826751
- Fisher, C.D. (2010). Happiness at Work. International Journal of Management Reviews, 12: 384-412. https://doi.org/10.1111/j.1468-2370.2009.00270.x
- Gazioglu, S., & Tansel, A. (2006). Job satisfaction in Britain: individual and job related factors. Applied Economics, 38(10), 1163–1171. https://doi.org/10.1080/00036840500392987
- Inglehart, R. (1997). Modernization and postmodernization: cultural, economic, and political change in 43 societies. Princeton, N.J., Princeton University Press.
- OECD. (2015). Education at a Glance 2015. OECD Publishing, Paris.