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Article

Work less, live more? The impact of an introduction of the Four-Day Working Week on happiness in the context of the Icelandic Four-Day Working Week experiment

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Online-Appendix

„Work Less, Live More? The Impact of an Introduction of the Four-Day Working Week on Happiness in the Context of the Icelandic Four- Day Working Week Experiment“

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Junior Management Science 10(4) (2025) 831-857

Appendix A

Reported income categories, their approximate (weekly), monthly (, annual) income bands in €, and assigned midpoint values for analysis, based on household's total net income, all sources:

YOUR HOUSEHOLD INCOME - CARD 53 (QUESTION F32)

Income Bands and Assigned Midpoint Values for Analysis				
Categories	Approximate Weekly	Approximate Monthly	Approximate Annual	Assigned Midpoint Values (Monthly Income in €)
J	Less than €40	Less than €150	Less than €1,800	€ 75
R	€40 to under €70	€150 to under €300	€1,800 to under €3,600	€ 225
C	€70 to under €120	€300 to under €500	€3,600 to under €6,000	€ 400
M	€120 to under €230	€500 to under €1,000	€6,000 to under €12,000	€ 750
F	€230 to under €350	€1,000 to under €1,500	€12,000 to under €18,000	€ 1,250
S	€350 to under €460	€1,500 to under €2,000	€18,000 to under €24,000	€ 1,750
K	€460 to under €580	€2,000 to under €2,500	€24,000 to under €30,000	€ 2,250
P	€580 to under €690	€2,500 to under €3,000	€30,000 to under €36,000	€ 2,750
D	€690 to under €1,150	€3,000 to under €5,000	€36,000 to under €60,000	€ 4,000
H	€1,150 to under €1,730	€5,000 to under €7,500	€60,000 to under €90,000	€ 6,125
U	€1,730 to under €2,310	€7,500 to under €10,000	€90,000 to under €120,000	€ 8,625
N	€2,310 or more	€10,000 or more	€120,000 or more	€ 11,000

Source: ESS Survey - https://stessrelpubprodwe.blob.core.windows.net/data/round3/fieldwork/source/ESS3_source_showcards.pdf

Table 8: Income Bands and Assigned Midpoint Values for Analysis Based on ESS Showcards (ESS, 2024a)

Appendix B

In order to validate the methodological decisions surrounding data transformation and variable selection, several key findings emerge:

Firstly, below histograms reinforce the decision to cap weekly working hours above 80, illustrating a central distribution around the 40-hour mark, thereby supporting the realism and relevance of a 80-hour threshold in the analysis.

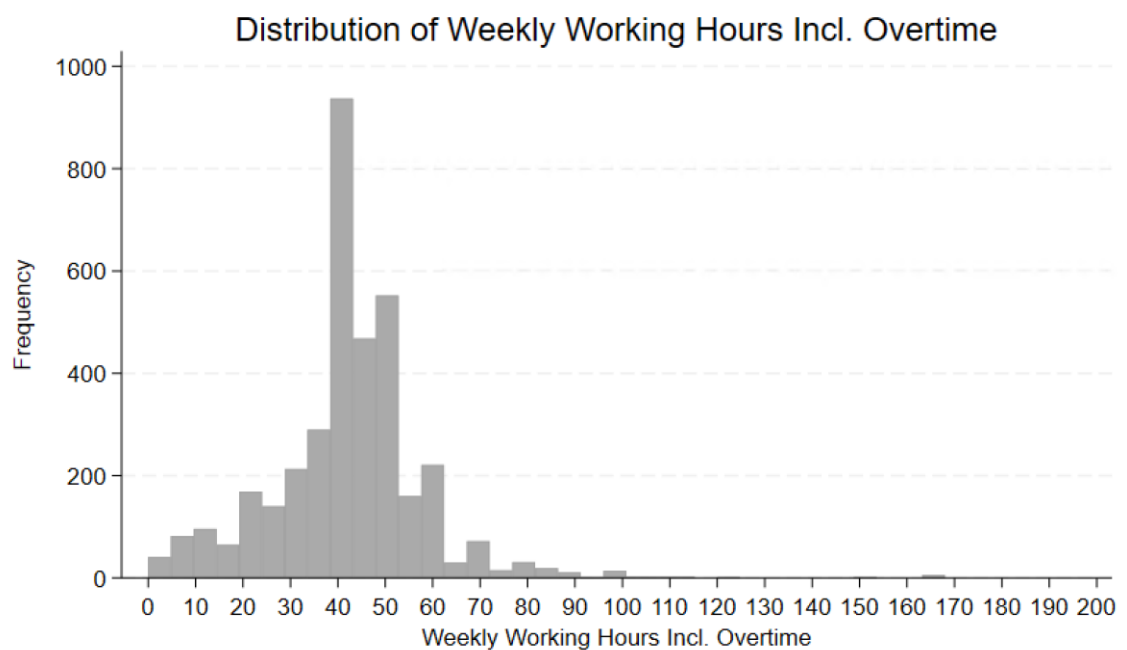


Figure 6: Distribution of Weekly Working Hours Incl. Overtime

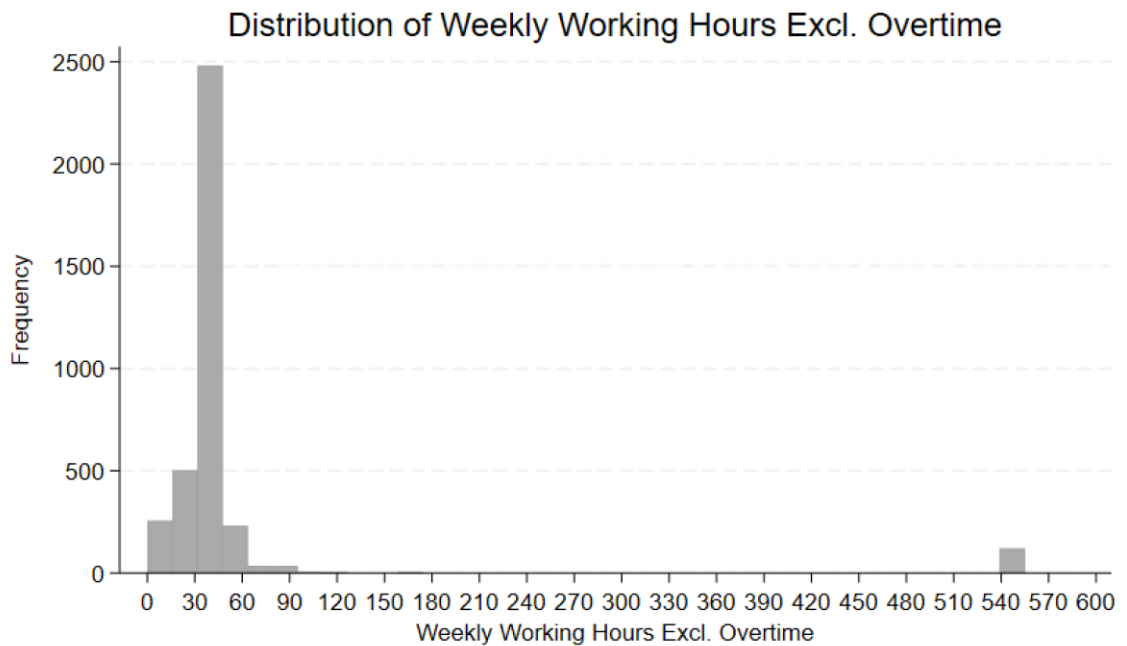


Figure 7: Distribution of Weekly Working Hours Excl. Overtime

Secondly, when comparing the variables for total contracted hours (excluding overtime) and total hours (including overtime), the regression models clearly favour the inclusion of overtime (models 1, 2, 5, 6, 9, 10). The models with overtime hours reveal robust coefficients that capture work intensity's effects on happiness more accurately, with coefficients for overtime hours ranging from -0.004 to 0.127 and significant at $p < 0.1$ when considering the weekly working hours variable with overtime that is not adjusted (wkhtot). As for the adjusted working hours including overtime variable, `work_hours_ot`, non-significant impacts at the conventional levels are indicated, however, this variable is important for model specification, as it shows the comprehensive representation of actual working conditions given the legal work-hour restrictions in Iceland, with overtime included.

Furthermore, the marital status variable and the indicator for belonging to an ethnic minority are excluded from the final analysis due to high percentages of missing

values and statistical insignificance, as reflected in the regression outputs where these variables consistently show no significant effect on happiness across multiple model specifications.

REGRESSION OUTPUT

Survey Data Regression Output Variable Comparison

Variables	Strata with single sampling unit treated as certainty units											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Happiness (happy)												
Weekly Working Hours incl. Overtime (work_hours_ot)	0.003 (0.002)				0.012 (0.008)				-0.004 (0.012)			
Squared Weekly Working Hours incl. Overtime (work_hours_ot_squared)					-0.000 (0.000)				0.000 (0.000)			
Weekly Working Hours incl. Overtime not Adjusted (wkhtot)		0.000 (0.002)				0.127*** (0.004)				0.011* (0.007)		
Squared Weekly Working Hours incl. Overtime not Adjusted (wkhtot_squared)						-0.000*** (0.000)				-0.000* (0.000)		
Weekly Working Hours excl. Overtime (work_hours_ct)			0.003 (0.003)				0.009 (0.009)				-0.001 (0.013)	
Squared Weekly Working Hours excl. Overtime (work_hours_ct_squared)							-0.000 (0.000)				0.000 (0.000)	
Weekly Working Hours excl. Overtime not Adjusted (wkhtct)				-0.000 (0.000)				0.003 (0.003)				0.001 (0.010)
Squared Weekly Working Hours excl. Overtime (wkhtct_squared)								-0.000 (0.000)				0.000 (0.000)
Logarithm of Equivalised Household Income in € per Month (log_equiv_hhinc)									0.094** (0.043)	0.091** (0.042)	0.111*** (0.043)	0.110*** (0.042)
Occupation (occup8)												
Self-Employed												
Professionals and Large Employers												
Small Business Owners									-0.506* (0.264)	-0.511* (0.262)	-0.583** (0.273)	-0.588** (0.273)
Technical (Semi-) Professionals									-0.059 (0.217)	-0.109 (0.214)	-0.085 (0.203)	-0.083 (0.199)
Production Workers									-0.228 (0.246)	-0.256 (0.245)	-0.346 (0.239)	-0.366 (0.236)
(Associate) Managers									-0.176 (0.194)	-0.200 (0.194)	-0.199 (0.190)	-0.205 (0.189)
Clerks									-0.433 (0.287)	-0.474* (0.285)	-0.517* (0.279)	-0.528* (0.278)
Socio-Cultural (Semi-)Professionals									-0.102 (0.194)	-0.134 (0.193)	-0.230 (0.192)	-0.237 (0.191)
Service Workers									-0.233 (0.207)	-0.255 (0.207)	-0.333 (0.205)	-0.346* (0.204)

The FDWW Impact on Happiness

Gender (gender)												
<i>Female</i>									-0.274**	-0.235**	-0.244**	-0.243**
<i>Male</i>									(0.113)	(0.112)	(0.114)	(0.114)
Age (age)									-0.023	-0.024	-0.031	-0.030
									(0.028)	(0.027)	(0.027)	(0.027)
Squared Age (age_squared)									0.000	0.000	0.000	0.000
									(0.000)	(0.000)	(0.000)	(0.000)
General Health (health)												
<i>Very Good</i>												
<i>Good</i>									-0.349***	-0.341***	-0.326***	-0.327***
									(0.088)	(0.087)	(0.088)	(0.087)
<i>Fair</i>									-1.182***	-1.195***	-1.146***	-1.145***
									(0.188)	(0.187)	(0.182)	(0.181)
<i>Bad</i>									-2.419***	-2.391***	-2.520***	-2.522***
									(0.401)	(0.385)	(0.330)	(0.330)
<i>Very Bad</i>									-4.446***	-4.429***	-4.086***	-4.108***
									(0.919)	(0.863)	(0.873)	(0.804)
Education (edu) <i>Less Than Lower Secondary</i>												
<i>Lower Secondary</i>									-0.716	-0.693	-0.677	-0.676
									(0.754)	(0.755)	(0.748)	(0.752)
<i>Lower Tier Upper Secondary</i>									-0.650	-0.727	-0.672	-0.686
									(0.762)	(0.761)	(0.753)	(0.757)
<i>Upper Tier Upper Secondary</i>									-0.567	-0.571	-0.573	-0.582
									(0.765)	(0.766)	(0.756)	(0.761)
<i>Advanced Vocational</i>									-0.766	-0.765	-0.733	-0.750
									(0.744)	(0.745)	(0.736)	(0.742)
<i>Lower Tertiary (BA Level)</i>									-0.724	-0.735	-0.739	-0.752
									(0.757)	(0.758)	(0.748)	(0.753)
<i>Higher Tertiary (> MA Level)</i>									-0.796	-0.813	-0.782	-0.796
									(0.757)	(0.757)	(0.746)	(0.752)
<i>None of the Above or Other</i>												
Religion (religious)												
<i>No</i>									0.210*	0.222**	0.248**	0.239**
<i>Yes</i>									(0.108)	(0.107)	(0.107)	(0.106)
Marital Status (marstat) <i>Married In a Partnership</i>												
<i>Separated</i>									0.009	0.067	0.138	0.126
									(0.333)	(0.312)	(0.325)	(0.322)
<i>Divorced</i>									-0.671	-0.593	-0.630	-0.632
									(0.420)	(0.412)	(0.412)	(0.411)
<i>Widowed</i>									-0.267	-0.227	-0.218	-0.225
									(0.260)	(0.252)	(0.255)	(0.254)
<i>Never Married or Similar</i>									0.142	0.174	0.211	0.209
									(0.326)	(0.317)	(0.315)	(0.314)
Belonging to Ethnic Minority (eth_minority) <i>No</i>									-0.347	-0.300	-0.241	-0.244
<i>Yes</i>									(0.235)	(0.230)	(0.233)	(0.233)
_cons	7.999***	8.109***	8.021***	8.147***	7.871***	7.848***	7.954***	8.032***	9.360***	9.151***	9.362***	9.362***
	(0.096)	(0.093)	(0.101)	(0.032)	(0.149)	(0.118)	(0.147)	(0.105)	(1.089)	(1.097)	(1.082)	(1.081)
Observations	3,085	3,138	3,006	3,156	3,085	3,138	3,006	3,156	803	818	799	806
R-Squared	0.001	0.000	0.001	0.000	0.002	0.005	0.001	0.001	0.240	0.247	0.254	0.257
Prob > F	0.135	0.825	0.207	0.536	0.161	0.005	0.362	0.409	0.000	0.000	0.000	0.000

Robust Standard Errors in Parantheses

P > |t| = Result of the Two-Tailed t-Test

Significance Levels: * p < 0.1 ; ** p < 0.05 ; *** p < 0.01

Table 9: Regression Output - Effect of Weekly Working Hours on Happiness for Variable Comparison

Appendix C

Pearson's Correlation Matrix and Their Significance Levels

PEARSON'S CORRELATION														
Weighted Pairwise Correlation Matrix														
Variables		1	2	3	4	5	6	7	8	9	10	11	12	13
Happiness (happy)	1	1.000												
Weekly Working Hours incl. Overtime (work_hours_ot)	2	0.021 (0.203)	1.000											
Squared Weekly Working Hours incl. Overtime (work_hours_ot_squared)	3	0.016 (0.336)	0.958 (0.000)	1.000										
Weekly Working Hours incl. Overtime in Categories (hours_category)	4	0.010 (0.552)	0.928 (0.000)	0.948 (0.000)	1.000									
Gender (gender)	5	-0.041 (0.010)	0.309 (0.000)	0.321 (0.000)	0.277 (0.000)	1.000								
Age (age)	6	0.080 (0.000)	0.122 (0.000)	0.107 (0.000)	0.076 (0.000)	-0.026 (0.155)	1.000							
Squared Age (age_squared)	7	0.076 (0.000)	0.104 (0.000)	0.092 (0.000)	0.067 (0.000)	-0.026 (0.154)	0.990 (0.000)	1.000						
General Health (health)	8	-0.316 (0.000)	-0.028 (0.099)	-0.018 (0.288)	0.019 (0.234)	-0.047 (0.004)	0.114 (0.000)	0.121 (0.000)	1.000					
Education (edu)	9	0.065 (0.000)	0.115 (0.000)	0.061 (0.000)	-0.001 (0.950)	-0.053 (0.001)	-0.017 (0.362)	-0.038 (0.039)	-0.172 (0.000)	1.000				
Equivalised Household Income in € per Month (equiv_hhinc)	10	0.166 (0.000)	0.102 (0.000)	0.097 (0.000)	0.078 (0.000)	0.066 (0.000)	0.085 (0.000)	0.080 (0.000)	-0.167 (0.000)	0.164 (0.000)	1.000			
Logarithm of Equivalised Household Income in € per Month (log_equiv_hhinc)	11	0.197 (0.000)	0.085 (0.000)	0.067 (0.000)	0.051 (0.002)	0.068 (0.000)	0.099 (0.000)	0.088 (0.000)	-0.202 (0.000)	0.214 (0.000)	0.835 (0.000)	1.000		
Religion (religious)	12	0.089 (0.000)	0.002 (0.897)	0.003 (0.859)	0.019 (0.236)	-0.092 (0.000)	-0.241 (0.000)	0.238 (0.000)	0.012 (0.212)	0.022 (0.179)	0.029 (0.088)	0.034 (0.041)	1.000	
Occupation (occup8)	13	-0.016 (0.329)	-0.262 (0.000)	-0.266 (0.000)	-0.236 (0.000)	-0.304 (0.000)	-0.137 (0.000)	-0.119 (0.000)	0.039 (0.016)	-0.089 (0.000)	-0.068 (0.000)	-0.073 (0.000)	-0.021 (0.190)	1.000
Level of Statistical Significance in Parantheses														

Table 10: Pearson's Correlation Matrix and Their Significance Levels

Appendix D

Regression Output by Gender - Effect of Weekly Working Hours on Happiness

REGRESSION OUTPUT				
Survey Data Regression Output by Gender				
Variables	Weighted Regression			
	Women		Men	
	(1)	(2)	(3)	(4)
	Happiness (happy)			
Weekly Working Hours incl. Overtime (work_hours_ot)	-0.004 (0.012)		0.023 (0.017)	
Squared Weekly Working Hours incl. Overtime (work_hours_ot_squared)	-0.000 (0.000)		-0.000 (0.000)	
Weekly Working Hours incl. Overtime in Categories (hours_category) Hours 0				
Hours 1-30		-0.121 (0.209)		-0.145 (0.243)
Hours 31-40		-0.116 (0.198)		0.065 (0.169)
Hours 41-50		-0.296 (0.202)		0.213 (0.156)
Hours 51-60		-0.098 (0.278)		0.311* (0.162)
Hours 60+		-0.242 (0.271)		0.252 (0.187)
Logarithm of Equivalised Household Income in € per Month (log_equiv_hhinc)	0.216*** (0.042)	0.222*** (0.042)	0.144*** (0.045)	0.181*** (0.044)
Occupation (occup8) <i>Self-Employed</i> <i>Professionals and Large Employers</i> <i>Small Business Owners</i>	-0.168 (0.266)	-0.183 (0.252)	-0.517*** (0.176)	-0.528*** (0.169)
<i>Technical (Semi-)Professionals</i>	-0.230 (0.256)	-0.207 (0.246)	-0.226 (0.162)	-0.256 (0.160)
<i>Production Workers</i>	-0.530 (0.375)	-0.652* (0.361)	-0.469*** (0.175)	-0.520*** (0.170)
<i>(Associate) Managers</i>	-0.205 (0.223)	-0.178 (0.213)	-0.311** (0.161)	-0.313* (0.160)
<i>Clerks</i>	-0.354 (0.249)	-0.321 (0.238)	-0.258 (0.287)	-0.276 (0.283)
<i>Socio-Cultural (Semi-)Professionals</i>	-0.102 (0.220)	-0.073 (0.208)	-0.478** (0.191)	-0.506*** (0.189)
<i>Service Workers</i>	-0.177 (0.245)	-0.153 (0.233)	-0.427** (0.181)	-0.494*** (0.180)
Age (age)	0.133 (0.023)	0.011 (0.022)	-0.000 (0.025)	0.002 (0.024)
Squared Age (age_squared)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
General Health (health) <i>Very Good</i> <i>Good</i>	-0.357*** (0.073)	-0.328*** (0.073)	-0.381*** (0.080)	-0.408*** (0.080)
<i>Fair</i>	-0.940*** (0.123)	-0.945*** (0.120)	-1.204*** (0.168)	-1.134*** (0.156)
<i>Bad</i>	-1.841*** (0.413)	-1.797*** (0.385)	-1.568*** (0.452)	-1.509*** (0.407)
<i>Very Bad</i>	-2.963*** (1.049)	-2.954*** (0.973)	-3.591*** (1.240)	-2.708** (1.213)

Education (edu) <i>Less Than Lower</i>				
<i>Secondary</i>				
<i>Lower Secondary</i>	1.097*** (0.379)	1.139*** (0.377)	-1.176 (0.783)	-1.137 (0.714)
<i>Lower Tier Upper Secondary</i>	0.850** (0.398)	0.806** (0.395)	-0.933 (0.789)	-0.879 (0.719)
<i>Upper Tier Upper Secondary</i>	1.060*** (0.385)	1.073*** (0.384)	-1.172 (0.787)	-1.134 (0.716)
<i>Advanced Vocational</i>	0.827** (0.397)	0.891** (0.394)	-1.201 (0.785)	-1.126 (0.719)
<i>Lower Tertiary (BA Level)</i>	0.802** (0.383)	0.853** (0.381)	-1.003 (0.786)	-0.969 (0.716)
<i>Higher Tertiary (> MA Level)</i>	0.749* (0.390)	0.770** (0.388)	-1.289 (0.789)	-1.276* (0.719)
<i>None of the Above or Other</i>	1.187*** (0.389)	1.349*** (0.389)	0.333 (0.798)	0.278 (0.716)
Religion (religious) <i>No</i>				
<i>Yes</i>	0.166** (0.080)	0.202** (0.078)	0.118 (0.090)	0.143 (0.087)
_cons	6.115*** (0.702)	6.177*** (0.695)	8.015*** (0.998)	8.292*** (0.941)
Observations	1,295	1,355	1,182	1,279
R-Squared	0.178	0.188	0.195	0.188

Robust Standard Errors in Parantheses

P > |t| = Result of the Two-Tailed t-Test

Significance Levels: * p < 0.1 ; ** p < 0.05 ; *** p < 0.01

Table 11: Regression Output - Effect of Weekly Working Hours on Happiness: Women vs. Men

Appendix E

Regression Output by Occupation - Effect of Weekly Working Hours on Happiness

REGRESSION OUTPUT

Survey Data Regression Output by Occupation

Variables	Weighted Regression							
	Self-Employed Professionals and Large Employers		Small Business Owners		Technical (Semi-)Professionals		Production Workers	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Happiness (happy)								
Weekly Working Hours incl.	0.008		0.030		-0.029		-0.021	
Overtime (work_hours_ot)	(0.022)		(0.030)		(0.034)		(0.037)	
Squared Weekly Working Hours incl. Overtime (work_hours_ot_squared)	0.000		-0.000		0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Weekly Working Hours incl. Overtime in Categories (hours_category) Hours 0								
Hours 1-30				-0.138		0.855***		
				(0.330)		(0.323)		
Hours 31-40		-0.217		0.011		0.550**		-0.512
		(0.377)		(0.278)		(0.234)		(0.514)
Hours 41-50		-0.241		0.271		0.349		-0.348
		(0.375)		(0.264)		(0.259)		(0.502)
Hours 51-60		0.117		0.309		1.101***		-0.156
		(0.357)		(0.278)		(0.349)		(0.537)
Hours 60+		0.027		-0.024		0.733**		-0.403
		(0.359)		(0.309)		(0.348)		(0.540)
Logarithm of Equivalised Household Income in € per Month (log_equiv_hhinc)	-0.0171	-0.030	0.245**	0.284***	0.158*	0.130	0.126	0.157
	(0.111)	(0.119)	(0.096)	(0.089)	(0.092)	(0.086)	(0.097)	(0.097)
Gender (gender) Female	-0.175	-0.089	-0.459*	-0.406*	0.096	0.136	-0.028	0.193
Male	(0.205)	(0.212)	(0.235)	(0.209)	(0.180)	(0.171)	(0.357)	(0.381)
Age (age)	-0.001	0.021	0.097*	0.099*	-0.006	-0.003	-0.108*	-0.085
	(0.067)	(0.080)	(0.055)	(0.051)	(0.052)	(0.049)	(0.056)	(0.054)
Squared Age (age_squared)	-0.000	-0.000	-0.001*	-0.001*	0.000	-0.000	0.001**	0.001*
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
General Health (health) Very Good								
Good	-0.395	-0.510**	-0.401**	-0.341**	-0.394***	-0.352**	-0.523**	-0.469**
	(0.217)	(0.227)	(0.179)	(0.169)	(0.146)	(0.143)	(0.206)	(0.208)
Fair	-0.273	-0.358	-1.523***	-1.078***	-0.939***	-	-1.076***	-1.076***
	(0.472)	(0.408)	(0.386)	(0.327)	(0.352)	0.891***	(0.206)	(0.321)
						(0.337)		
Bad	-0.957	-1.196**	-1.122*	-1.080*	-2.316***	-	-1.465	-1.054
	(0.761)	(0.503)	(0.663)	(0.563)	(0.878)	2.283***	(0.981)	(0.919)
						(0.789)		
Very Bad			-3.527***	-3.449***			-4.903***	-4.021***
			(0.456)	(0.440)			(1.697)	(1.129)
Education (edu) Less Than Lower Secondary								
Lower Secondary			0.706***	0.744***			-1.623**	-1.591*
			(0.247)	(0.254)			(0.749)	(0.889)
Lower Tier Upper Secondary	-0.306	-0.177	0.373	0.427	0.153	0.218	-0.814	-0.920
	(0.457)	(0.373)	(0.249)	(0.276)	(0.320)	(0.300)	(0.740)	(0.894)

The FDWW Impact on Happiness

<i>Upper Tier Upper Secondary</i>	-1.197** (0.502)	-1.197** (0.449)	0.469 (0.294)	0.409 (0.293)	-0.447 (0.411)	-0.468 (0.401)	-1.158 (0.776)	-1.213 (0.923)
<i>Advanced Vocational</i>	-0.812* (0.411)	-0.844** (0.406)	0.468* (0.252)	0.519** (0.253)	-0.410 (0.340)	-0.385 (0.318)	-1.227 (0.760)	-1.206 (0.911)
<i>Lower Tertiary (BA Level)</i>	-0.927** (0.458)	-0.892** (0.396)	0.435* (0.233)	0.550** (0.256)	-0.001 (0.323)	-0.004 (0.308)	-0.852 (0.796)	-0.881 (0.937)
<i>Higher Tertiary (> MA Level)</i>	-1.467*** (0.357)	-1.410*** (0.322)	0.120 (0.303)	0.012 (0.371)	-0.149 (0.320)	-0.093 (0.305)	-1.487* (0.770)	-1.242 (0.940)
<i>None of the Above or Other</i>			2.533*** (0.408)	2.064*** (0.209)				
Religion (religious) <i>No</i> <i>Yes</i>	-0.187 (0.235)	-0.230 (0.227)	0.151 (0.188)	0.177 (0.174)	0.060 (0.145)	0.104 (0.144)	0.265 (0.187)	0.363** (0.175)
_cons	9.393*** (1.957)	9.440*** (2.126)	3.895** (1.502)	4.091*** (1.297)	8.252*** (1.213)	7.352*** (0.991)	11.030*** (1.693)	10.035*** (1.553)
Observations	72	77	308	352	240	255	268	296
R-Squared	0.313	0.367	0.192	0.172	0.187	0.204	0.205	0.216
Prob > F	0.000	0.000			0.006		0.000	0.000

Robust Standard Errors in Paratheses

P > |t| = Result of the Two-Tailed t-Test

Significance Levels: * p < 0.1 ; ** p < 0.05 ; *** p < 0.01

REGRESSION OUTPUT (CONTD)

Survey Data Regression Output by Occupation (cont'd)

Variables	Weighted Regression							
	(Associate) Managers		Clerks		Socio-Cultural (Semi-)Professionals		Service Workers	
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Happiness (happy)								
Weekly Working Hours incl.	0.010		-0.007		0.222		-0.015	
Overtime (work_hours_ot)	(0.023)		(0.043)		(0.017)		(0.018)	
Squared Weekly Working								
Hours incl. Overtime	-0.000		-0.000		-0.000		0.000	
(work_hours_ot_squared)	(0.000)		(0.000)		(0.000)		(0.000)	
Weekly Working Hours incl.								
Overtime in Categories								
(hours_category) <i>Hours 0</i>								
<i>Hours 1-30</i>						-0.527*** (0.173)		
<i>Hours 31-40</i>		0.562* (0.273)		-0.587** (0.273)		-0.426*** (0.137)		0.162 (0.196)
<i>Hours 41-50</i>		0.352 (0.274)		-0.440 (0.322)		-0.351** (0.143)		0.048 (0.198)
<i>Hours 51-60</i>		0.597* (0.322)		-1.507 (0.952)		-0.381* (0.202)		0.357 (0.280)
<i>Hours 60+</i>		0.657 (0.420)		0.189 (0.281)		-0.307 (0.326)		0.006 (0.293)
Logarithm of Equivalised								
Household Income in € per	0.217***	0.256***	0.289***	0.287***	0.133**	0.123**	0.158**	0.179***
Month (log_equiv_hhinc)	(0.078)	(0.0779)	(0.089)	(0.084)	(0.052)	(0.052)	(0.068)	(0.066)
Gender (gender) <i>Female</i>	-0.126	-0.097	0.045	-0.010	-0.354**	-0.385**	-0.402**	-0.425**
<i>Male</i>	(0.111)	(0.107)	(0.257)	(0.245)	(0.152)	(0.153)	(0.182)	(0.175)

The FDWW Impact on Happiness

Age (age)	-0.040 (0.038)	-0.049 (0.038)	0.016 (0.052)	0.006 (0.048)	0.061 (0.038)	0.060 (0.037)	-0.032 (0.034)	-0.046 (0.032)
Squared Age (age_squared)	-0.001 (0.000)	0.001 (0.000)	-0.000 (0.001)	0.000 (0.001)	-0.001 (0.000)	-0.001 (0.000)	0.001 (0.000)	0.001** (0.000)
General Health (health) <i>Very Good</i>								
<i>Good</i>	-0.190* (0.103)	-0.174* (0.103)	-0.251 (0.215)	-0.150 (0.204)	-0.344*** (0.118)	-0.351*** (0.118)	-0.409*** (0.145)	-0.458*** (0.148)
<i>Fair</i>	-0.870*** (0.246)	-0.924*** (0.222)	-1.161*** (0.371)	- 1.109*** (0.358)	-0.840*** (0.164)	-0.868*** (0.162)	-1.153*** (0.208)	-1.198*** (0.203)
<i>Bad</i>	-1.670*** (0.472)	-1.871*** (0.401)	-2.586*** (0.964)	-2.303** (0.880)	-0.514 (0.434)	-0.487 (0.422)	-2.349*** (0.652)	-2.322*** (0.647)
<i>Very Bad</i>	-3.393** (1.703)	-1.194 (1.469)	-3.877 (0.261)	-3.452 (3.040)	-1.660*** (0.270)	-1.652*** (0.262)	-2.518* (1.336)	-2.713** (1.212)
Education (edu) <i>Less Than Lower Secondary</i>								
<i>Lower Secondary</i>			0.354 (0.429)	0.191 (0.427)	-0.758*** (0.260)	-0.727*** (0.248)	0.689 (0.929)	0.665 (0.926)
<i>Lower Tier Upper Secondary</i>	0.328 (0.264)	0.324 (0.272)	0.142 (0.553)	0.154 (0.549)	-0.773*** (0.218)	-0.768*** (0.226)	0.522 (0.959)	0.481 (0.955)
<i>Upper Tier Upper Secondary</i>	-0.564** (0.277)	-0.500* (0.261)	0.668 (0.501)	0.416 (0.480)	-0.516** (0.241)	-0.580** (0.245)	0.753 (0.933)	0.777 (0.931)
<i>Advanced Vocational</i>	-0.636** (0.256)	-0.459* (0.253)	0.385 (0.461)	0.324 (0.448)	-0.387 (0.243)	-0.388 (0.239)	0.584 (0.946)	0.498 (0.942)
<i>Lower Tertiary (BA Level)</i>	-0.421** (0.204)	-0.362* (0.199)	0.255 (0.502)	0.050 (0.482)	-0.595*** (0.138)	-0.651*** (0.151)	0.614 (0.944)	0.761 (0.942)
<i>Higher Tertiary (> MA Level)</i>	-0.506** (0.208)	-0.486** (0.207)	0.098 (0.573)	-0.031 (0.587)	-0.654*** (0.143)	-0.684*** (0.150)	0.558 (0.992)	0.422 (0.978)
<i>None of the Above or Other</i>							0.905 (0.938)	0.918 (0.936)
Religion (religious) <i>No</i>								
<i>Yes</i>	0.081 (0.110)	0.081 (0.107)	0.311 (0.211)	0.345* (0.199)	0.142 (0.115)	0.169 (0.114)	0.187 (0.162)	0.253 (0.156)
_cons	7.860*** (1.043)	7.665*** (0.987)	5.929*** (1.489)	6.279*** (1.227)	6.476*** (0.970)	7.486*** (0.971)	7.452*** (1.201)	7.319*** (1.148)
Observations	462	477	187	192	477	489	463	496
R-Squared	0.215	0.227	0.312	0.345	0.125	0.126	0.223	0.233
Prob > F	0.000	0.000	0.012	0.000				

Robust Standard Errors in Parantheses

P > |t| = Result of the Two-Tailed t-Test

Significance Levels: * p < 0.1 ; ** p < 0.05 ; *** p < 0.01

Table 12: Regression Output - Effect of Weekly Working Hours on Happiness by Occupation

Appendix F

T-Test for Differences in Means

T-TEST FOR DIFFERENCES IN MEANS

Two-Sample T-Test With Equal Variances

Groups	Mean	SD
Group 0: Hours ≤ 35	8.250 (0.164)	1.471
Group 1: Hours > 35	8.227 (0.026)	1.421
Difference: mean(0) - mean (1)	0.023 (0.161)	
Standard Error in Parantheses		

df = 3,117

t = 0.140

H0: diff = 0

Ha: diff ≠ 0 | Pr(|T| > |t|) = 0.888

Table 13: Two-Sample T-Test With Equal Variances for Differences in Means

Appendix G

Robustness Checks

a) Wald Tests

ROBUSTNESS CHECK

Wald Test on Models 6 and 9

Null Hypotheses of Wald Test	F-Statistic	Prob > F
H0: Squared Weekly Working Hours = 0	0.14	0.711
H0: Weekly Working Hours Consistent Across all FDWW Periods	Before = 0.94 ; During = 1.07 ; After = 0.34	Before = 0.332 ; During = 0.302 ; After = 0.559

Table 14: Wald Test on Null Hypotheses

b) Regression: France

REGRESSION OUTPUT

Survey Data Regression Output Robustness Check France

Variables	Strata with single sampling unit treated as certainty units								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Happiness (happy)									
Weekly Working Hours incl. Overtime (work_hours_ot)	0.001 (0.001)	0.003 (0.005)					-0.013*** (0.005)	-0.008 (0.005)	-0.006 (0.006)
Squared Weekly Working Hours incl. Overtime (work_hours_ot_squared)		-0.000 (0.000)					0.000** (0.000)	0.000 (0.000)	0.000 (0.000)
Weekly Working Hours incl. Overtime in Categories (hours_category) <i>Hours 0</i>									
<i>Hours 1-30</i>			0.002 (0.209)	0.035 (0.224)	0.022 (0.234)	-0.101 (0.300)			
<i>Hours 31-40</i>			0.037 (0.204)	-0.066 (0.218)	-0.042 (0.226)	-0.155 (0.295)			
<i>Hours 41-50</i>			0.046 (0.204)	-0.120 (0.218)	-0.126 (0.226)	-0.207 (0.295)			
<i>Hours 51-60</i>			0.185 (0.213)	0.009 (0.229)	-0.022 (0.237)	-0.033 (0.306)			
<i>Hours 60+</i>			0.138 (0.207)	0.148 (0.223)	-0.142 (0.236)	-0.203 (0.311)			
Logarithm of Equivalised Household Income in € per Month (log_equiv_hhinc)				0.324*** (0.017)	0.336*** (0.018)	0.303*** (0.211)	0.344*** (0.017)	0.337*** (0.018)	0.305*** (0.021)
Occupation (occup8) <i>Self- Employed Professionals and Large Employers</i>									
<i>Small Business Owners</i>					-0.125 (0.111)	0.039 (0.141)		-0.031 (0.113)	0.083 (0.143)
<i>Technical (Semi-)Professionals</i>					-0.320*** (0.110)	-0.167 (0.139)		-0.263** (0.110)	-0.159 (0.140)
<i>Production Workers</i>					-0.344*** (0.106)	-0.086 (0.143)		-0.280*** (0.106)	-0.063 (0.143)

The FDWW Impact on Happiness

(Associate) Managers	-0.246**	-0.102	-0.187*	-0.102					
	(0.101)	(0.132)	(0.103)	(0.133)					
Clerks	-0.332***	-0.104	-0.254**	-0.089					
	(0.110)	(0.145)	(0.111)	(0.144)					
Socio-Cultural (Semi-)Professionals	-0.106	0.013	-0.040	0.029					
	(0.104)	(0.137)	(0.105)	(0.136)					
Service Workers	-0.239**	-0.019	-0.196*	-0.027					
	(0.105)	(0.139)	(0.107)	(0.141)					
Gender (gender) Female		-0.068		-0.079*					
Male		(0.043)		(0.043)					
Age (age)		-0.026**		-0.026**					
		(0.011)		(0.011)					
Squared Age (age_squared)		0.000*		0.000*					
		(0.000)		(0.000)					
General Health (health) Very Good		-0.503***		-0.496***					
Good		(0.045)		(0.046)					
Fair		-0.869***		-0.864***					
		(0.056)		(0.056)					
Bad		-1.559***		-1.517***					
		(0.131)		(0.133)					
Very Bad		-2.084***		-2.113***					
		(0.334)		(0.352)					
Education (edu) Less Than Lower Secondary		-0.257**		-0.220*					
Lower Secondary		(0.117)		(0.119)					
Lower Tier Upper Secondary		-0.099		-0.068					
		(0.086)		(0.089)					
Upper Tier Upper Secondary		-0.052		-0.041					
		(0.087)		(0.091)					
Advanced Vocational		0.093		-0.086					
		(0.097)		(0.101)					
Lower Tertiary (BA Level)		-0.114		-0.095					
		(0.105)		(0.108)					
Higher Tertiary (> MA Level)		-0.056		-0.038					
		(0.098)		(0.101)					
None of the Above or Other		0.168		0.207					
		(0.566)		(0.564)					
Religion (religious) No		0.058		0.062					
Yes		(0.037)		(0.038)					
_cons	7.228***	7.200***	7.245***	5.201***	5.377***	6.874***	5.288***	5.472***	6.800***
	(0.056)	(0.096)	(0.203)	(0.243)	(0.267)	(0.411)	(0.143)	(0.177)	(0.295)
Observations	16,811	16,811	19,012	15,707	14,544	10,348	14,185	14,011	10,084
R-Squared	0.000	0.000	0.001	0.045	0.052	0.122	0.050	0.052	0.120
Prob > F	0.275	0.527	0.081	0.000	0.000	0.000	0.000	0.000	0.000

Robust Standard Errors in Parantheses

P > |t| = Result of the Two-Tailed t-Test

Significance Levels: * p < 0.1 ; ** p < 0.05 ; *** p < 0.01

Table 15: Regression Output - Effect of Weekly Working Hours on Happiness in France for Robustness Check