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Factors Differentiating the Subjective Well-being of the Inhabitants of Wielkopolska According to the Criterion of Hierarchy of Their Life Values

Abstract: The study examines the level of satisfaction with 21 different areas of life among 300 respondents from Wielkopolska voivodship at the age of 30 and over. What distinguishes this analysis from other such studies is the fact that when examining partial satisfaction, it was weighed by, specified subjectively by respondents, the importance of the areas for which this satisfaction was measured. In the course of the analysis, it turned out that the respondents were the most satisfied with their private life, life as parent and independence. The smallest satisfaction of the respondents derives from social activity, but it is above all the effect of the lack of meaning of this sphere of life in the hierarchy of respected life values. In addition, it has been noticed that within individual fields there are certain factors that differentiate probability of being more satisfied for some categories of people in comparison with others. Especially personality traits strongly affect the diversity of life satisfaction. Being a social person, trusting other people, being conscientious, peaceful and open to new experiences increase the probability of being a more satisfied person (especially with social areas) and having traits from the second pole of the personality scale reduces this probability.

Keywords: satisfaction with life, life values, ordinal regression

JEL: C35, I31

1. Introduction

In research on human psychological well-being, two mainstream ideas dominate: hedonistic (subjectivist) and eudaimonistic (normative). The first assumes that man himself is the judge of his own success: he determines whether he is fine in his life or not. This is also the dominant trend in quantitative empirical research on happiness. Under this approach there is also a division into two concepts of understanding and measuring well-being: “up-down” and “down-up”. According to first concept, sense of happiness is a function of partial satisfaction (I am as happy generally as I am happy in various aspects of my life). The second concept assumes that the happier we are generally, the better we evaluate the individual aspects of our life. Happiness researchers are constantly arguing about the direction of the causal relationship between life situation and happiness, and they also propose many different indicators of well-being (Argyle, 2008; Myers, 1993).

When analysing the results of many studies both in Poland and in the world, we can observe two tendencies: replacing partial satisfaction with an indicator which measures satisfaction with the whole life or analysing partial satisfaction with most important aspects of human life – such as health, marriage, work, etc. While explaining why these aspects are most often presented, it should be stated that this choice is dependent on the hierarchy of the individual’s life values. For example OECD Better Life Index, apart from general life satisfaction, uses 10 partial factors: housing, income, job, community, education, environment, civic engagement, health, safety and work-life balance.

2. Goals and scope of the analysis

In the undertaken analysis, the hierarchy of life values will play a key role in the subjective assessment of the well-being of the inhabitants of Wielkopolska. According to the above-mentioned “up-down” concept, 21 indicators will be used that measure subjective human well-being, additionally taking into account the hierarchy of these partial aspects of life. This approach is found in individual psychological tests (eg. SWLS questionnaire – Diener et al., 1985: 71–75), but, for example, in the largest Polish social study (Social Diagnosis) such weights are not used.

The main target of the study is to identify factors differentiating the subjective well-being of the residents of Wielkopolska, measured on the basis of the assessment of satisfaction with the 21 aspects of life and taking into account the importance of these aspects. The following variables were chosen for these factors: respondent’s gender, age and characteristics of their personality (extraversion, antagonism, scrupulousness, neuroticism and openness to experience).

This study is a part of the analysis carried out under the NCN grant: “Conditions and consequences of life decisions on the example of Wielkopolska inhabitants”, in which 3,000 respondents (selected randomly using stratified sampling according to the place of residence) from this voivodship aged over 35 are to be examined. The research results in this article are based only on the answers of 300 respondents (the coding process is in progress), and the survey among them was carried out in the first quarter of 2017. Due to the nature of the analysed variables, the results will be developed using ordinal regression model (otherwise known as PLUM model¹).

3. Research results

First of all, it is worth presenting the structure of the surveyed group of respondents according to the studied features: gender, marital status, education level and 5 personality traits. This information is presented in Table 1. As mentioned, all people were over 35 years of age. For some personality factors two extreme categories were combined together because of low frequencies, so for example in extraversion level there is no category number 1 (very low extraversion).

Table 1. The number of respondents according to the analysed features

Sex	N =	Extraversion level	N =	Non-conscience	N =	Openness to experience	N =
Male	150	Low & very low (cat. 2)	24	Very low (cat. 1)	82	Very low (cat. 1)	98
Female	150	Average (cat. 3)	72	Low (cat. 2)	105	Low (cat. 2)	104
Marital status		High (cat. 4)	112	Average (cat. 3)	75	Average (cat. 3)	38
Single (cat. 1)	45	Very high (cat. 5)	92	High & very high (cat. 4)	38	High (cat. 4)	39
Married (cat. 2)	210	Antagonism level		Neuroticism level		Very high (cat. 5)	21
Other (cat. 3)	45	Very low (cat. 1)	59	Very low (cat. 1)	20		
Education level		Low (cat. 2)	126	Low (cat. 2)	83		
Primary (cat. 1)	17	Average (cat. 3)	84	Average (cat. 3)	83		
Vocational (cat. 2)	99	High & very high (cat. 4)	31	High (cat. 4)	73		
Secondary (cat. 3)	130			Very high (cat. 5)	41		
Higher (cat. 4)	54						

Source: own elaboration based on the sample study

¹ For example in SPSS programme.

Next, the attention was paid to the hierarchy of values of the surveyed respondents. Each of them was to determine on a 5-point scale how much they care about 21 aspects of their life. These aspects are listed in Table 1 and on all figures below. The validity of a given aspect was expressed in the questionnaire as responses 1–5, but for arithmetic reasons it was scaled down to $\langle 0, 1 \rangle$ in this study, where 0 means that a given aspect is insignificant in the respondent's life, and 1 that it is very important.

It turned out that for respondents, the three most important areas of life are those related to safety, body efficiency and health. Other very important spheres of life are life as a parent, private and family life as well as housing conditions and financial situation. Social activity is the least important. In the next question of the questionnaire, respondents were to assess their satisfaction with particular areas of their life. If any of them pointed out, for example, that they are very dissatisfied with their social activity, and this field was not important to them at all, then by weighing the level of satisfaction, one can assume that they do not feel any dissatisfaction, because they are indifferent towards that particular part of their lives. Therefore knowing about the weights presented in Figure 1 is very important for further analysis.

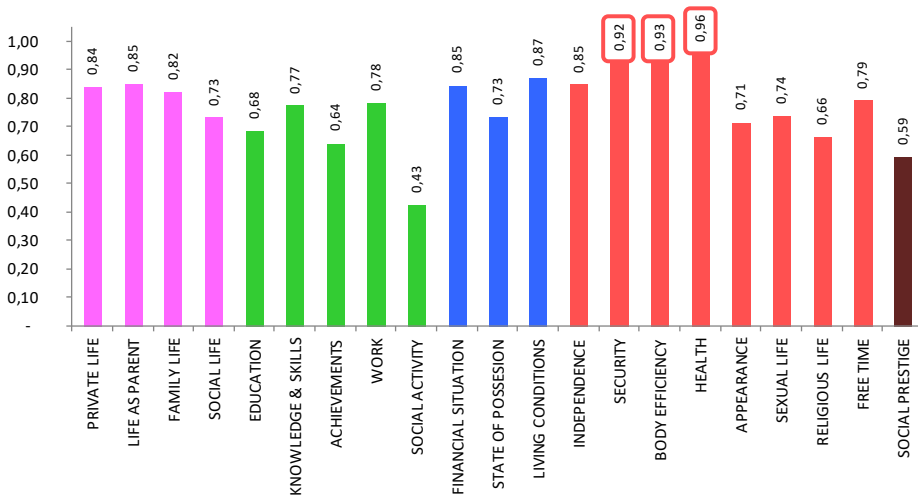


Figure 1. Importance of particular areas of life in the opinion of respondents at the time of the survey

Source: own elaboration based on the sample study

Satisfaction with individual aspects of life was in turn measured on a scale from -2 to $+2$, because in the survey the respondents could determine that they are dissatisfied (-2) with the given area of life, rather dissatisfied (-1), neither satisfied nor dissatisfied (0), rather satisfied ($+1$) and very satisfied ($+2$). Taking into

account the weights, means that from the 5-point original scale we receive results in a 13-point scale of weighted satisfaction (weights multiplied by the satisfaction rating in a given area of life). This way, we find out that respondents are the most satisfied with their private life, life as a parent and independence. The smallest satisfaction occurs in the case of social activity, but as it is the most neutral sphere for respondents, it should rather be said that even if the respondents indicated that they are satisfied with their social activity, this assessment has no meaning as far as real satisfaction is concerned, because this sphere of life is indifferent to respondents. Whether it is going well or not, it does not strengthen the feeling of contentment nor diminishes it, because what is indifferent to me cannot have any real effect on satisfaction or dissatisfaction.

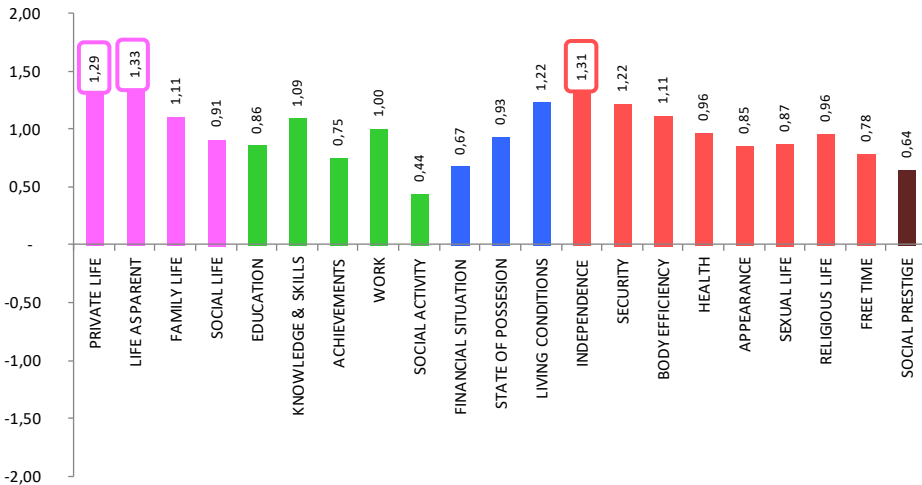


Figure 2. Weighted satisfaction of respondents with particular areas of life at the time of the survey
 Source: own elaboration based on the sample study

After presenting the distribution of weighted satisfaction with particular areas of life, it is time to determine the factors differentiating this satisfaction. For this purpose, the ordinal procedural regression (PLUM) or, in other words, ordered logit model was used. This model describes the cumulative probabilities of occurrence of a given phenomenon, in this case – level of life satisfaction. The dependent variable is discrete and accepts values from a countable and finite set of values (categories) of a given hierarchy. It was assumed that respondents are characterized by one of 5 levels of satisfaction with a given aspect of life: 1 – negative satisfaction (if the weighted satisfaction value measured on scale $<-2, +2>$ was less than 0), 2 – neutral (if numeric satisfaction was exactly 0, the respondent did not feel any satisfaction or dissatisfaction), 3 – positive (if numeric satisfaction was higher than 0, but lower than 1), 4 – very positive (from 1 to 2) and 5 – maximum

satisfaction (if numeric weighted satisfaction was exactly 2). Such transformation is the result of distribution of satisfaction for the analysed aspects, for example distribution of weighted satisfaction with financial situation is presented below:

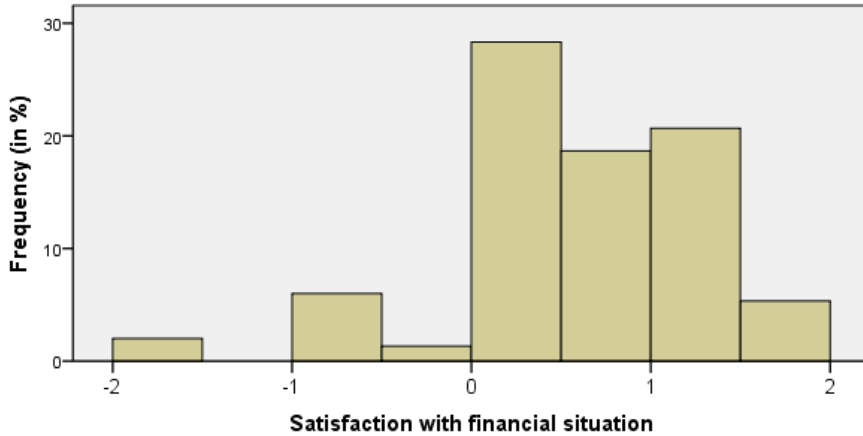


Figure 3. Distribution of weighted satisfaction with financial situation

Source: own elaboration based on the sample study

Cumulated logits were used in the process of modelling satisfaction, that is the logarithms of the likelihood ratios of affiliation of i -th respondent to category no higher than j -th (p_{ij}) and likelihoods of opposite event ($1 - p_{ij}$). To identify factors affecting life satisfaction, an ordered logit model was used:

$$y_i^* = x_i^T \beta + \varepsilon_i,$$

where:

y_i^* – unobservable variable referring to the i -th respondent, is associated with its discrete counterparts: $y_i = j$, if $\tau_{j-1} \leq y_i^* \leq \tau_j$,

τ_j – thresholds (or cut-points) $-\infty < \tau_0 < \tau_1 < \dots < \tau_m < \tau_{m+1} < +\infty$,

β – vector of parameters,

x_i – vector of values of explanatory variables for i -th respondent,

ε_i – random component for i -th respondent,

$i = 1, 2, \dots, N$ – number of respondents.

After estimating the parameters of the model, the expected probability of belonging by i -th respondent to j -th category of life satisfaction can be written as:

$$P(y = j|x) = P(\tau_{j-1} \leq y^* < \tau_j | x) = P(\tau_{j-1} \leq x\beta < \tau_j | x) = F(\tau_j - x\beta) - F(\tau_{j-1} - x\beta),$$

where F is the logistic distribution of random component.

As a linking function, which is a transformation of cumulative probabilities and enables the estimation of the model, the complementary log-log function has been selected [$f(x) = \log(-\log(1-x))$]. This transformation is used when higher categories are more likely, and in the case of life satisfaction analysis, the distributions (not only in this research) are mostly symmetrically left-sided (compare with Figure 3). The calculations were performed in the SPSS package.

To assess the quality of fit of ordered regression models the following characteristics were used: a) investigating the total significance of all explanatory variables (significance of the model) based on the likelihood ratio, test $LR^2 = 2(\ln L - \ln L_0)$, (it has a chi-square distribution), b) Wald test for significance of parameters, c) McFadden's Pseudo R^2 .

As factors that may determine satisfaction with 21 aspects of life, the following factors were selected: gender, marital status (described by three categories: single – in Tables 2–5 marked as category 1, married – category 2 and others – category 3), education level (basic – category 1, vocational – category 2, secondary – category 3, higher – category 4), age (in years) and factors describing the personality of respondents (to check codes of categories see Table 1). According to the Big Five theory (Strelau, 2000: s. 525–560; Beauval, Gałdowa, 1999: s. 235–255) the following traits were used: 1) extraversion (measured by a 5-point scale as a response to the statement “I’m a social person”), 2) antagonism (response to “I often blame others”), 3) non-conscience (response to “I’m quite lazy”), 4) neuroticism (response to “I am easily nervous”), 5) openness to experience (response to “I have artistic interests”).

The results of analyses in the form of ordinal regression models are presented in the following four tables.

² L – value of likelihood function of tested model, L_0 – value of likelihood function only with constant.

Table 2. Parameters of the ordinal regression model describing weighted satisfaction with 4 aspects of life (related to social life)

Factors	PRIVATE LIFE					LIFE AS PARENT					FAMILY LIFE					SOCIAL LIFE					
	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	
Threshold:																					
[SATISF=1]	-1,744	0,676	6,657	0,010	0,175	-1,996	0,721	7,868	0,006	0,136	-3,000	0,646	21,570	0,000	0,050	-4,471	0,620	52,036	0,000	0,011	
[SATISF=2]	-0,451	0,646	0,487	0,485	0,637	-0,404	0,687	0,347	0,556	0,667	-1,147	0,595	3,713	0,054	0,317	-2,695	0,581	21,524	0,000	0,068	
[SATISF=3]	0,055	0,642	0,007	0,932	1,057	0,029	0,684	0,002	0,967	1,029	-0,472	0,591	0,637	0,425	0,624	-2,070	0,575	12,954	0,000	0,126	
[SATISF=4]	1,086	0,642	2,866	0,090	2,962	0,904	0,683	1,749	0,186	2,469	0,239	0,589	0,165	0,684	1,270	-1,024	0,565	3,283	0,070	0,359	
Location:																					
AGE	0,002	0,008	0,074	0,786	1,002	-0,011	0,009	1,555	0,212	0,989	-0,008	0,007	1,124	0,289	0,992	-0,017	0,007	6,418	0,011	0,983	
[SEX=F]	-0,125	0,185	0,454	0,501	0,883	-0,217	0,205	1,124	0,289	0,805	-0,028	0,163	0,029	0,865	0,973	-0,110	0,150	0,540	0,462	0,896	
[SEX=M]	0 ^a																				
[MARIT_S=1]	0,306	0,280	1,191	0,275	1,358	-1,190	0,324	13,468	0,000	0,304	-0,490	0,296	2,745	0,098	0,613	-0,258	0,281	0,841	0,359	0,773	
[MARIT_S=2]	1,740	0,245	50,568	0,000	5,697	0,692	0,286	5,843	0,016	1,997	-0,037	0,244	0,023	0,880	0,964	-0,312	0,221	1,994	0,158	0,732	
[MARIT_S=3]	0 ^a																				
[EDUC=1]	-0,208	0,393	0,281	0,596	0,812	0,108	0,407	0,070	0,791	1,114	0,020	0,348	0,003	0,955	1,020	-0,136	0,336	0,165	0,685	0,872	
[EDUC=2]	0,217	0,260	0,694	0,405	1,242	0,631	0,274	5,309	0,021	1,880	0,474	0,232	4,185	0,041	1,607	0,146	0,218	0,448	0,503	1,157	
[EDUC=3]	0,197	0,231	0,726	0,394	1,218	0,670	0,246	7,433	0,006	1,954	0,248	0,204	1,481	0,224	1,282	-0,051	0,197	0,068	0,794	0,950	
[EDUC=4]	0 ^a																				
[EXTRAV=2]	-0,678	0,332	4,169	0,041	0,508	-0,496	0,359	1,909	0,167	0,609	-0,684	0,297	5,316	0,021	0,505	-1,286	0,282	20,820	0,000	0,276	
[EXTRAV=3]	-0,396	0,252	2,468	0,116	0,673	-0,647	0,267	5,863	0,015	0,524	-0,595	0,217	7,558	0,006	0,551	-0,973	0,203	23,009	0,000	0,378	
[EXTRAV=4]	-0,292	0,216	1,819	0,177	0,747	-0,254	0,245	1,069	0,301	0,776	-0,248	0,199	1,542	0,214	0,781	-0,656	0,182	12,925	0,000	0,519	
[EXTRAV=5]	0 ^a																				
[ANTAG=1]	0,269	0,366	0,540	0,462	1,309	1,022	0,400	6,538	0,011	2,778	0,370	0,329	1,265	0,261	1,448	0,330	0,299	1,214	0,271	1,391	
[ANTAG=2]	0,413	0,342	1,457	0,227	1,512	0,838	0,360	5,412	0,020	2,311	-0,041	0,297	0,020	0,889	0,959	-0,151	0,269	0,316	0,574	0,859	
[ANTAG=3]	-0,265	0,339	0,612	0,434	0,767	0,258	0,351	0,539	0,463	1,294	-0,272	0,295	0,854	0,356	0,762	-0,303	0,271	1,249	0,264	0,739	
[ANTAG=4]	0 ^a																				
[NON-CONS=1]	-0,100	0,298	0,114	0,736	0,904	1,220	0,308	15,657	0,000	3,389	0,012	0,266	0,002	0,965	1,012	-0,002	0,246	0,000	0,995	0,998	
[NON-CONS=2]	-0,029	0,290	0,010	0,920	0,971	1,041	0,285	13,347	0,000	2,831	0,180	0,260	0,480	0,488	1,197	0,246	0,241	1,042	0,307	1,279	
[NON-CONS=3]	-0,183	0,293	0,388	0,533	0,833	0,942	0,286	10,821	0,001	2,566	-0,002	0,260	0,000	0,993	0,998	0,244	0,246	0,977	0,323	1,276	
[NON-CONS=4]	0 ^a																				
[NEUROT=1]	0,280	0,452	0,383	0,536	1,323	-0,451	0,487	0,859	0,354	0,637	0,762	0,416	3,347	0,067	2,142	0,703	0,366	3,686	0,055	2,019	
[NEUROT=2]	0,099	0,314	0,100	0,752	1,104	-0,566	0,369	2,352	0,125	0,568	0,167	0,280	0,358	0,550	1,182	0,243	0,257	0,891	0,345	1,275	
[NEUROT=3]	-0,365	0,301	1,470	0,225	0,694	-0,647	0,357	3,295	0,069	0,523	0,012	0,271	0,002	0,964	1,012	0,224	0,251	0,801	0,371	1,252	
[NEUROT=4]	-0,030	0,306	0,009	0,922	0,971	-0,300	0,351	0,731	0,393	0,740	0,215	0,271	0,632	0,427	1,240	0,250	0,248	1,015	0,314	1,284	
[NEUROT=5]	0 ^a																				
[OPEN_EXP=1]	0,372	0,358	1,076	0,300	1,450	0,456	0,378	1,460	0,227	1,578	0,466	0,318	2,152	0,142	1,594	-0,127	0,331	0,147	0,701	0,881	
[OPEN_EXP=2]	0,116	0,351	0,109	0,741	1,123	0,584	0,375	2,421	0,120	1,792	0,657	0,316	4,338	0,037	1,930	-0,030	0,328	0,008	0,927	0,970	
[OPEN_EXP=3]	0,231	0,383	0,362	0,547	1,259	0,970	0,415	5,458	0,019	2,638	0,793	0,355	4,990	0,026	2,209	-0,270	0,353	0,584	0,445	0,763	
[OPEN_EXP=4]	0,398	0,399	0,997	0,318	1,489	0,757	0,423	3,191	0,074	2,131	0,617	0,349	3,133	0,077	1,854	-0,175	0,355	0,244	0,621	0,839	
[OPEN_EXP=5]	0 ^a																				

^a – comparative category

Source: own elaboration based on the sample study

Looking at the parameters of the first 4 models (Table 2), it can be seen that the diversity of satisfaction with private life is influenced by marital status (married people have 5.697 times higher probability of assessing their satisfaction with this sphere of life as high than people from the “other marital status” category)

and by the level of extraversion (the lowest level is not conducive to higher satisfaction with private life).

The difference in satisfaction with life as a parent is again affected by marital status (married people are almost twice as likely to be in the group of people better assessing their satisfaction with this sphere of life than people from the "other marital status" category). Education level (vocational and secondary) is conducive to greater likelihood of being satisfied with this sphere of life, and also the average level of extraversion and being a person with very low or low level of antagonism. In addition, the low (category 1, 2 and 3) non-conscience level, as well as low (less than 5) level of openness to experience are conducive to higher life satisfaction as a parent.

In the case of satisfaction with family life, the chances of achieving greater satisfaction are higher for people without higher education, with high levels of extraversion and lower than maximum level of openness to experience. Higher age significantly decreases satisfaction with social life, however people with the highest level of extraversion achieve higher satisfaction with this area of life.

Looking at the parameters for the next 5 models (Table 3), it can be noticed that the diversity of satisfaction with education is, of course, affected by education level (people with higher education compared to other categories have significantly higher chance of finding themselves in a group of people with greater satisfaction).

Gender is a factor significantly differentiating satisfaction with knowledge and skills (men have 1,623 times more chances than women to be more content with this aspect of life). In addition, higher education (compared to the other three categories) and the highest level of extraversion favour higher chances for high level of satisfaction with knowledge and skills.

For satisfaction with achievements and successes, the most important factor is the highest level of antagonism (focus on competition) and extraversion. Higher job satisfaction is favoured by lower age, higher levels of extraversion, antagonism and low non-conscience level. Furthermore, men have 1.5 times more chances than women to be in a group more satisfied with their work. In turn, satisfaction with social activity is differentiated by the level of extroversion and openness to new experiences.

Table 3. Parameters of the ordinal regression model describing weighted satisfaction with next 5 aspects of life (related to education and work)

Factors	EDUCATION					KNOWLEDGE & SKILLS					ACHIEVEMENTS					WORK					SOCIAL ACTIVITY					
	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	
Threshold:																										
[SATISF=1]	-4.891	0.646	57.256	0.000	0.008	-5.768	0.731	62.334	0.000	0.003	-5.166	0.629	67.376	0.000	0.006	-4.096	0.637	41.316	0.000	0.017	-3.153	0.547	33.213	0.000	0.043	
[SATISF=2]	-2.401	0.570	17.740	0.000	0.091	-3.249	0.615	27.882	0.000	0.039	-2.752	0.564	23.795	0.000	0.064	-2.162	0.592	13.328	0.000	0.115	-1.079	0.518	4.341	0.037	0.340	
[SATISF=3]	-1.680	0.564	8.868	0.003	0.186	-2.448	0.606	16.306	0.000	0.086	-2.002	0.557	12.897	0.000	0.135	-1.737	0.588	8.715	0.003	0.176	-0.441	0.515	0.733	0.392	0.644	
[SATISF=4]	-0.746	0.557	1.793	0.181	0.474	-1.422	0.596	5.702	0.017	0.241	-1.095	0.547	4.002	0.045	0.335	-0.868	0.581	2.232	0.135	0.420	0.466	0.512	0.830	0.362	1.594	
Location:																										
AGE	-0.006	0.006	0.935	0.334	0.994	-0.010	0.007	2.322	0.128	0.990	-0.010	0.006	2.341	0.126	0.990	-0.015	0.007	5.107	0.024	0.985	-0.002	0.006	0.167	0.683	0.998	
[SEX=F]	-0.120	0.148	0.654	0.419	0.887	-0.484	0.159	9.332	0.002	0.616	-0.103	0.143	0.519	0.471	0.902	-0.379	0.159	5.675	0.017	0.684	-0.022	0.140	0.024	0.876	0.978	
[SEX=M]	0a																									
[MARIT_S=1]	0.149	0.274	0.297	0.586	1.161	-0.485	0.291	2.779	0.095	0.615	-0.113	0.265	0.181	0.670	0.893	0.094	0.288	0.107	0.744	1.099	0.447	0.256	3.054	0.081	1.564	
[MARIT_S=2]	-0.001	0.211	0.000	0.995	0.999	-0.244	0.232	1.111	0.292	0.783	-0.130	0.208	0.389	0.533	0.878	0.151	0.224	0.454	0.501	1.163	0.298	0.199	2.244	0.134	1.348	
[MARIT_S=3]	0a																									
[EDUC=1]	-1.829	0.355	26.501	0.000	0.161	-0.947	0.355	7.134	0.008	0.388	-0.409	0.333	1.509	0.219	0.665	-0.549	0.346	2.518	0.113	0.578	-0.255	0.327	0.607	0.436	0.775	
[EDUC=2]	-1.279	0.245	27.335	0.000	0.278	-0.728	0.238	9.360	0.002	0.483	-0.322	0.213	2.278	0.131	0.725	-0.255	0.229	1.237	0.266	0.775	0.246	0.204	1.455	0.228	1.279	
[EDUC=3]	-1.151	0.228	25.483	0.000	0.316	-0.536	0.220	5.937	0.015	0.585	-0.380	0.195	3.808	0.051	0.684	-0.020	0.211	0.009	0.925	0.980	-0.033	0.185	0.032	0.858	0.968	
[EDUC=4]	0a																									
[EXTRAV=2]	-0.269	0.285	0.889	0.346	0.765	-0.842	0.291	8.348	0.004	0.431	-0.477	0.271	3.094	0.079	0.621	-0.657	0.292	5.075	0.024	0.518	-1.153	0.273	17.771	0.000	0.316	
[EXTRAV=3]	-0.489	0.195	6.292	0.012	0.613	-0.575	0.209	7.601	0.006	0.563	-0.639	0.169	11.436	0.001	0.528	-0.615	0.209	8.637	0.003	0.541	-0.629	0.185	11.520	0.001	0.533	
[EXTRAV=4]	-0.396	0.173	5.253	0.022	0.673	-0.450	0.187	5.770	0.016	0.638	-0.239	0.169	2.016	0.156	0.787	-0.294	0.188	2.441	0.118	0.745	-0.588	0.164	12.855	0.000	0.556	
[EXTRAV=5]	0a																									
[ANTAG=1]	0.009	0.290	0.001	0.976	1.009	-0.108	0.321	1.113	0.737	0.898	-0.422	0.290	2.113	0.146	0.656	-0.297	0.328	0.816	0.366	0.743	-0.117	0.273	0.183	0.669	1.124	
[ANTAG=2]	-0.169	0.265	0.404	0.525	0.845	-0.412	0.294	1.960	0.161	0.662	-0.485	0.270	3.226	0.072	0.616	-0.462	0.306	2.276	0.131	0.630	-0.105	0.251	0.174	0.677	0.901	
[ANTAG=3]	-0.444	0.270	2.712	0.100	0.641	-0.558	0.296	3.552	0.059	0.572	-0.835	0.273	9.356	0.002	0.434	-0.791	0.306	6.666	0.010	0.453	-0.188	0.254	0.549	0.459	0.829	
[ANTAG=4]	0a																									
[NON-CONS=1]	0.156	0.244	0.406	0.524	1.169	-0.420	0.259	2.622	0.105	1.522	-0.120	0.243	0.242	0.623	0.887	0.418	0.259	2.609	0.106	1.519	-0.228	0.233	0.959	0.327	0.796	
[NON-CONS=2]	0.236	0.239	0.973	0.324	1.266	-0.309	0.250	1.536	0.215	1.362	-0.049	0.238	0.043	0.836	0.952	0.509	0.253	4.037	0.045	1.664	-0.190	0.228	0.695	0.404	0.827	
[NON-CONS=3]	-0.072	0.242	0.088	0.766	0.930	-0.108	0.252	1.183	0.669	1.114	-0.374	0.240	2.427	0.119	0.688	0.207	0.254	0.666	0.414	1.230	-0.205	0.233	0.772	0.380	0.815	
[NON-CONS=4]	0a																									
[NEUROT=1]	0.410	0.365	1.257	0.262	1.506	-0.277	0.377	0.538	0.463	1.319	0.482	0.343	1.968	0.161	1.619	0.170	0.358	0.225	0.636	1.185	-0.098	0.319	0.095	0.758	1.103	
[NEUROT=2]	0.071	0.253	0.079	0.779	1.074	-0.362	0.272	1.767	0.184	1.435	0.040	0.246	0.026	0.872	1.040	0.480	0.271	3.124	0.077	1.616	-0.195	0.241	0.654	0.419	0.823	
[NEUROT=3]	-0.110	0.249	0.194	0.660	0.896	-0.027	0.264	0.010	0.920	1.027	0.196	0.243	0.647	0.421	1.216	0.166	0.263	0.398	0.528	1.180	-0.038	0.236	0.026	0.873	0.963	
[NEUROT=4]	-0.025	0.248	0.010	0.920	0.975	-0.048	0.260	0.034	0.855	0.953	-0.087	0.241	0.130	0.719	0.917	0.262	0.262	1.001	0.317	1.300	-0.141	0.235	0.358	0.549	0.869	
[NEUROT=5]	0a																									
[OPEN_EXP=1]	0.428	0.310	1.901	0.168	1.534	-0.066	0.331	0.039	0.843	1.068	-0.177	0.302	0.343	0.558	0.838	0.015	0.327	0.002	0.963	1.015	-0.573	0.288	3.977	0.046	0.564	
[OPEN_EXP=2]	0.343	0.308	1.246	0.264	1.410	-0.255	0.329	0.602	0.438	1.291	0.035	0.300	0.014	0.907	1.036	0.192	0.326	0.346	0.557	1.211	-0.100	0.286	0.123	0.726	1.105	
[OPEN_EXP=3]	0.486	0.341	2.026	0.155	1.626	-0.612	0.372	2.705	0.100	1.845	0.190	0.333	0.324	0.569	1.209	0.378	0.364	1.078	0.299	1.460	0.197	0.314	0.396	0.529	1.218	
[OPEN_EXP=4]	0.671	0.342	3.840	0.050	1.956	-0.255	0.361	0.502	0.479	1.291	-0.146	0.325	0.200	0.654	0.865	0.061	0.357	0.029	0.865	1.063	0.093	0.313	0.088	0.767	1.097	
[OPEN_EXP=5]	0a																									

a – comparative category

Source: own elaboration based on the sample study

Next 3 models are presented in Table 4. For the satisfaction with financial situation, the level of education is important and unexpectedly people with lower education levels are more satisfied with this aspect of life (maybe they have lower aspirations). In addition, being a neurotic person is not conducive to higher satisfaction with finances.

For greater satisfaction with property, education (the same direction of influence as in finance, so the lower the better) and higher level of extraversion are also important. In turn, people with less education, low levels of antagonism and openness to new experiences have higher chance of being satisfied with housing conditions.

Table 4. Parameters of the ordinal regression model describing weighted satisfaction with next 5 aspects of life (related to finances and property)

Factors	FINANCIAL SITUATION					STATE OF POSSESSION					LIVING CONDITIONS				
	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR	Param.	SE	Wald	p	OR
Threshold:															
[SATISF=1]	-1,533	0,544	7,940	0,005	0,216	-2,169	0,593	13,364	0,000	0,114	-1,807	0,645	7,842	0,005	0,164
[SATISF=2]	0,061	0,521	0,014	0,906	1,063	-0,484	0,556	0,757	0,384	0,617	-0,375	0,601	0,389	0,533	0,687
[SATISF=3]	0,670	0,520	1,661	0,197	1,954	0,239	0,552	0,187	0,665	1,270	0,349	0,595	0,344	0,558	1,418
[SATISF=4]	1,503	0,523	8,242	0,004	4,494	1,027	0,553	3,455	0,063	2,793	1,336	0,597	5,013	0,025	3,803
Location:															
AGE	-0,001	0,006	0,008	0,927	0,999	0,007	0,007	1,034	0,309	1,007	0,001	0,007	0,005	0,946	1,001
[SEX=F]	-0,036	0,145	0,061	0,804	0,965	-0,143	0,152	0,881	0,348	0,867	-0,048	0,169	0,082	0,775	0,953
[SEX=M]	0a														
[MARIT_S=1]	0,119	0,259	0,212	0,645	1,127	0,008	0,270	0,001	0,976	1,008	-0,150	0,296	0,258	0,611	0,861
[MARIT_S=2]	0,322	0,204	2,492	0,114	1,380	0,214	0,217	0,976	0,323	1,239	0,320	0,243	1,744	0,187	1,378
[MARIT_S=3]	0a														
[EDUC=1]	0,626	0,348	3,247	0,072	1,870	0,318	0,346	0,843	0,359	1,374	0,338	0,384	0,776	0,378	1,402
[EDUC=2]	0,466	0,211	4,860	0,027	1,594	0,547	0,218	6,293	0,012	1,727	0,483	0,236	4,184	0,041	1,620
[EDUC=3]	-0,021	0,187	0,013	0,910	0,979	0,208	0,191	1,181	0,277	1,231	0,304	0,208	2,149	0,143	1,356
[EDUC=4]	0a														
[EXTRAV=2]	-0,165	0,280	0,346	0,556	0,848	-0,387	0,287	1,819	0,177	0,679	-0,600	0,306	3,840	0,050	0,549
[EXTRAV=3]	-0,535	0,191	7,870	0,005	0,585	-0,765	0,200	14,621	0,000	0,465	-0,553	0,222	6,216	0,013	0,575
[EXTRAV=4]	-0,230	0,169	1,858	0,173	0,795	-0,305	0,181	2,837	0,092	0,737	-0,232	0,203	1,316	0,251	0,793
[EXTRAV=5]	0a														
[ANTAG=1]	-0,023	0,283	0,007	0,935	0,977	-0,098	0,295	0,109	0,741	0,907	0,536	0,320	2,808	0,094	1,709
[ANTAG=2]	-0,130	0,262	0,246	0,620	0,878	0,110	0,274	0,161	0,689	1,116	0,610	0,291	4,403	0,036	1,840
[ANTAG=3]	-0,390	0,265	2,178	0,140	0,677	-0,032	0,276	0,013	0,908	0,969	0,341	0,289	1,390	0,238	1,406
[ANTAG=4]	0a														
[NON-CONS=1]	-0,102	0,233	0,193	0,660	0,903	0,178	0,247	0,518	0,471	1,195	0,172	0,272	0,399	0,528	1,187
[NON-CONS=2]	0,440	0,233	3,563	0,059	1,552	0,287	0,242	1,405	0,236	1,332	0,243	0,264	0,846	0,358	1,275
[NON-CONS=3]	0,243	0,234	1,079	0,299	1,276	0,179	0,244	0,536	0,464	1,196	0,075	0,266	0,079	0,778	1,078
[NON-CONS=4]	0a														
[NEUROT=1]	0,840	0,340	6,122	0,013	2,317	0,727	0,378	3,693	0,055	2,068	0,367	0,416	0,780	0,377	1,444
[NEUROT=2]	0,377	0,242	2,434	0,119	1,459	-0,014	0,255	0,003	0,956	0,986	0,094	0,295	0,100	0,751	1,098
[NEUROT=3]	0,593	0,240	6,107	0,013	1,809	0,006	0,250	0,001	0,980	1,006	-0,247	0,281	0,778	0,378	0,781
[NEUROT=4]	0,455	0,238	3,670	0,055	1,577	0,119	0,251	0,223	0,637	1,126	-0,141	0,280	0,254	0,614	0,868
[NEUROT=5]	0a														
[OPEN_EXP=1]	0,329	0,287	1,312	0,252	1,389	0,038	0,306	0,016	0,900	1,039	0,763	0,321	5,660	0,017	2,145
[OPEN_EXP=2]	0,371	0,285	1,694	0,193	1,450	-0,016	0,302	0,003	0,957	0,984	0,631	0,315	4,015	0,045	1,879
[OPEN_EXP=3]	0,255	0,311	0,671	0,413	1,291	0,054	0,330	0,027	0,870	1,056	0,738	0,351	4,438	0,035	2,093
[OPEN_EXP=4]	0,091	0,310	0,087	0,769	1,096	0,012	0,330	0,001	0,972	1,012	0,502	0,346	2,107	0,147	1,651
[OPEN_EXP=5]	0a														

^a – comparative category

Source: own elaboration based on the sample study

Final models (presented in Table 5) describe what factors increase or decrease the chances of being more satisfied with the psychological and health aspects of life (independence, security, body efficiency, health, appearance, sexual life, religious life, free time and social prestige). For many of these aspects, age is an important factor that differentiates life satisfaction in particular areas. Gender significantly differentiates the chances of being more satisfied with sex life (greater chances for men) and religious life (greater chances for women). Higher education significantly reduces the chances of being satisfied with free time. Among the 5 factors describing personality, as usual, the level of extraversion is the most important for particular indicators of satisfaction.

The last table presents quality of fit of all 21 constructed models.

Table 6. Quality of fit of estimated ordinary regression models

Model describing satisfaction with:	$2(\ln L - \ln L_0)$	df	p	McFadden
Private life	92,552	24	0,000	0,116
Life as a parent	110,950	24	0,000	0,150
Family life	39,801	24	0,022	0,045
Social life	62,844	24	0,000	0,070
Education	69,326	24	0,000	0,079
Knowledge & skills	57,819	24	0,000	0,068
Achievements	46,808	24	0,004	0,053
Work	43,212	24	0,009	0,049
Social activity	57,637	24	0,000	0,067
Financial situation	40,531	24	0,019	0,044
Property	33,799	24	0,088	0,037
Living conditions	37,410	24	0,040	0,045
Independence	42,876	24	0,010	0,055
Security	29,683	24	0,195	0,037
Body efficiency	49,695	24	0,002	0,060
Health	61,857	24	0,000	0,072
Appearance	64,475	24	0,000	0,071
Sexual life	107,198	24	0,000	0,116
Religious life	70,445	24	0,000	0,078
Free time	35,129	24	0,067	0,037
Social prestige	34,234	24	0,081	0,040

Source: own elaboration based on the sample study

4. Summary

Summing up, as a result of the analysis, it was possible to notice the diversity of the level of satisfaction with different areas of respondents' lives. What is important, this satisfaction takes into account the importance of a given aspect of life. The respondents were most satisfied with their private life, life as a parent and independence, the smallest satisfaction derives from social activity, but it is primarily the effect of the indifference of this sphere of life in the hierarchy of respected life values (Figure 1). In addition, it has been noticed that within individual life spheres there are certain factors that differentiate probability of being more satisfied for some categories of people in comparison with the others. This study only focuses on gender, age, marital status, level of education and personality traits. Especially the latter have a strong impact on the diversity of life satisfaction. Being a social person, trusting other people, being conscientious, peaceful and open to new experiences increase the probability of being a more satisfied person (especially with social areas) and having traits from the second pole of the personality scale reduces this probability.

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Czynniki różnicujące subiektywny dobrostan mieszkańców Wielkopolski według kryterium hierarchii respektowanych przez nich wartości

Streszczenie: W artykule badano poziom zadowolenia z 21 różnych dziedzin życia 300 respondentów z terenu województwa wielkopolskiego w wieku 30 lat i więcej. Niniejszą analizę od innych tego typu badań różni to, że satysfakcje cząstkowe zostały ważone przez określoną subiektywnie przez respondentów istotność dziedzin, dla których mierzono tę satysfakcję. W toku analiz okazało się, że badane osoby były najbardziej zadowolone ze swojego życia prywatnego, życia jako rodzic oraz niezależności. Najmniejsze zadowolenie badani czerpią zaś z aktywności społecznej, ale jest to przede wszystkim efekt braku znaczenia tej sfery życia w hierarchii respektowanych wartości życiowych. Ponadto zauważono, że w ramach poszczególnych dziedzin istnieją pewne czynniki powodujące wzrost prawdopodobieństwa bycia osobą bardziej zadowoloną niż inni. Szczególnie silnie na zróżnicowanie satysfakcji z życia wpływają cechy osobowości. Bycie osobą towarzyską, nieobwiniającą innych, sumienną, nieskłoną do denerwowania się oraz otwartą na nowe doświadczenia zwiększa prawdopodobieństwo osiągnięcia wysokiej satysfakcji z życia (szczególnie w sferach społecznych), natomiast posiadanie cech z drugiego bieguna skali osobowości to prawdopodobieństwo obniża.

Słowa kluczowe: zadowolenie z życia, wartości życiowe, regresja porządkowa

JEL: C35, I31

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