

## LIFE SATISFACTION IN POLISH MALES AND FEMALES AT THE AGE OF 50 YEARS

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**Abstract:** *The aim of the present report was: to assess an association between feeling of global happiness and selected socio-economic characteristics in 50 years old subjects, to estimate the net effect of satisfaction with certain aspects of life on self-assessed feeling of global happiness and to estimate persistence of feeling of global happiness during 25 years of their adult life. Data for this study were from 126 males and 130 females, members of longitudinal Wrocław Growth Study that was started in 1961. Using three different methods like the T-student Test, Generalised Linear Model, and Analysis of Variance the findings can be summarised as follows. The feeling of global happiness showed some sex differences. In males it depended on level of education, level of income and marital status, whereas in females depended on marital status and stress at work. Second, for both sexes the most important components of the feeling of global happiness were self assessed satisfaction with living condition, health, interpersonal relationship and marriage. Satisfaction with the standard of life, level of income and leisure time significantly biased to males, whereas in females global happiness was significantly influenced by satisfaction with interpersonal relationship. Additionally the feeling of global happiness appeared to be stable during the life span of 25 years only in females.*

**Keywords:** *Life satisfaction; Socio-economic situation; Global happiness; Adult life.*

### Introduction

Life satisfaction is a subjective feeling indicating general well-being. It is considered as an assessment of the life as a whole on the basis of the fit between personal goals and achievements (Cantril 1965). It is also one of the main indicators that to a large extent express the quality of life. It concerns children, adolescents and adults regardless of socio-economic status (Simeoni et al. 2001, Herdman et al. 2002, Kitamura et al. 2002). Self-assessed life satisfaction is positively related to physical and mental health, depressive symptoms, anxiety, morbidity and mortality (Korkeila et al. 1998, Maier and Smith 1999, Dear et al. 2002). Psychological well-being proves to be the most important predictor of self-perceived health. For instance, subjects who report unhappiness and life dissatisfaction also report higher rates of poor health outcome (Garrity et al. 1978, Zuckerman et al. 1984, Piko 2000). Life satisfaction is able to predict longevity and psychiatric morbidity, and is also associated with higher risk of suicide.

The present report describes 1) the association between feeling of global happiness and selected socio-economical factors like: achieved level of education, marital status, level of income, atmospheres in work; 2) the net effect of satisfaction in certain aspects of life on self-assessed feeling of global happiness and 3) persistence of feeling of global happiness during 25 years of adult life.

## Material and Methods

The males and females recruited to the present study come from the longitudinal data of the Wrocław Growth Study (Bielicki and Waliszko 1976; Waliszko and Jedlińska 1976). In 1978–1979, at the age of 25 of females and 27 of males, the subjects filled out a questionnaire that pertained, among others, to their general attitude toward their life. The subjects were asked the following question: "If you had a possibility to repeat your life, would you have lived out it the same, a little different or completely different way". Persons that answered that they did not want to change anything in their lives and they would have lived out their lives in the same manner were assessed as "happy". Persons that answered that they would have lived out their lives differently were assessed as "not too happy". Persons that answered that they would have lived out their life completely different were assessed as "unhappy".

In the year of 2002 the subjects were investigated again. 126 males and 130 females filled out a questionnaire that included questions concerning subjects' socio-economic situation and their life satisfaction. Their marital status was described in the two standard categories: married and unmarried only. Level of their education was classified as: university degree, graduation from secondary school, completion of a basic trade school and completion of the primary school. Monthly income was divided into three categories: low, medium and high. Stress at work was assessed by a single question:

"How do you assess the atmosphere at your job: pleasant and warm, rather stressful or very stressful?" Possession of children was scored in two categories: to have children and to have not. Dwelling conditions – number of rooms per person was a measure of the economic situation. According to the value of occupant/room ratio – ORR (number of occupants divided by number of rooms), individuals were scored in three categories namely, living in low, medium and high concentration. Intergenerational social mobility was based on father's and the subject's level of education. Here there were categories: upwardly mobile person – the subject's level of education was higher than the one of the father; non mobile – the subject and the father had the same level of education; downwardly mobile person – the father's level of education was higher than the subject's.

The life satisfaction was measured by responses to the Cantril Self Anchoring Scale (Cantril 1965). This scale was designed to be "symbolic of the ladder of life" (Cantril 1965), where the lowest rank indicated extreme dissatisfaction and the highest rank – full satisfaction from entire life.

To assess the satisfaction with 12 different aspects of life the questionnaire worked out by Nowak (1976) and modified according to the requirements of our study was used. It included self assessed satisfaction from housing conditions, health, marriage, educational level, interpersonal relationships, leisure time, job, achievements in work, income, hobbies, property, and standard of life. There were four possible answers: very happy, pretty happy, not too happy and unhappy.

The association between feeling of global happiness and selected socio-economic factors were tested by T-Student test or Fisher Test, according to a number of categories of independent variables. The net effect of satisfaction in a certain aspects of life was analysed by the means of Generalised Linear Model, using logit-link function wherever applicable.

The constancy of the feeling of global happiness during 25 years of adult life was tested by one-way analysis of variance where the answer to a question asked at the age of

25–27 was the independent variable and Cantril score of the feeling of global happiness reported at the age of 50 years was the dependent variable.

## Results

Table 1 describes the frequencies of all categories of each of the analysed factors by sex of the subject. Among all analysed socio-economic traits only the achieved level of education showed highly significant sex differences (Pearson's chi-square 6.9;  $p=0.0086$ ). More often than the males the females finished their education at the college level, the males reaching the university or trade level.

*Table 1.* Frequencies of each category of studied characteristics at 50 years by sex (in %).

	Males	Females
n	126	130
Marital status		
married	76.98	69.23
unmarried	21.02	30.77
Education		
university	30.16	23.26
college	39.68	60.47
trade	27.78	12.40
primary	2.38	3.88
Stress at work		
pleasant work	44.09	44.55
rather stressful	34.41	36.63
very stressful	21.51	18.81
Income		
low	34.75	41.44
medium	31.36	38.74
high	33.90	19.82
Children in family		
yes	88.89	90.00
no	11.11	10.00
Social mobility		
upward	53.28	64.80
non	30.33	26.40
downward	16.39	8.80
Dwelling conditions		
low	79.84	71.32
medium	13.71	13.95
high	6.45	14.73

Results of the analysis of associations between temporary socio-economic features at the age of 50 years and feeling of global happiness are listed in Table 2. The feeling of global happiness in males significantly increased with their educational level



( $t=3.97$ ,  $p<0.05$ ) and with their income level ( $F=9.82$ ,  $p<0.001$ ). Married men were happier than unmarried, though this association was borderline significant ( $t=1.95$ ,  $p=0.053$ ). For females, stress at work significantly influenced their self-assessed life satisfaction ( $F=15.28$ ,  $p < 0.001$ ). "Pleasant and warm" atmosphere at work highly raised the feeling of global happiness, whereas atmosphere "rather stressful" or "very stressful" lowered it. Also married women have significantly higher feeling of global happiness in relation to unmarried women ( $t=2.32$ ,  $p<0.05$ ).

*Table 2.* Association between socio-economic characteristics and feeling of global happiness in males and females at the age of 50.

SES characteristics	M a l e s		F e m a l e s	
	F	probability	F	probability
Marital status	1.95	0.0531	<b>2.32</b>	0.0220
Education level	<b>3.97</b>	0.0486	1.53	0.2189
Stress at work	2.24	0.1120	<b>15.28</b>	0.0000
Income	<b>9.82</b>	0.0001	1.65	0.1971
Children in family	0.74	0.7377	0.32	0.7485
Social mobility	0.02	0.9846	0.63	0.5330
Dwelling conditions	1.82	0.1478	1.28	0.2924

Table 3 lists the frequencies of answers concerning satisfaction with 12 different aspects of life for males and females.

*Table 3.* Frequencies of answers concerning satisfaction with 12 different aspects of life at 50 years (in %).

	M a l e s				F e m a l e s			
	very happy	pretty happy	not too happy	unhappy	very happy	pretty happy	not too happy	unhappy
Housing condition	30.6	36.3	20.2	12.9	40.1	31.5	14.2	14.2
Health	27.4	15.2	14.5	12.9	13.4	50.4	26.0	10.2
Marriage	47.8	41.6	8.8	1.8	46.2	39.4	8.6	5.8
Education	25.2	30.1	23.6	21.1	24.2	39.1	16.4	20.3
Interpersonal relationship	40.0	52.8	6.4	0.8	51.2	43.3	3.1	2.4
Leisure time	16.7	35.8	20.0	27.5	13.8	35.0	30.9	20.3
Job	33.9	35.8	15.3	7.6	33.3	35.0	16.7	15.0
Achievements in work	29.0	47.7	15.9	7.4	33.3	45.4	13.0	8.3
Income	8.6	29.9	23.9	37.6	5.7	29.5	25.9	36.9
Hobbies	27.7	35.3	19.3	17.7	21.9	43.1	23.6	11.4
Property	19.5	43.9	23.6	13.0	27.4	43.6	16.9	12.1
Standard of life	8.1	43.1	26.8	22.0	14.2	29.1	29.1	27.6

The net effect of individual aspects of satisfaction in life on feeling of global happiness is presented in Table 4. Both for males and females the significant components of the feeling of global happiness were satisfaction with housing conditions ( $F=12.46$ ,  $p=0.0004$  for males and  $F=22.28$ ,  $p=0.0001$  for females), health ( $F=10.91$ ,  $p=0.0009$  for males and  $F=10.47$ ,  $p=0.001$  for females), and marriage ( $F=5.33$ ,  $p=0.02$  for males and  $F=6.44$ ,  $p=0.01$  for females). Satisfaction with leisure time, level of income and standard of life influenced males' global happiness, whereas in females satisfied interpersonal relationship seemed to be an additional significant factor.

*Table 4.* Net effect of particular aspects of life satisfaction on the self-assessed feeling of happiness (Cantril score) tested by Generalised Linear Model (GLM).

Aspects of life satisfaction	M a l e s		F e m a l e s	
	F	probability	F	probability
Housing conditions	<b>12.46</b>	0.0004	<b>22.28</b>	0.0000
Health	<b>10.91</b>	0.0009	<b>10.47</b>	0.0012
Marriage	<b>5.33</b>	0.0209	<b>6.44</b>	0.0111
Education	2.12	0.1449	2.22	0.1365
Interpersonal relationship	1.46	0.2274	<b>6.54</b>	0.0106
Leisure time	<b>4.37</b>	0.0365	3.66	0.0558
Job	0.22	0.6388	1.35	0.2453
Achievements in work	0.14	0.7090	3.61	0.0574
Income	<b>5.94</b>	0.0148	2.15	0.1424
Hobbies	0.32	0.5719	0.44	0.5068
Accumulated belongings	0.17	0.6766	0.87	0.3502
Standard of life	<b>9.53</b>	0.0020	<b>3.71</b>	0.0540

The results of the analysis of the long-term stability of the feeling of global happiness are shown on Table 5. It seems that only in females the feeling of global happiness showed 25 years stability ( $F=3.61$ ;  $p < 0.05$ ). Most of the females that expressed high happiness at the age of 25 years, showed also high level of global happiness after 25 years at the age of 50 years. There was no such strong relationship in males.

*Table 5.* Relationship of feeling of global happiness at the age of 27 in males, and at 25 in females with Cantril score at the age of 50.

	Mean square	df.	Sum square	F	p
Females	20.49	2	10.24	<b>3.60</b>	0.0299
Males	4.14	2	2.07	0.73	0.4857

Significant relationships were tested by one-way analysis of variance separately for each sex.

## Discussion

The main results of the present study can be summarised in three observations. For both sexes the most important components of Cantril score of the feeling of global happiness were satisfaction with housing, health and marriage. However the feeling of global happiness showed some sex differences. In males it depended rather on the level of education, income and the marital status, whereas in females it was their marital status and the level of stress at work. Satisfaction with standard of living, income and leisure time was significant in males, whereas in females global happiness was significantly influenced by satisfaction derived from their interpersonal relationships. Third, only in females the feeling of global happiness appeared to be stable during the life span of 25 years.

The fact that level of education and income were associated with higher global happiness only in males seemed to be compatible with the fact that high level of education was a good proxy for economic status in Poland, where graduates of universities received higher salaries (Domański 1998). Thus, both education level and income increased the social status and of men, and this assured prosperity and well-beings. Pawłowski and Koziel (2002) found that better educated men received significantly higher hit rate on personal matrimonial advertisement, even allowing for such variables like age, height, resources and physical attractiveness. Glenn and Weaver (1981) surveyed national-wide sample of Americans pointed out that irrespective of gender, marital happiness showed a stronger relationship to global happiness than did any of other aspects of well-being. The findings in our study partly confirmed this report. Only in females there was significant relationship between well-being with marital status, however in both sexes the marriage satisfaction significantly contributed to feeling of global happiness.

Many "domains of life" are related to perception of global happiness and satisfaction with life. In this study satisfaction with housing, health and marriage had the greatest contribution to the life satisfaction for both sexes, whereas satisfaction with income was important only for men. For women, significant impact on the global satisfaction had satisfaction with results at work and interpersonal relationship. These results were in line with outcomes of Campbell et al. (1976) who found that satisfaction with marriage and the family were the most important contributors to global happiness. (Unfortunately they did not analyse sex differences.)

Another subject of the study was stability of life satisfaction during 25 years. Subjective well-being or happiness appeared to be a fairly stable personality characteristic (Costa and McCrae 1980). Moderate stability of the subjective well-being during 2.5 year was found also by Lu (1999) who pointed at the role of social support and positive life events as predictors of overall happiness. Also Kozma and Stones (1983) found that happiness remained stable among persons over 64 years of age. In this group of people housing, health, activities, marital status were main independent predictors of happiness during 1.5 years of investigation.

However in our subjects only women revealed significant stability between the age of 25 and 50 years. Happy women at the age of 25 were more frequently happy at the age of 50 and unhappy women at the beginning of their adult life were still unhappy after 25 years. Men showed similar, but non-significant trend.



Taking into consideration that life satisfaction was a good predictor of the health status, stability of satisfaction in women across their life span should perhaps be taken into account while explaining the sex differences in morbidity and mortality. Women that described their life as highly satisfactory at the beginning of the adult life and also at the age of 50 were, most likely, healthier. Whether this can be confirmed by the material at our disposal will be the subject of a further study.

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