

## INTERGENERATIONAL DIFFERENCES IN JOB SATISFACTION IN GERMANY

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**Purpose:** The aim of the research is to determine the differences in the level of job satisfaction among employees representing different generations in the labor market in Germany. It is assumed that the younger the generation, the lower the chance for higher satisfaction.

**Design/methodology/approach:** The first part of the methodology is based on the use of post-hoc statistical tests and answers to the questions about the significance of differences in the level of job satisfaction among employees representing different generations. The second part of the analysis involves estimating multinomial logit models in which the dependent variable is job satisfaction. This part indicates important factors influencing the increase in the chances of achieving higher job satisfaction.

**Findings:** The results of the study showed that there are statistically significant differences in the level of job satisfaction between the BB and X generations as well as the BB and Y generations. The general conclusion is that the younger the generation, the lower the average job satisfaction. Significant differences occur only when compared to the oldest generation.

**Research limitations/implications:** The sample of the data is representative for German establishments in the private sector with at least 50 employees. Further research may focus on identifying the factors that create job satisfaction in generational groups and those that cause significant differences. An important element of the research would be to find substitution relationships between factors, which could certainly be used in human resources management processes.

**Practical implications:** The research results can be used in practice in managing intergenerational teams. Knowledge of differences in approach to work and factors influencing job satisfaction allows for more accurate influence on, among others: employee commitment and performance and mitigating conflict situations.

**Social implications:** The social implications of the presented study are related to shaping the attitudes of both employees and managers towards representatives of different generations functioning in the workplace and their mutual relationships.

**Originality/value:** The article is addressed to a wide range of management practitioners in intergenerational teams. The value is providing new knowledge about differences in job satisfaction and factors that build satisfaction.

**Keywords:** job satisfaction, generations, post hoc tests, multinomial logit model.

**Category of the paper:** research paper.

## 1. Introduction

Having multi-generational workplaces for companies is a management and organizational challenge. Most organizations employ representatives of the Baby Boomers (BB), Generation X, Generation Y and, increasingly, Generation Z. Each generation brings specific skills to the organization that can be transformed into organizational and business success. Broadly understood differences between representatives of different generations can lead to conflicts and misunderstandings. Understanding the differences between generations will help management staff achieve success and efficiency in their business. Collaboration between representatives of different generations within the same teams can stimulate creativity and inventions (Cacanindin, 2023).

A generation is defined as a category of people whose ages vary significantly. Representatives of the same generation can be distinguished by their age and the experiences they gain as they develop and grow up (Amayah, Gedro, 2014). Another definition defines a generation as an identifiable group that shares birth, years, age, location and significant life events at critical development stages (Angeline, 2011). Generations are divided as follows: people born between 1946 and 1964 are Baby Boomers; those born between 1965 and 1979 are Generation X, those born between 1980 and 1994 are Generation Y; and those born between 1995-2012 are Generation Z. A lot of research and analysis has been carried out related to the characteristics of generational groups and the differences resulting from them.

Baby Boomers generation members are perceived as the most competitive among generations. They are loyal and dedicated and accept direction and value professionalism and independence (Twenge, 2006; Bates, 2019). They prefer stability in employment and are more diligent than other generations (Loomis, 2000). Sometimes representatives of this generations are called as workoholics because of their focus on career (Zemke et al., 2000). A negative feature of this generation is that it is not technologically advanced and in general doesn't like change (Yu, Miller, 2005).

Generation X is called Baby Busters, Gen X-ers or the Lost Generation. Members of this generation are oriented on work-life balance. They have set deadlines for participating in work tasks. (Bates, 2019) and are less likely sacrifice their lives for organizations (Ledimo, 2015). Moreover they are technologically advanced and results-oriented (Crampton, Hodge, 2006). Because they grew up with computers, automatic machine tellers and cell phones (Raines, 2003) they have developed a tendency to perform work independently with technology support (Dogan Gursoy, 2008). In some oppinions they are self-sufficient, self-satisfied and not only diligent but also highly valued (Yu, Miller, 2005).

Generation Y is called as Millenials. Members of this generation grew up with technology, team approach and diversity. They emphasize innovations and change in the workplace (Cacanindin, 2023) but also on work-life balance (Altizer, 2010). Priority on equality and

diveristy is very high in professional and personal life as well. This generation is ambitious, hardworking, ready for change, prefers high salaries, constant challenges, wealth and diverse job but the loyalty is not its a strong point (Treuren, Kathryn, 2010).

Generation Z or Gen Z is the youngest in the labor market. Members of this generation are interested in working under the loyal and honest leadership (Shilpa Gaidhani, 2019). Transparency, flexibility, individual freedom belong to the group of theirs values. Moreover, they are the most technologically advanced. Studies revealed that Gen Z is less satisfied than other generations (Bhattacharaya et al., 2021).

Job satisfaction is one of the key factors tha determine performance, quality of the service and productivity of any organization. Job satisfaction is defined as an attitude that manifests a subjective evaluation judgment of the job by a worker (Spector, 2022; Weiss, 2002) or as a positive emotional response to one's work, the alignment of a job with an individual's work values (Locke, 1976). Belonging to a specific generation influences views on overall satisfaction, mainly due to the experiences and perspectives of the group (Lamm, Meeks, 2009).

The aim of the article is to determine the differences in the level of job satisfaction among employees representing different generations in the labor market in Germany.

## 2. Data and definitions of the variables

The data set used in the survey is the German Linked Personnel Panel – LPP (Broszeit, Wolter, 2015; Broszeit et al., 2016; Mackeben et al., 2019; Ruf et al., 2020, 2023; Mackeben et al., 2023). This data set is composed of the microdata which come from five waves of the survey. The survey was started in 2012/13 (N = 7508), second wave took place in 2014/15 (N = 7282), third wave was in 2016/17 (N = 6779), the fourth in 2018/19 (N = 6494) and the fifth one in 2020/21 (N = 7397). The data set of the Linked Personnel Panel is representative of private sector establishments with at least 50 employees in the manufacturing and services industries and provides information at the company and employee level. The employee level of the survey includes demographic, qualification, health status, employment, personal and job characteristics. In addition, the dataset includes information on job satisfaction and work-life balance, among others.

Twelve variables were used in the analysis. The main ones are: job satisfaction (JOB\_SAT) and generation (GEN) in the labor market. The values of the job satisfaction variable come directly from the answer to the question: How satisfied are you today with your job? and takes values from 0 to 10, where 0 means completely dissatisfied and 10 means completely satisfied.

The levels of the variable describing generations (GEN) are determined on the base of the age of respondents. In waves 1-4 of the LPP, there were three levels of this variable: baby boomers (BB), X, Y. In the fifth there was a fourth level describing generation Z.

Respondent was classified as a baby boomer if he was born between the years 1946 and 1964. Generation X is represented by people born between 1965 and 1979. Generation Y was born between 1980 and 1994. The youngest generation Z are people born between 1995 and 2012. For the purposes of further analysis, the GEN variable was recoded into binary variables, respectively: GEN\_BB, GEN\_X, GEN\_Y, GEN\_Z.

In the further part of the analysis, multinomial logit models are built in which the JOB\_SAT variable appears as the dependent variable. The GEN variable and the remaining 10 variables act as independent variables. These ten variables concern: level of education, gender, number of people in the household, holding a leadership position, employment situation, type of employment contract, full-time employment, concern for job security, hours worked and gross salary.

The variable describing level of education (EDU\_LEVEL) takes six possible values: 1 – any qualification, 2 – lower secondary school certificate, 3 – intermediate secondary school certificate, 4 – university of applied sciences entrance qualification or vocational diploma, 5 – general higher education entrance qualification (A-level), extended secondary school certificate, vocational training with A-level, 6 – another level of education. This variable was recoded into binary variables respectively: EDU\_LEVEL\_1, EDU\_LEVEL\_2, EDU\_LEVEL\_3, EDU\_LEVEL\_4, EDU\_LEVEL\_5, EDU\_LEVEL\_6.

Sex is represented by SEX variable and takes two values: 1 for men and 2 for women. Respective binary variables describing sex are denoted as SEX\_1 and SEX\_2.

Household size is described by HOUSEHOLD variable which takes 5 possible values: 1 – one-person household, 2 – two-person household, 3 – three person household, 4 – four-person household, 5 – at least five-person household. Binary variables respective for household size are denoted as: HOUSEHOLD\_1, HOUSEHOLD\_2, HOUSEHOLD\_3, HOUSEHOLD\_4, HOUSEHOLD\_5.

Holding a leadership position is a binary variable named LEADER\_POS taking value 1 if the answer is yes and 0 otherwise.

Employment situation variable may take only two values: 1 – worker and 2 – employee. Respective binary variables are denoted as EMPL\_SIT\_1 and EMPL\_SIT\_2.

Type of employment contract variable takes two values: 1 – permanent and 2 – fixed term. Respective binary variables are denoted as EMPL\_CONTR\_1 and EMPL\_CONTR\_2.

Full-time employment is described by a binary variable FULL taking value 1 if the answer is yes and 0 otherwise.

Concern about job security variable named JOB\_SECURITY takes three values: 1 – great worries, 2- some worries, 3 – no worries. Binary variables referring to job security are: JOB\_SECURITY\_1, JOB\_SECURITY\_2 and JOB\_SECURITY\_3.

WORK\_HOURS is a variable that takes values obtained directly from the question: How many hours a week do you normally work, including regular overtime and long hours?

The values of the GROSS\_PAY variable come from the answers to the question: How much did you earn with your current employer last month? This variable describes the level of gross pay before any tax deductions and social security contributions (excluding any bonuses and extra pay and including payments for overtime).

The basis for all analyzes performed was a data set from which all incomplete records were removed.

### 3. Descriptive results

The results of the analysis of the structures of the surveyed samples and job satisfaction by generations in the labor market are presented in Table 1.

**Table 1.**

*Summary statistics of job satisfaction by generations and waves of the LPP*

Wave	measure	GEN				Total
		BB	X	Y	Z	
2012/13	mean	7.56	7.53	7.42	-	7.53
	standard dev.	1.77	1.70	1.73	-	1.74
	number of obs.	2545	1948	918	-	5411
	structure (%)	47.03	36.00	16.97	-	100.00
2014/15	mean	7.59	7.46	7.44	-	7.51
	standard dev.	1.67	1.70	1.48	-	1.65
	number of obs.	2506	1935	966	-	5407
	structure (%)	46.35	35.79	17.87	-	100.00
2016/17	mean	7.56	7.50	7.41	-	7.51
	standard dev.	1.70	1.64	1.56	-	1.65
	number of obs.	2179	1793	851	-	4823
	structure (%)	45.18	37.18	17.64	-	100.00
2018/19	mean	7.34	7.12	6.98	-	7.17
	standard dev.	1.91	1.97	1.97	-	1.95
	number of obs.	1771	2068	1044	-	4883
	structure (%)	36.27	42.35	21.38	-	100.00
2020/21	mean	7.28	7.11	7.08	6.70	7.15
	standard dev.	2.00	2.01	1.98	1.97	2.00
	number of obs.	1728	2568	1427	96	5819
	structure (%)	29.70	44.13	24.52	1.65	100.00

Source: Own calculations on the base of Linked Personnel Panel.

The first conclusion is that the structure of the studied samples changes naturally over time. This means that in subsequent waves of the LPP survey, the percentage of people from the baby boomer generation decreases and the percentage of generation X and Y increases. The youngest generation Z appears only in the last - fifth wave of the survey. The percentage of people in the study sample is relatively small.

The second conclusion is that the younger the generation, the lower job satisfaction. The level of job satisfaction in each wave of the LPP survey for the oldest generation is higher than the average overall satisfaction rating for the entire survey samples.

Descriptive statistics (mean and standard deviation) for the exploratory variables are presented in Table 2.

**Table 2.**

*Descriptive statistics for additional explanatory variables by waves of the LPP survey*

Variable	Wave									
	2012/13		2014/15		2016/17		2018/19		2020/21	
	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.	mean	std. dev.
EDU_LEVEL_1&6	0.005	0.069	0.010	0.099	0.008	0.089	0.004	0.064	0.005	0.070
EDU_LEVEL_2	0.247	0.431	0.214	0.410	0.197	0.397	0.151	0.358	0.126	0.332
EDU_LEVEL_3	0.433	0.496	0.435	0.496	0.423	0.494	0.344	0.475	0.357	0.479
EDU_LEVEL_4	0.106	0.307	0.114	0.318	0.116	0.321	0.138	0.345	0.142	0.349
EDU_LEVEL_5	0.203	0.402	0.227	0.419	0.256	0.436	0.355	0.479	0.361	0.480
SEX_1	0.727	0.446	0.713	0.453	0.714	0.452	0.736	0.441	0.718	0.450
SEX_2	0.273	0.446	0.287	0.453	0.286	0.452	0.264	0.441	0.282	0.450
HOUSEHOLD_1	0.123	0.328	0.119	0.324	0.127	0.333	0.144	0.351	0.149	0.356
HOUSEHOLD_2	0.337	0.473	0.357	0.479	0.362	0.481	0.360	0.480	0.374	0.484
HOUSEHOLD_3	0.235	0.424	0.232	0.422	0.230	0.421	0.221	0.415	0.215	0.411
HOUSEHOLD_4	0.226	0.418	0.213	0.410	0.209	0.407	0.205	0.404	0.201	0.401
HOUSEHOLD_5	0.079	0.270	0.078	0.269	0.072	0.259	0.070	0.256	0.062	0.240
LEADER_POS_1	0.311	0.463	0.310	0.463	0.317	0.465	0.258	0.438	0.262	0.440
LEADER_POS_2	0.689	0.463	0.690	0.463	0.683	0.465	0.742	0.438	0.738	0.440
EMPL_SIT_1	0.384	0.486	0.359	0.480	0.341	0.474	0.289	0.453	0.243	0.429
EMPL_SIT_2	0.616	0.486	0.641	0.480	0.659	0.474	0.711	0.453	0.757	0.429
EMPL_CONTR_1	0.942	0.234	0.959	0.198	0.962	0.191	0.971	0.168	0.970	0.172
EMPL_CONTR_2	0.058	0.234	0.041	0.198	0.038	0.191	0.029	0.168	0.030	0.172
FULL_1	0.881	0.324	0.867	0.340	0.859	0.348	0.867	0.340	0.853	0.354
FULL_2	0.119	0.324	0.133	0.340	0.141	0.348	0.133	0.340	0.147	0.354
JOB_SECURITY_1	0.087	0.281	0.058	0.234	0.056	0.230	0.055	0.227	0.049	0.216
JOB_SECURITY_2	0.320	0.467	0.281	0.449	0.267	0.442	0.320	0.466	0.276	0.447
JOB_SECURITY_3	0.593	0.491	0.662	0.473	0.677	0.468	0.625	0.484	0.675	0.468
WORK_HOURS	40.89	8.60	40.62	8.15	40.25	7.83	39.43	8.73	39.13	8.70
GROSS_PAY/1000	3.46	4.78	3.74	7.36	3.85	2.28	5.56	15.23	5.09	8.11
N	5411		5407		4823		4883		5819	

Source: Own calculations on the base of Linked Personnel Panel.

In the structure of samples dominates respondents who are: men with intermediate secondary school certificates (waves 1-3) and A-level education (waves 4-5), members of two-person households, employees with full-time permanent contracts, without leadership positions, working over 40 hours per week (waves 1-3) and less than 40 hours per week (waves 4-5), with no worries about job security, with the gross pay form about 3,5 thousand EURO (wave 1) to over 5 thousand EURO in waves 4 and 5.

#### 4. Methodology

The methodology for examining intergenerational differences in job satisfaction is composed of two main components. The first one is based on the use of post-hoc statistical tests. The use of a specific test depends on whether the variances in the groups tested are equal

or not. In the case of equal variances, the following may be used: Sidak test (Sidak, 1967), Bonferroni test (Dunn, 1961), Scheffe test (Scheffe, 1959). When the variances are not equal in the studied groups, the following methods are used: Dunett's C test (Dunett, 1980), Games and Howell test (Games, Howell, 1976) and Tamhane's T2 test (Tamhane, 1979).

Testing for equality of variances in generational groups was carried out using two tests: Levene's (Levene, 1960; Brown and Forsythe, 1974) and Bartlett's (Bartlett, 1937; Snedecor, Cochran, 1983).

The second part of the analysis involves estimating multinomial logit models in which the dependent variable is job satisfaction and the most important explanatory variables are those that describe generations on the labor market.

The first part of the analysis will answer questions about the significance of differences in the level of job satisfaction among employees representing different generations. The second one will indicate important factors influencing the increase in the chances of achieving higher job satisfaction. In particular, the impact of belonging to a specific generation on job satisfaction is examined. It is assumed that the younger the generation, the lower the chance for higher satisfaction.

## 5. Empirical results

Examining the significance of differences in the level of job satisfaction according to generational groups must be preceded by examining the homogeneity of variances in these groups. Two statistical tests were used for this purpose: Levene's and Bartlett's. The results of these tests are presented in Table 3.

**Table 3.**  
*Tests of homogeneity of variances*

Wave	Levene's test				Bartlett's test	
	statistic	df1	df2	p-value	statistic	p-value
2012/13	1.6055	2	5408	0.2009	3.4181	0.1810
2014/15	3.9245	2	5404	0.0198	24.2605	0.0000
2016/17	1.6625	2	4820	0.1898	8.8646	0.0120
2018/19	0.4511	2	4880	0.6370	2.2971	0.3170
2020/21	0.2155	3	5815	0.8857	0.3167	0.9570

Source: Own calculations on the base of Linked Personnel Panel.

The test statistics of Levene's test indicate that at the 5% level of significance, the hypothesis of equality of variances in generational groups should be rejected only in the case of analysis of data collected in the second wave of the LPP survey. In the case of the first and third to fifth waves, there are no grounds to reject the hypothesis of equality of variances in generational groups.

In the case of Bartlett's equal-variances test, the test statistics indicate the rejection of the hypothesis of homogeneity of variances in groups for data collected in the second and third waves. For the remaining waves of the LPP survey, there are no grounds to reject the hypothesis of equality of variances in generational groups.

Apart from the results for the third wave, both tests produced consistent verification decisions. Scheffe, Sidak and Bonferroni tests will be used to test the significance of differences for the first and third to fifth waves. For the second and third waves, Dunnett's, Games' and Howell's and Tamhane's tests were used.

The results of testing the significance of the difference in means are presented in Tables 4 and 5.

**Table 4.**

*Results of testing the significance of the difference in means using the Scheffe, Sidak and Bonferroni tests*

Wave	GEN diff.	Mean difference	p-value		
			Bonferroni	Scheffe	Sidak
2012/13	X vs. BB	-0.024	1.000	0.898	0.955
	Y vs. BB	-0.140	0.107	0.110	0.103
	Y vs. X	-0.116	0.284	0.247	0.258
2016/17	X vs. BB	-0.054	0.921	0.593	0.667
	Y vs. BB	-0.149	0.077	0.083	0.075
	Y vs. X	-0.095	0.496	0.382	0.419
2018/19	<b>X vs. BB</b>	<b>-0.213</b>	0.002	0.003	0.002
	<b>Y vs. BB</b>	<b>-0.361</b>	0.000	0.000	0.000
	Y vs. X	-0.148	0.137	0.136	0.131
2020/21	<b>X vs. BB</b>	<b>-0.165</b>	0.047	0.069	0.046
	<b>Y vs. BB</b>	<b>-0.194</b>	0.040	0.061	0.040
	Z vs. BB	-0.527	0.071	0.097	0.069
	Y vs. X	-0.028	1.000	0.980	0.999
	Z vs. X	-0.362	0.489	0.386	0.400
	Z vs. Y	-0.333	0.681	0.474	0.515

The mean differences are significant at the 5% level.

Source: Own calculations on the base of Linked Personnel Panel.

**Table 5.**

*Results of testing the significance of the difference in means using the Dunnett, Games and Howell and Tamhane's tests*

Wave	GEN diff	Mean difference	Confidence interval					
			Dunnett's C		Games and Howell		Tamhane's T2	
			lower	upper	lower	upper	lower	upper
2014/15	<b>X vs. BB</b>	<b>-0.129</b>	-0.249	-0.010	-0.249	-0.010	-0.251	-0.008
	<b>Y vs. BB</b>	<b>-0.144</b>	-0.280	-0.007	-0.280	-0.007	-0.283	-0.005
	Y vs. X	-0.014	-0.158	0.130	-0.158	0.130	-0.161	0.132
2016/17	X vs. BB	-0.054	-0.178	0.071	-0.178	0.071	-0.181	0.073
	Y vs. BB	-0.149	-0.301	0.002	-0.301	0.002	-0.304	0.005
	Y vs. X	-0.095	-0.250	0.059	-0.250	0.059	-0.253	0.062

The mean differences are significant at the 5% level.

Source: Own calculations on the base of Linked Personnel Panel.



In case of Dunnett's, Games and Howell and Tamhane's tests zero indicates that the group means are equal. When a confidence interval does not contain zero, the difference between that pair of groups is statistically significant. The tests used showed that statistically significant differences at the 5% level of significance in the average levels of job satisfaction occur between the Baby Boomer and X generations and between the Baby Boomer and Y generations. This regularity was confirmed for the second, fourth and fifth waves of the study. There are no significant differences in job satisfaction between generations X, Y and Z. A statistically significant difference in the level of job satisfaction between the BB and Z generations occurs at the 10% significance level. The obtained results are consistent with the results of research published by Young et. al., (2013) and Bhattacharya et. al. (2021).

In order to examine the impact and direction of influence of belonging to a specific generation on job satisfaction, multinomial logit models were estimated for each wave of the study. Additional variables were also included in the models. The model parameter estimates and the corresponding odds ratios are presented in Table 6.

**Table 6.**  
*Estimates of multinomial ordered logit models for job satisfaction*

Variable	Wave									
	2012/13		2014/15		2016/17		2018/19		2020/21	
	coefficient	odds ratio	coefficient	odds ratio	coefficient	odds ratio	coefficient	odds ratio	coefficient	odds ratio
GEN_X	-0.061	0.941	-0.114 *	0.892	-0.035	0.966	-0.121 **	0.886	-0.166 ***	0.847
GEN_Y	-0.176 **	0.839	-0.283 ***	0.753	-0.217 ***	0.805	-0.277 ***	0.758	-0.221 ***	0.802
GEN_Z	-	-	-	-	-	-	-	-	-0.636 ***	0.529
EDU_LEVEL_3	-0.131 **	0.877	-0.221 ***	0.802	-0.154 **	0.857	-0.136	0.873	-0.054	0.947
EDU_LEVEL_4	-0.361 ***	0.697	-0.362 ***	0.696	-0.266 ***	0.767	-0.184 *	0.832	-0.182 *	0.833
EDU_LEVEL_5	-0.413 ***	0.661	-0.516 ***	0.597	-0.494 ***	0.610	-0.313 ***	0.731	-0.300 ***	0.741
SEX_1	-0.038	0.962	-0.115	0.891	-0.062	0.940	-0.002	0.998	-0.037	0.964
HOUSEHOLD_2	0.194 **	1.214	0.257 ***	1.293	0.275 ***	1.317	0.213 ***	1.237	0.120	1.127
HOUSEHOLD_3	0.221 **	1.248	0.273 ***	1.314	0.361 ***	1.434	0.192 **	1.212	0.272 ***	1.313
HOUSEHOLD_4	0.273 ***	1.314	0.334 ***	1.396	0.332 ***	1.394	0.190 **	1.209	0.246 ***	1.279
HOUSEHOLD_5	0.412 ***	1.510	0.329 ***	1.389	0.530 ***	1.700	0.393 ***	1.481	0.388 ***	1.474
LEADER_POS_1	0.240 ***	1.272	0.214 ***	1.238	0.169 ***	1.184	0.281 ***	1.325	0.198 ***	1.218
EMPL_SIT_1	-0.184 ***	0.832	-0.211 ***	0.810	-0.164 **	0.849	-0.163 **	0.849	-0.235 ***	0.791
EMPL_CONTR_1	-0.072	0.931	-0.306 **	0.736	-0.289 *	0.749	-0.270 *	0.763	-0.174	0.840
FULL_1	0.099	1.104	0.378 ***	1.459	0.282 ***	1.326	0.332 ***	1.393	0.347 ***	1.415
JOB_SECURITY_1	-1.320 ***	0.267	-1.426 ***	0.240	-1.373 ***	0.253	-1.373 ***	0.253	-1.430 ***	0.239
JOB_SECURITY_2	-0.707 ***	0.493	-0.717 ***	0.488	-0.727 ***	0.483	-0.704 ***	0.494	-0.746 ***	0.474
WORK_HOURS	-0.011 **	0.989	-0.011 **	0.989	-0.015 ***	0.985	-0.011 ***	0.989	-0.007 **	0.993
GROSS_PAY1000	0.022	1.022	0.014	1.014	0.061 ***	1.063	0.004 ***	1.004	0.006 **	1.006
N	5411		5407		4823		4883		5819	
Pseudo R2	0.0213		0.0211		0.0213		0.0194		0.0184	

Significance level: \*\*\* 1%; \*\* 5%; \* 10%.

Source: Own calculations on the base of Linked Personnel Panel.

In the estimated models, in the group of variables describing generations, the base variable is GEN\_BB. This means that it is a reference point for the interpretation of models. In each model, the parameter estimates for the GEN\_X, GEN\_Y and GEN\_Z variables are negative, so belonging to the X, Y, Z generation reduces the chances of greater job satisfaction.

In the case of Generation X, compared to Generation BB, the chance for higher job satisfaction is lower in subsequent waves of the study by: 5.9%, 10.8%, 3.4%, 11.4% and 15.3%. In the case of Generation Y, compared to Generation BB, the chance for higher job satisfaction is lower in subsequent waves of the study by: 16.1%, 24.7%, 19.5%, 24.2% and

19.8%. The effect for Generation Z could only be estimated on data from the fifth wave of the LPP survey. In this case, the chance for higher job satisfaction compared to the BB generation is 47.1% lower. In general, it can be said that the younger the generation, the lower the chance for higher satisfaction. This also confirms the previous results presented in Table 1.

The influence of the remaining variables is as follows:

- in the case of education level - in general, the higher it is, the lower the chances for higher job satisfaction,
- sex is an irrelevant factor in shaping job satisfaction,
- living in larger than single-person households increases the chances of higher job satisfaction,
- having a leadership position increases the chances of higher job satisfaction by 18.5% to 32.4%,
- having a job as a worker (employment situation) reduces the chances of higher job satisfaction by 15.1% to 20.9%,
- having a permanent employment contract reduces the chances of higher job satisfaction by over 26%,
- having a full-time employment contract increases the chances of higher satisfaction by up to over 40%,
- people worried about job security have a lower chance of higher job satisfaction,
- extending the working week by one hour would reduce the chances of higher job satisfaction by approximately 0.7% to 1.5%,
- increase in gross salary by 1,000 EURO is associated with an increase in the chances of higher satisfaction by 0.4% to 6.3%.

## 6. Conclusions

The aim of the study was to identify differences in the level of job satisfaction between generations. The article presents the results of the study using statistical tests of differences in the level of job satisfaction between employees from the BB, X, Y and Z generations. In addition, multinomial logit models were presented that describe the influence and direction of membership, among others, to a specific generation on job satisfaction. The analyzes were performed on microdata from five waves of the German Linked Personnel Panel study.

The results of the study showed that there are statistically significant differences in the level of job satisfaction between the BB and X generations as well as the BB and Y generations. The statistical significance of the difference in job satisfaction between the BB and Z generations occurs not at the 5% but at the 10% level of significance. The estimated logit models

indicated that the chances of higher job satisfaction among employees from generations X, Y and Z compared to employees from the BB generation are lower.

The general conclusion is that the younger the generation, the lower the average job satisfaction. However, significant differences occur only when compared to the oldest generation. For younger generations, these differences are statistically insignificant.

Further research may focus on identifying the factors that create job satisfaction in generational groups and those that cause significant differences. An important element of the research would be to find substitution relationships between factors, which could certainly be used in human resources management processes.

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