GSmart - IO1
REPORT: RESEARCH

Cross-Generational Collaboration

In The Domains Of Working Life And Every Day Life

generation:smart

Erasmus+ GSmart Project Ref. No. 2020-1-PL01-KA204-081415

What's Inside The Report

Legal Disclaimer

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STICHTING on EDUCATION
SEALS for AGILITY LIBERATING STRUCTURES

Wojewódzki Urząd Pracy w Katowicach

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Research:
INTRODUCTION

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I. Research Context

The research relates to an Erasmus+ project called:
Generation: Smart. Social Competences Transmedia Bridge
To Cultivate A New Culture For Cross-Generational Collaboration.
(GSmart) [1]. The research was conducted from January to July 2021. It deals with the data collected in the GSmart partner countries: Germany, Netherlands, Poland, Spain, and Turkey.

1. The GSmart project assumes the following Intellectual Outputs (IOs)

   - **IO1:** Research on cross-generational collaboration and the necessity to overcome emerging problems in this area – for current and future needs. The research analysis results form the basis for designing an educational model, including a training program in IO2 aimed at the project's targeted groups – educators and other personnel who support adult learners.

     Through the research, the GSmart project brings the project's targeted groups the possibilities to update and expand their knowledge on cross-generational collaboration – to educate others. It also constitutes an added value at the EU level – there is a real need for new, reliable, and up-to-date research on the issue in question.

   - **IO2:** Design and construction of an innovative educational model, including a transmedia course. It is a 50-hour-long training program for educating on cross-generational collaboration through social competences. The course supports the project's targeted groups.

   - **IO3:** Preparation of a multimedia and interactive MOOC course, presenting the outcome of IO2. It is an online manual and know-how of using the training program to educate on cross-generational collaboration through social competences. The MOOC course is directed to the project's targeted groups.

2. Priorities that have been chosen to be included in the project's objectives.

   - Extending and developing the competences of educators and other personnel who support adult learners.

   - Fostering through innovative and integrated approaches ownership of shared values, equality, diversity, and non-discrimination – social inclusion.

   - Promoting Erasmus+ among all citizens and generations by offering educational activities and experiences to seniors.

II. Research Approach

The primary desk research was conducted during the processes of the GSmart project proposal elaboration. It included analyzing such sources as books, articles, and reports. Thus, it was a kind of state-of-the-art analysis. It concluded that a consistent and reliable update on the cross-generational collaboration issue is highly recommended.

Therefore, the actual project's research collects and analyzes statistical information and notions of the empirical kind. It features the so-called triangulation [2]. In Statistics and Social Sciences, it refers to the analysis of both quantitative and qualitative data to obtain more accurate research results.

III. Research Structure

The research is divided into three parts:

- Part 1: Cross-Generational Collaboration In The Social Environment.
- Part 2: Cross-Generational Collaboration In Working Life [3] – from the perspective of managers.
- Part 3: Cross-Generational Collaboration In Working Life And Everyday Life [4] – from the perspective of seniors.

IV. Research Methodology

- **In the research:**
  - Generation BB: 57 years old and over
  - Generation X: 42-56 years old
  - Generation Y: 26-41 years old
  - Generation Z: 18-25 years old
- **The procedure: Research Part 1**

  It is quantitative desk research that characterizes the population and labor market situation in the GSmart partner countries. Eurostat data are used to embrace the notion of cross-generational collaboration. It is supposed to be a big picture of the issue in question in the partner countries. More information — in Part 1.

- **The procedure: Research Part 2**

  Working life indicates connections with professional activities. The GSmart research takes the perspective of entrepreneurs and managers of different ages. The qualitative analysis of the research assumes a selection of the research group. Participants should originate from the working life environment, i.e., entrepreneurs and managers of different ages and groups in companies, institutions, associations, and foundations. The research group should consist of not less than 30 representatives in each partner country. Here, we intend to embrace the difficulties in cross-generational collaboration and ways of dealing with it. This part of the research is directed to managers of companies, institutions, and associations or foundations. The research is conducted by an online survey.

- **The procedure: Research Part 3**

  Everyday life designates natural and ordinary world activities. It is experienced and treated as a foundation for all forms of standardized and targeted actions.

  The GSmart research takes the perspective of seniors. The qualitative research analysis also comes out from an online survey. It aims to describe the cross-generational collaboration in working life and every-day life from the perspective of seniors. The research group is supposed to consist of not less than 30 seniors – from each country.

Sources

[1] L&D, R&D Erasmus+ Project: "GSmart Generation: Smart. Social Competences Transmedia Bridge To Cultivate A New Culture For Cross-Generational Collaboration" (GSmart). Project No. 2020-1-PL01-KA204-081415, [Online] Available: https://www.generationsmart.eu/ [Accessed: July 30, 2021].

[2] S. Glen: "Triangulation in Research Statistics and Social Sciences," StatisticsHowTo.com: Elementary Statistics for the rest of us!, 2017. [Online] Available: https://www.statisticshowto.com/triangulation [Accessed: July 30, 2021].

[3] "Duration of working life – statistics," Eurostat, May 2020. [Online]. Available: https://ec.europa.eu/eurostat/statistics-explained/index.php?title= Duration_of_working_life_-_statistics [Accessed: July 30, 2021].

[4] B. Mateja-Jaworska and M. Zawodna-Stephan, *Research On Everyday Life in Poland [Badania życia codziennego w Polsce],* Poznań: Adam Mickiewicz University Publishing House, 2019.

Research:
PART ONE

Cross-Generational Collaboration
In The Social Environment

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Cross-Generational Collaboration In The Social Environment.

The first part of research characterizes the population and labor market situation in the GSmart partner countries. Characteristics include the state and structure of the population by sex, age groups, the population aged 65 and over, the old-age dependency ratio and population projections to 2030, as well as the labor force participation rate by sex, age (15-64), and education level, the employment rate for the 15-64 age group by sex and education level, and statistics on the unemployment rate for the 15-74 age group by sex and education level.

The statistics were obtained from Eurostat and the available information (as of February 24, 2021) covers the periods from 2018 to 2020 (as of January 1), while the Labour Force Survey (LFS) covers the 3rd quarter of 2019 and 2020.

1.   **State and structure of the population in the partner countries**

All partner countries except Poland experienced population growth compared to 2018, with the largest in Turkey by 2.9 p.p. (i.e. percentage point — by 2,334 thousand) (Table 1. More info — see the Statistical Appendix*).

**See p. 19 to download Appendix 1: Statistical Information**.

Table 1. Population in partner countries: 1ˢᵗ January 2018-2020 in thousands.

Partner countries	2018	2019	2020	Increase/ decrease compared to 2018 in thousands	Increase/ decrease compared to 2018 in percentage
Germany	82 792 351	83 019 213	83 166 711	374 360	0,5
Spain	46 658 447	46 937 060	47 332 614	674 167	1,4
Netherlands	17 181 084	17 282 163	17 407 585	226 501	1,3
Poland	37 976 687	37 972 812	37 958 138	-18 549	-0,05
Turkey	80 810 525	82 003 882	83 154 997	2 344 472	2,9

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

In 2020, populations in partner countries were predominantly male, except Turkey, where there is a higher percentage of women, 52.2% (see Figure 1). Relative to 2018, the rate of women and men in populations in partner countries remains constant (Fig . 1).

Fig. 1. Percentage of women and men in populations in partner countries in 2020 — as of January 1 (data in %).
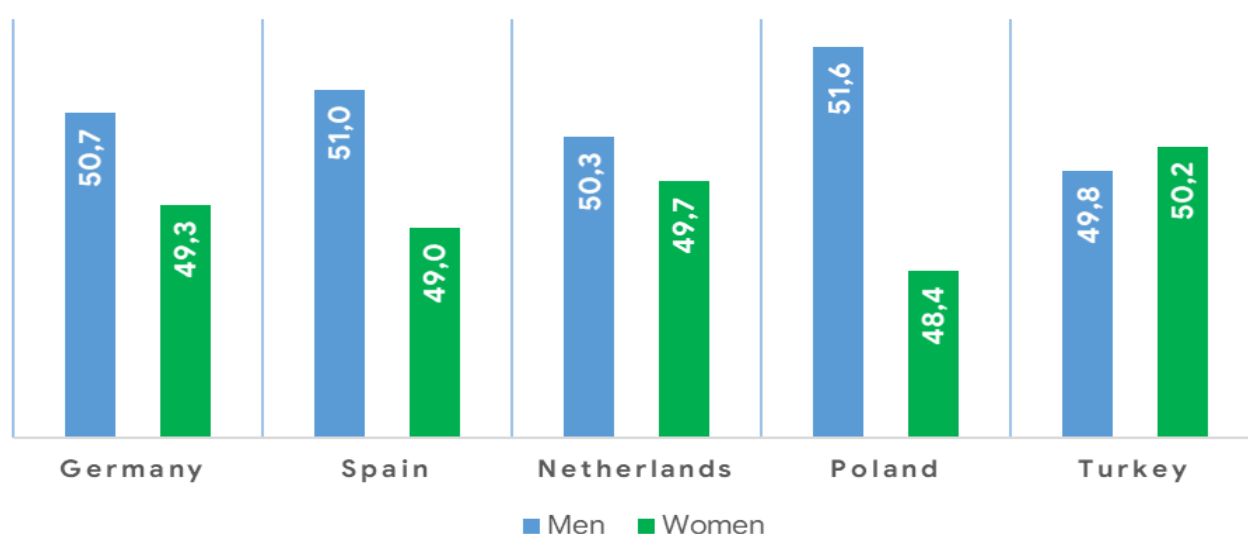
Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

Regardless of the partner country, their populations are predominantly 25- to 49-year-olds ranging from 31.3% in Germany to 37.1% in Turkey (as of January 1, 2020). In the 50-64 age group there was one in four citizens of Germany (23.0%), one in five of Spain, the Netherlands and Poland (21.0%; 19.3% respectively) and one in seven of Turkey (15.2%). One in seven citizens of Spain and Poland were aged 65-79 (13.6%, 13.8% respectively), one in eight of Germany and the Netherlands (14.9%; 14.8% respectively) and one in 14 of Turkey (7.3%). The highest prportion of people over 80 in the populations in question was in Germany at 6.8% and the lowest in Turkey at 1.8%. The share of young people under 24 was highest in Turkey 38.7% and lowest in Germany 24% (Table 2).

The largest increases and decreases in the proportion of the population in each age group in the partner countries in 2020 compared to the same period in 2018 were:

- Germany: the largest increase in the share of the population aged 80 and over by 0.6 p.p. and the largest decrease among those aged 25-49 by 0.7 p.p.

- Spain: the greatest increase in participation was recorded among those aged 50-64 and 65-79 years, 0.6 p.p. each, and the greatest decrease among those aged 25-49 years, 1.0 p.p.

- Netherlands: the largest increase was recorded in the group of people aged 65-79 years by 0.5 p.p., and the largest decrease was in the group of the youngest aged up to 14 years and in the group of people aged 25-49 years by 0.4 p.p. each.
- Poland: the largest increase in the share was recorded among people aged 65-79 years by 1.0 p.p. and the largest decrease by 0.8 p.p. among people aged 50-64 years.
- Turkey: the largest increase in the share was recorded in the group of people aged 65-79 years by 0.5 p.p. and the largest decrease in the group of people under 14 and under 24 years of age by 0.5 p.p. each (Table 2).

Table 2. Population in partner countries by age group in 2020 and for 2018, as of January 1 (data in %).

Partner countries	Proportion of population aged 0–14 years	Increase/decrease compared to 2018 in percentage points	Proportion of population aged 15–24 years	Increase/decrease compared to 2018 in percentage points	Proportion of population aged 25–49 years	Increase/decrease compared to 2018 in percentage points	Proportion of population aged 50–64 years	Increase/decrease compared to 2018 in percentage points	Proportion of population aged 65–79 years	Increase/decrease compared to 2018 in percentage points	Proportion of population aged 80 years and more	Increase/decrease compared to 2018 in percentage points
Germany	13,7	0,2	10,3	-0,2	31,3	-0,7	23,0	0,4	14,9	-0,3	6,8	0,6
Spain	14,5	-0,5	10,0	0,3	34,8	-1,0	21,0	0,6	13,6	0,6	6,0	-0,2
Netherlands	15,7	-0,4	12,3	0,0	31,6	-0,4	21,0	0,2	14,8	0,5	4,7	0,2
Poland	15,4	0,2	10,0	-0,7	37,0	0,1	19,3	-0,8	13,8	1,0	4,4	0,1
Turkey	23,1	-0,5	15,6	-0,5	37,1	0,1	15,2	0,3	7,3	0,5	1,8	0,1

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

In 2020, one in five residents of Germany, Spain, and Netherlands were aged 65 and over, one in six of Poland, and one in 11 of Turkey. In 2020, compared to the same period in 2018, the populations in the partner countries show an increase in the proportion of people aged 65 and over, with the largest increase in the proportion in this age group compared to 2018 in Poland (by 1.1 p.p.) (Table 3).

Table 3. Proportion of population aged 65 and over on 1 January in 2018-2020 (data in %).

Partner countries	2018	2019	2020	Increase/ decrease compared to 2018 in percentage points
	%	%	%	p.p.
Germany	21,4	21,5	21,8	0,4
Spain	19,2	19,4	19,6	0,4
Netherlands	18,9	19,2	19,5	0,6
Poland	17,1	17,7	18,2	1,1
Turkey	8,5	8,8	9,1	0,6

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

The retirement dependency ratio is the ratio of the number of people aged 65 and over (the age at which people are generally economically inactive) to the number of people aged 15-64 (a value expressed per 100 people of working age (15-64).

This ratio is increasing in all partner countries with the highest value in 2020 in Germany at 33.7% and the lowest in Turkey at 13.4%. Compared to 2018, in Poland this indicator increased by 2.2 p.p. the most among the partner countries (Table 4).

Table 4. 2018-2020 retirement dependency ratios in peer states, as of January 1 (data %).

Partner countries	2018	2019	2020	Increase/ decrease compared to 2018 in percentage points
	%	%	%	p.p.
Germany	32,8	33,2	33,7	0,9
Spain	29,2	29,5	29,7	0,5
Netherlands	29,0	29,5	30,1	1,1
Poland	25,3	26,4	27,5	2,2
Turkey	12,6	12,9	13,4	0,8

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/

Comparing the projection to 2030 with historical data for 2019 for the partner countries, only Poland is projected to have a population decline of 2.5% (a decline of 2.6% among women and 2.4% among men).

Among the partner countries, the largest population increase is expected in the Netherlands by 4.0% (women will increase by 4.1% and men by 3.8%). The smallest population increase is projected in Germany by 0.5% (female increase by 0.7%, male increase by 0.3%).

At the same time in the forecast population compared to other partner countries will increase the most in Spain by 1 809 339 people and the least in Germany by 434 483 people. In the Eurostat forecast there are no data for Turkey (Table 5).

Table 5. Population projections to 2030 for partner countries.

Partner countries	2019 – historical date			2030 – forecast					
	Total in thousands	Males in thousands	Females in thousands	Total in thousands	Increase/decrease compared to 2019 in percentage	Males in thousands	Increase/decrease compared to 2019 in percentage	Females in thousands	Increase/decrease compared to 2019 in percentage
Germany	83 019 213	40 966 691	42 052 522	83 453 697	0,5	41 104 020	0,3	42 349 677	0,7
Spain	46 937 060	23 009 259	23 927 801	48 746 399	3,9	23 789 414	3,4	24 956 985	4,3
Netherlands	17 282 163	8 581 086	8 701 077	17 969 884	4,0	8 911 450	3,8	9 058 434	4,1
Poland	37 972 812	18 380 376	19 592 436	37 018 453	-2,5	17 942 058	-2,4	19 076 395	-2,6

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

2. Selected statistics from the Labour Force Survey (LFS) for partner countries (Q3 2019 and 2020).

2.1. Labour force participation rate in the partner countries.

The activity rate describes the share of economically active persons of a given category in the total population of that category. Economically active people are employed and unemployed people in the assumed age category, here 15-64 years to the total population in this age category.

In Q3 2020, the highest labor force participation rate among partner countries was recorded in the Netherlands at 81.1% and the lowest in Turkey at 56.3%.

In Q3 2020, compared to the same period in 2019, the labour force participation rate fell in Germany, Spain and Turkey, stayed the same in the Netherlands and increased by 0.3 p.p. in Poland. The largest decrease in the coefficient was observed in Turkey by 3.2 p.p.

In Germany, the participation rate decreased among men by 0.7 p.p. and increased among women by 0.3 p.p., similarly in the Netherlands (men — decrease by 0.4 p.p., women — increase by 0.5 p.p.). In Spain and Turkey, participation rates decreased for both men and women, with larger decreases observed in Turkey (men — down 3.3 p.p., women — down 3.1 p.p.). In Poland it increased among women by 0.3 p.p. and among men by 0.2 p.p. (Table 6).

Table 6. Labor force participation rate by age 15-64 and gender in partner countries, Q3 2019 and 2020 (data in %).

Partner countries	2019-Q3			2020-Q3					
	Total	Males	Females	Total	Increase/ decrease compared to 2018 in percentage points	Males	Increase/ decrease compared to 2018 in percentage points	Females	Increase/ decrease compared to 2018 in percentage points
Germany	79,5	83,7	75,2	79,3	− 0,2	83,0	− 0,7	75,5	0,3
Spain	73,9	78,8	69,0	72,7	−1,2	77,5	−1,3	68,0	−1,0
Netherlands	81,1	85,3	76,8	81,1	0,0	84,9	−0,4	77,3	0,5
Poland	71,1	78,4	63,9	71,4	0,3	78,6	0,2	64,2	0,3
Turkey	59,5	79,5	39,4	56,3	−3,2	76,2	−3,3	36,3	−3,1

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

Labor force participation rate in the third quarter of 2020 considering three levels of education, i.e.: (a) lower primary, primary and lower secondary education (levels 0-2), (b) upper secondary and post-secondary education (levels 3 and 4) and (c) tertiary education (levels 5-8) was highest among those with tertiary education regardless of the partner country and ranged from 77.7% in Turkey to 90.4% in the Netherlands, with higher rates among men than women. Compared to the same period in 2019, among those with tertiary education, it decreased in Turkey by 3.8 p.p. and in Spain by 0.2 p.p. In the Netherlands it remained at the same level and in Poland it increased by 0.7 p.p. (Tables 7, 8, 9).

Table 7. Labor force participation rate by educational attainment in partner countries — level 5-8 (ISCED 2011), Q3 2019 and 2020 (data in %).

| Partner countries | Tertiary education (levels 5-8) International Standard Classification of Education (ISCED 2011) | | | | | | | | |
| | 2019-Q3 | | | 2020-Q3 | | | | | |
	Total	Males	Females	Total	Increase/ decrease compared to 2019-Q3 in %	Males	Increase/ decrease compared to 2019-Q3 in %	Females	Increase/ decrease compared to 2019-Q3 in %
Germany	90,7	93,8	87,0	No data available					
Spain	87,6	90,5	85,2	87,4	-0,2	90,0	-0,5	85,2	0,0
Netherlands	90,4	92,8	88,1	90,4	0,0	92,6	-0,2	88,2	0,1
Poland	89,6	94,2	86,5	90,3	0,7	94,4	0,2	87,4	0,9
Turkey	81,5	89,4	72,2	77,7	-3,8	87,3	-2,1	67,2	-5,0

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

The labor force participation rate for those with upper secondary and post-secondary education (levels 3 and 4) in the third quarter of 2020 in partner countries was highest in the Netherlands at 82.5% and lowest in Turkey at 57.7%. The ratio is higher among men regardless of the partner country. Compared to the same period in 2019, it is observed to decrease except in Poland where it increased by 0.2 p.p. (Table 8).

Table 8. labor force participation rate by educational attainment in partner countries — level 3-4 (ISCED 2011), Q3 2019 and 2020 (data in %).

| Partner countries | Upper secondary and post-secondary non-tertiary education (levels 3 and 4)) International Standard Classification of Education (ISCED 2011) | | | | | | | | |
| | 2019-Q3 | | | 2020-Q3 | | | | | |
	Total	Males	Females	Total	Increase/ decrease compared to 2019-Q3 in percentage point	Males	Increase/ decrease compared to 2019-Q3 in percentage point	Females	Increase/ decrease compared to 2019-Q3 in percentage point
Germany	83,3	86,7	80,0	No data available					
Spain	71,8	77,2	66,5	69,2	-2,6	74,1	-3,1	64,5	-2,0
Netherlands	83,0	86,8	79,1	82,5	-0,5	86,3	-0,5	78,6	-0,5
Poland	71,5	81,6	59,8	71,7	0,2	82,0	0,4	59,4	-0,4
Turkey	61,3	78,9	38,8	57,7	-3,6	75,7	-3,2	34,5	-4,3

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

The labor force participation rate for those with less than primary, primary and lower secondary education (levels 0-2) in the third quarter of 2020 in partner countries was highest in the Netherlands at 65.0% and lowest in Poland at 27.1%. This rate is higher among men than among women regardless of the partner country.

Compared to the same period in 2019, it is observed to decrease in all countries with the largest decrease of 1.8 p.p. in Poland and the smallest decrease of 0.5 p.p. in the Netherlands (Table 9).

Table 9. Labor force participation rate by educational attainment in partner countries — level 0-2 (ISCED 2011), Q3 2019 and 2020 (data in %).

Partner countries	Less than primary, primary and lower secondary education (levels 0-2)International Standard Classification of Education (ISCED 2011)								
	2019-Q3			2020-Q3					
	Total	Males	Females	Total	Increase/ decrease compared to 2019-Q3 in %	Males	Increase/ decrease compared to 2019-Q3 in %	Females	Increase/ decrease compared to 2019-Q3 in %
Germany	54,3	61,2	47,4	No data available					
Spain	65,9	73,7	56,5	64,2	-1,7	72,7	-1,0	54,0	-2,5
Netherlands	65,5	73,1	57,6	65,0	-0,5	71,4	-1,7	58,3	0,7
Poland	28,9	37,4	19,2	27,1	-1,8	35,2	-2,2	18,0	-1,2
Turkey	51,9	76,1	30,6	48,4	-3,5	72,2	-3,9	27,2	-3,4

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

2.2. Employment rate in partner countries

Employment rate describes the share of employed persons of a given category in the total population of the given category . The age category used here is 15-64 years.

The employment rate in partner countries in Q3 2020 was highest in the Netherlands 77.6% and lowest in Turkey 48.8%. The rate is higher among men than women regardless of the partner country, with a 36.5 p.p. difference between men and women in favor of the former in Turkey.

The employment rate in Q3 2020 compared to the same period in 2019 decreased in almost all partner countries except Poland where it increased by 0.1 p.p. The largest decrease was observed in Spain by 2.7 p.p. (Table 10).

Table 10. Employment rate of people aged 15-64 in partner countries, Q3 2019 and 2020 (data in %).

Partner countries	2019-Q3			2020-Q3					
	Total	Males	Females	Total	Increase/ decrease compared to 2019-Q3 in %	Males	Increase/ decrease compared to 2019-Q3 in %	Females	Increase/ decrease compared to 2019-Q3 in %
Germany	77,0	80,6	73,3	No data available					
Spain	63,5	69,1	58,0	60,8	-2,7	66,2	-2,9	55,4	-2,6
Netherlands	78,4	82,5	74,4	77,6	-0,8	81,4	-1,1	73,7	-0,7
Poland	68,9	76,1	61,7	69,0	0,1	76,2	0,1	61,8	0,1
Turkey	51,0	69,5	32,4	48,8	-2,2	66,9	-2,6	30,4	-2,0

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

The employment rate in the third quarter of 2020 when considering the three levels of education, viz: (a) lower primary, primary and lower secondary education (levels 0-2), (b) upper secondary and post-secondary education (levels 3 and 4) and (c) tertiary education (levels 5-8) was highest among those with tertiary education regardless of the partner country, with 88.2% in Poland. Among those with upper secondary and post-secondary education (levels 3 and 4), it was highest in the Netherlands at 79.0% as well as among those with less than primary, primary and lower secondary education (levels 0-2) at 59.8% (Table 11).

Table 11. Employment rate by educational attainment level (ISCED 2011), among 15-64 year olds in partner countries — Q3 2020 (data in %).

International Standard Classification of Education (ISCED 2011)								
Partner countries	2020-Q3							
	Total	Increase / decrease compared to 2019 in percentage points	Less than primary, primary and lower secondary education (levels 0-2)	Increase / decrease compared to 2019 in percentage points	Upper secondary and post-secondary non-tertiary education (levels 3 and 4)	Increase / decrease compared to 2019 in percentage points	Tertiary education (levels 5-8)	Increase / decrease compared to 2019 in percentage points
Germany	:		:		:		:	
Spain	60,8	-2,7	49,7	-3,0	57,4	-4,1	77,5	-2,3
Netherlands	77,6	-0,8	59,8	-2,0	79,0	-1,5	87,9	-0,5
Poland	69,0	0,1	25,0	-1,8	69,1	0,1	88,2	0,3
Turkey	48,8	-2,2	42,5	-2,5	48,8	-2,7	66,8	-2,4

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/database, download date 24.02.2021.

2.3. Unemployment rate in partner countries

The LFS unemployment rate (LSF) measures the share of unemployed people of a given category in the number of economically active people of that category , in other words, it represents the unemployed as a percentage of the labor force. The labor force is the total number of employed and unemployed persons.

The unemployed according to the LFS are those aged 15 to 74 who meet three conditions simultaneously:

- Were not working individuals during the study week;

- Actively looked for a job, i.e., took concrete steps within 4 weeks (including the last week surveyed) to find a job;

- Were ready (able) to start work in the period: according to LFS — within two weeks following the reference week, according to Census 2002 and Census 2011 — in the reference week or in the following week.

The unemployed also included people who were not looking for work because they had a job arranged and had been waiting to start one for no more than 3 months and an additional condition in the LFS — they were ready to start one.

In the third quarter of 2020, the highest unemployment rates were recorded in Spain and Turkey at 16.3% and 13.2% respectively and the lowest in Poland at 3.3%. Compared to the same period in 2019, the unemployment rate decreased only in Turkey by 0.8 p.p. and increased the most in Spain by 2.4 p.p. (Table 12).

In the partner countries in Q3 2020, the highest unemployment rate among both men and women was recorded in Spain (14.4% and 18.4% respectively) and at the same time, compared to the same period of 2019, an increase of 2.2 p.p. was recorded among men and 2.5 p.p. among women. A decrease was observed only in Turkey with a 1.6 p.p. decrease among women compared to Q3 2019.

Table 12. LFS unemployment rate (LSF) in partner countries and by gender — Q3 2019 and 2020 (data in %).

Partner countries	2019-Q3			2020-Q3						
	Total	Males	Females	Total	Increase / decrease compared to 2019-Q3 in %	Males	Increase / decrease compared to 2019-Q3 in %	Females	Increase / decrease compared to 2019-Q3 in %
Germany	3,1	3,5	2,6	No data available					
Spain	13,9	12,2	15,9	16,3	2,4	14,4	2,2	18,4	2,5
Netherlands	3,2	3,3	3,2	4,3	1,1	4,0	0,7	4,6	1,4
Poland	3,1	2,9	3,4	3,3	0,2	3,0	0,1	3,6	0,2
Turkey	14,0	12,3	17,5	13,2	−0,8	11,9	−0,4	15,9	−1,6

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/ main/data/database, download date 24.02.2021.

In the third quarter of 2020, the unemployment rate was the lowest among people with tertiary education regardless of the partner country. Its highest value among those with tertiary education was recorded in Turkey at 14.0%. Among those with upper secondary and post-secondary and lower primary, primary and lower secondary education, its highest value was in Spain at 17.0% and 22.5% respectively.

Compared to the same period in 2019, there was a decrease in the unemployment rate only in Turkey and at the same time in each of the educational levels listed, with the largest decrease in the group of people with tertiary education (decrease of 1.1 p.p.) (Table 13).

Table 13. LFS unemployment rate (LSF) in partner countries and by education level — Q3 2019 and 2020 (data in %).

Partner countries	2020-Q3							
	All ISCED 2011 levels	Increase/decrease compared to Q3 2019	Less than primary, primary and lower secondary education (levels 0-2)	Increase/decrease compared to Q3 2019	Upper secondary and post-secondary non-tertiary education (levels 3 and 4)	Increase/decrease compared to Q3 2019	Tertiary education (levels 5-8)	Increase/decrease compared to Q3 2019
Germany								
Spain	16,3	2,4	22,5	2,7	17,0	2,7	11,1	2,3
Netherlands	4,3	1,1	7,8	2,2	4,2	1,1	2,7	0,5
Poland	3,3	0,2	7,4	0,1	3,6	0,1	2,2	0,3
Turkey	13,2	−0,8	11,8	−0,9	15,4	−0,5	14,0	−1,1

Source: own compilation based on Eurostat, https://ec.europa.eu/eurostat/web/main/data/ database, download date 24.02.2021.

Conclusions

1. In 2020, compared to the same period in 2018, population growth was recorded in all partner countries except Poland. The percentages of women and men in the populations in the partner countries remain constant.

2. In 2020, one in three people in the partner country populations were aged 25-49. In the age group 50-64 there was one in four German, one in five Spanish, Dutch and Polish citizens and one in seven Turkish citizens. Every seventh citizen of Spain and Poland was aged 65-79, every eighth citizen of Germany and the Netherlands and every fourteenth citizen of Turkey (7.3%). One in five citizens of Germany, Spain, the Netherlands and Poland and one in eleven of Turkey were aged 65 or older. Every third citizen of Turkey was aged 0-24 (every sixth citizen aged 15-24), every fourth citizen of Germany, Spain, the Netherlands, and Poland (every tenth citizen aged 15-64 and every eighth citizen of the Netherlands).

3. In 2020, compared to the same period in 2018, populations in the partner states are experiencing an increase in the percentage of people aged 65 and older.

4. The old-age dependency ratio is increasing in all partner countries, with the highest value in 2020 in Germany at 33.7% and the lowest in Turkey at 13.4%.

5. In the forecast to 2030 for the European partner countries (no Eurostat data for Turkey) only Poland is projected to have a decrease in population. The largest population increase is projected for the Netherlands and the smallest for Germany.

6. In Q3 2020, the highest labor force participation rate among partner countries was recorded in the Netherlands at 81.1% and the lowest in Turkey at 56.3%. The labour force participation rate was highest among people with tertiary education regardless of the partner country and ranged from 77.7% in Turkey to 90.4% in the Netherlands. It had the lowest values among people with less than primary, primary and lower secondary education from 27.1% in Poland to 65.0% in the Netherlands. In Q3 2020, compared to the same period in 2019, the labour force participation rate fell in Germany (-0.2 p.p.), Spain (-1.2 p.p.) and Turkey (-3.2 p.p.), in the Netherlands it remained at the same level and in Poland it increased by 0.3 p.p.

7. The employment rate in the partner countries in Q3 2020 was the highest in the Netherlands 77.6% and the lowest in Turkey 48.8% and was also the highest among people with higher education regardless of the partner country from 66.8% in Turkey to 88.2% in Poland. The lowest value of this indicator was among those with less than primary, primary and lower secondary education from 42.5% in Turkey to 59.8% in the Netherlands. The employment rate in Q3 2020 compared to the same period in 2019 decreased in almost all partner countries except Poland where an increase of 0.1 p.p. was recorded. Its largest decrease was observed in Spain by 2.7 p.p.

8. The unemployment rate according to the LFS (LSF) in the third quarter of 2020 was highest in Spain and Turkey at 16.3% and 13.2% respectively and lowest in Poland at 3.3%. Compared to the same period in 2019, the unemployment rate decreased only in Turkey by 0.8 p.p. and increased the most in Spain by 2.4 p.p.

Appendix 1: Statistical Information

Click the icon to download:

Research:
PART TWO

Cross-Generational Collaboration In The Work Environment.

Opinions Of Managers

generation:smart

Cross-Generational Collaboration In The Work Environment.
Opinions Of Managers

I.   Methodological note

The main aim of the research is to describe social competences necessary for shaping and developing cross-generational collaboration in the work environment and to describe difficulties in managing employees of different ages in economic entities (enterprises), institutions, associations, and foundations.

The research issues were focused on the following questions:

- How do the respondents evaluate the collaboration between different generations in the workplace?

- What are the strengths and weaknesses of employees of different age groups according to the respondents?

- Which social competences are essential for collaboration between workers of different ages?

- What difficulties do managers most often encounter in managing employees of different ages in work situations? Is there a strategy for cross-generational management in the surveyed companies?

- Do the respondents think that generational diversity is used to improve the functioning of companies, institutions, associations, or foundations?

Method, technique, and research tool

The research used the survey method with the CAWI technique (Computer-Assisted Web Interview). In this technique the respondent is asked to fill in the survey questionnaire in an electronic (online) form.

Research group and scope of the research

The research group consists of managers in institutions, business entities, associations, foundations, or organizations contacting different generations in the work environment. The research was carried out in the project's partner countries. The assumed research group is 150 people — 30 from each country. Despite the fact that the consortium partners have done their best to achieve the planned number of participants, the research group turned out to be slightly smaller. We presume that the respondents' unwillingness to participate in such surveys deserves separate future research.

II.   Analysis of the collected empirical data

1.   Characteristics of respondents

The survey was conducted in April 2021 using the CAWI technique, through which 116 questionnaires were obtained (Fig. 1).
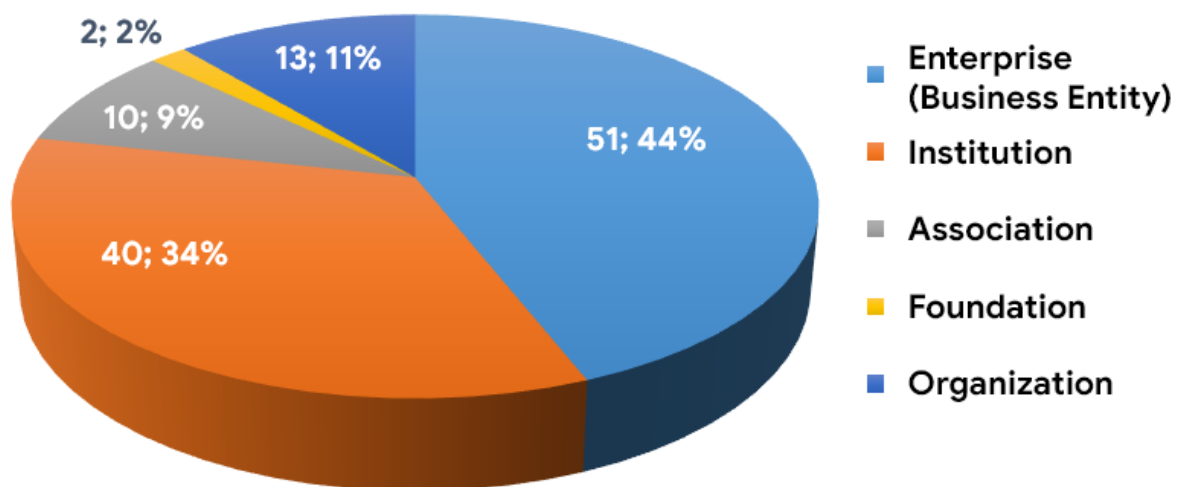
Fig 1. Respondents by country of residence (data in numbers and %); N=116.
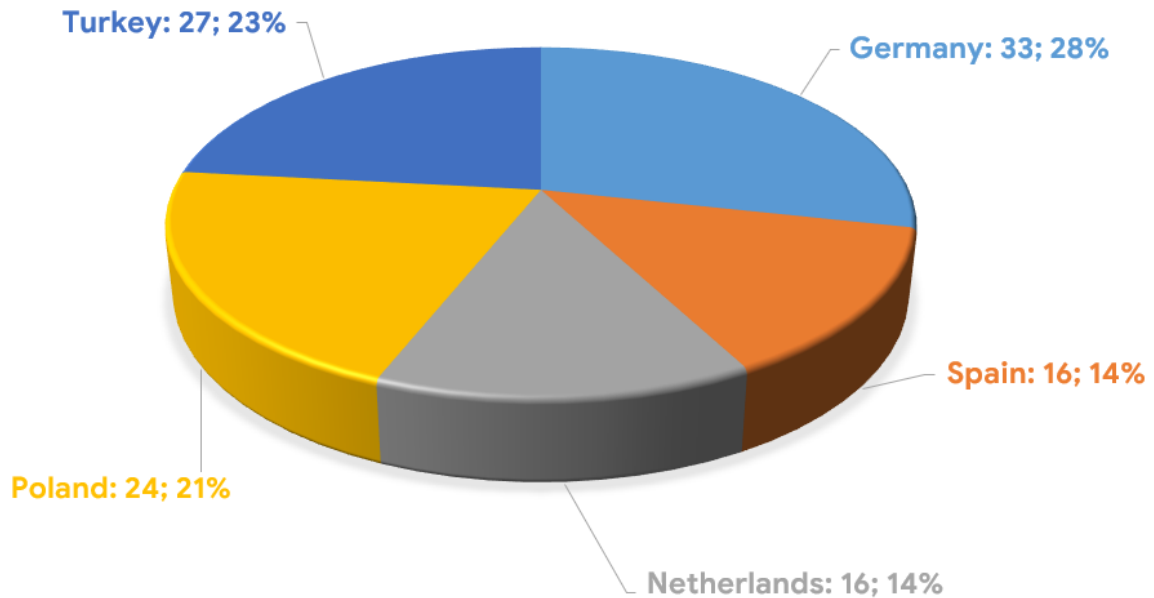
Source: own elaboration.

The highest number of respondents were employed in enterprises (business entities) and institutions, and the lowest in foundations (Fig. 2).
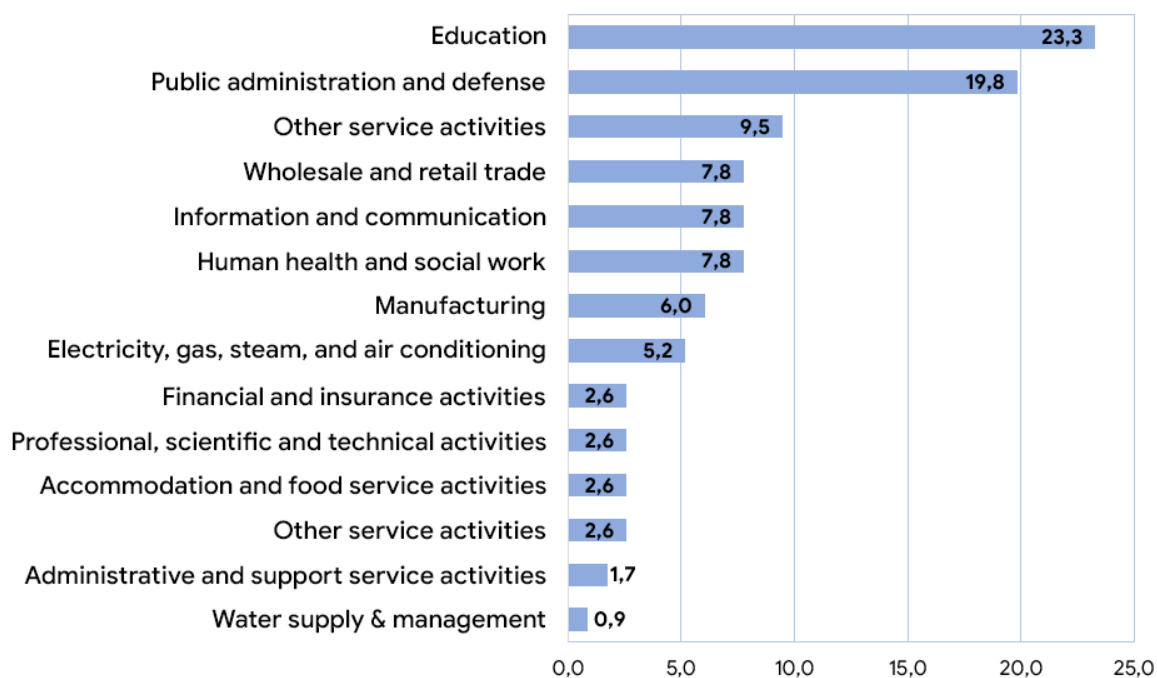
Fig. 2. Respondents by workplace (data in numbers and %); N=116.

Source: own elaboration.

Enterprises, institutions, and organizations in which respondents worked belonged primarily to Education (Fig. 3).

Fig 3. Respondents by business section (data in %); N=116.

Source: own elaboration.

Every second respondent worked in a large enterprise, institution, or organization with 250 or more employees. Every third respondent was employed in a small enterprise or institution (10 to 25 employees) (Fig. 4).

Fig 4. Respondents by the size of employment in institutions or businesses (data in numbers and %); N=116.
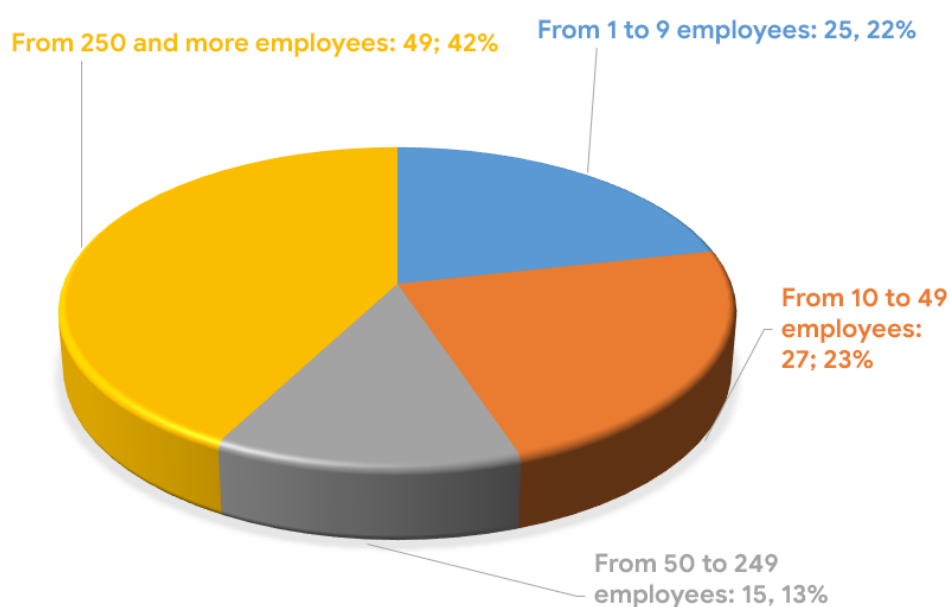
Source: own elaboration.

2. Questionnaire analysis

Employee age groups managed by respondents

Every second respondent manages employees where Generation Y predominates. On the other hand, every third respondent manages employees where people from Generation X prevail. At the same time, according to every second manager, the number of people from Generations X and Y is similar. Every second respondent manages a group where employees from Generation Z and Generation BB are in the minority. At the same time, one in three respondents has no subordinates from Generation Z and Generation BB in their group (Fig. 5-8).

Fig 5. Generation BB in institutions and business entities in respondents' opinion (data in numbers and %); N=116.

Prevail among employees: 3; 3%

There are no employees in this age group: 33; 28%

Their number is at a similar level: 23; 20%

Their number is small (they are in the minority): 57; 49%
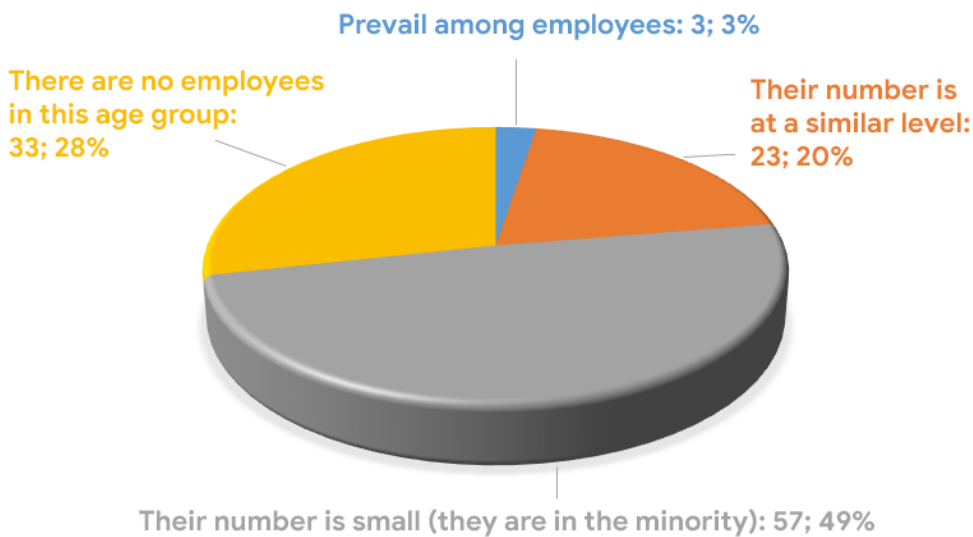
Source: own elaboration.

**Fig. 6. Generation X in institutions and businesses in respondents' opinion (data in numbers and %); N=116.**

There are no employees in this age group: 5; 4%

Their number is small (they are in the minority): 37; 32%

Prevail among employees: 34; 29%

Their number is at a similar level: 40; 35%
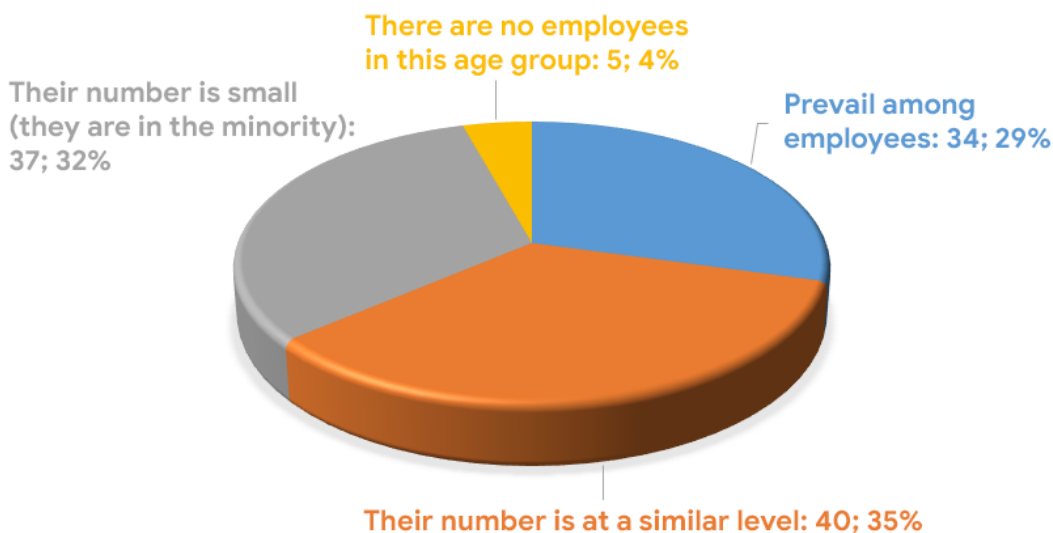
Source: own elaboration.

Fig 7. Generation Y in institutions and businesses in respondents' opinion (data in numbers and %); N=116

Their number is small
(they are in the minority): 17; 15%

There are no employees
in this age group: 2; 2%

Prevail among
employees:
51; 44%

Their number is at a similar level: 46; 39%
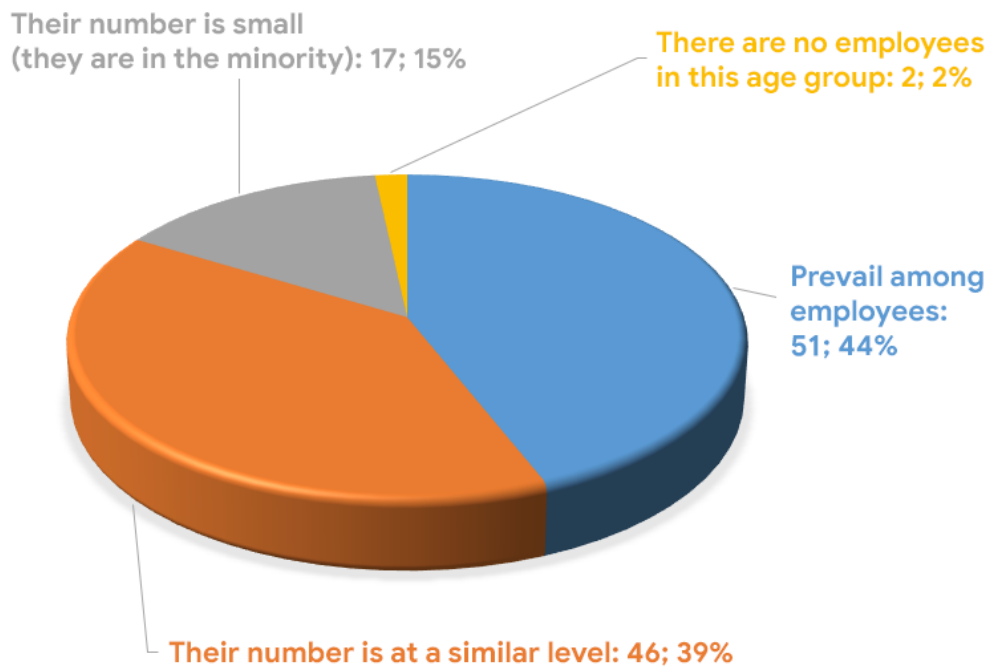
Source: own elaboration.

Fig. 8. Generation Z in institutions and businesses in respondents' opinion (data in numbers and %); N=116.

Prevail among employees: 4; 4%

There are no employees
in this age group:
27; 23%

Their number is
at a similar level:
22; 19%

Their number is small (they are in the minority): 63; 54%
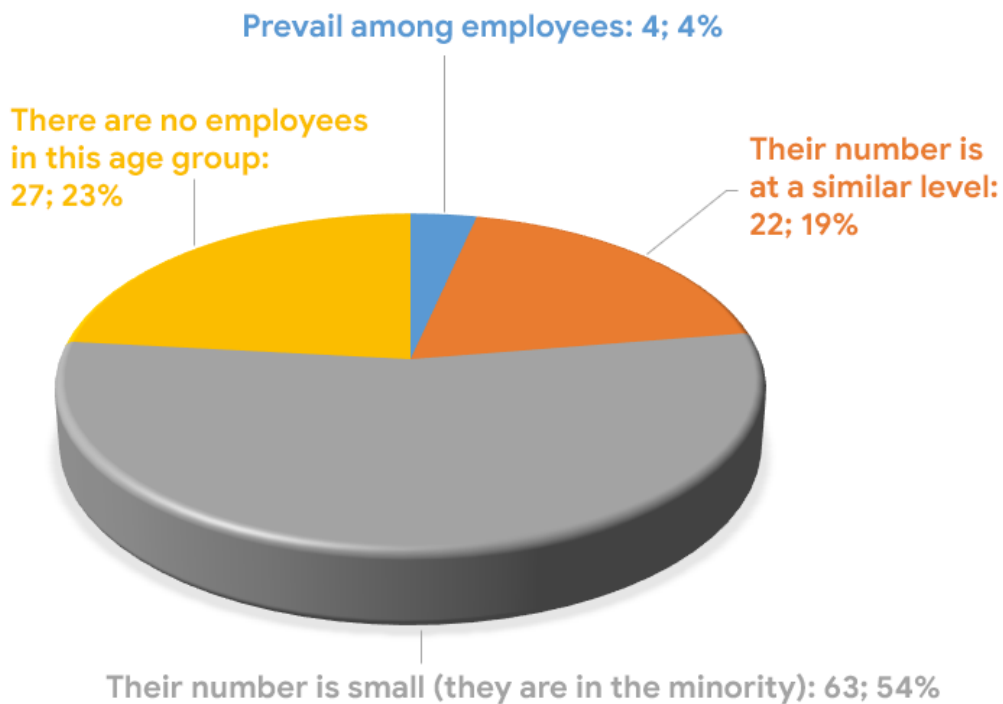
Source: own elaboration.

Evaluation of each generation's collaboration with other employees. Socio-demographic characteristics relevant to cross-generational collaboration

Respondents rated the different generations well regarding their cooperation with other employees who differ from them in age. Generations Y and X are the most likely to cooperate reasonably with other employees. Education is the most frequently shown socio-demographic feature important for cross-generational collaboration in the workplace. Every second respondent also indicated the length of service and age. According to one in two respondents, gender is an irrelevant feature for cross-generational collaboration. Age and job tenure were considered as important by every third and education by every fifth respondent (Fig. 9-10).

Fig 9. Evaluation of the cross-generational collaboration in the workplace in respondents' opinion (data in %).
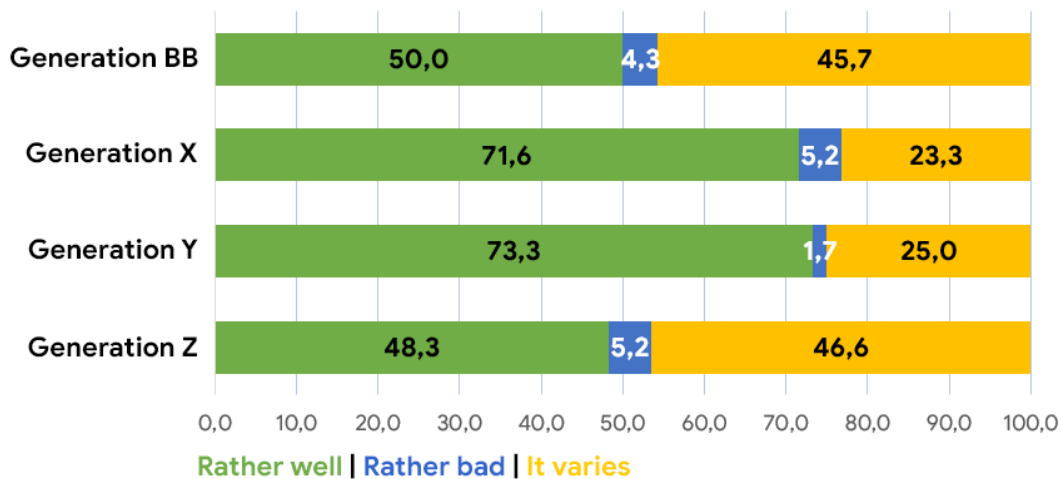
Source: own elaboration.

Fig. 10. Socio-demographic characteristics important for cross-generational collaboration in the workplace in respondents' opinion (data in %).
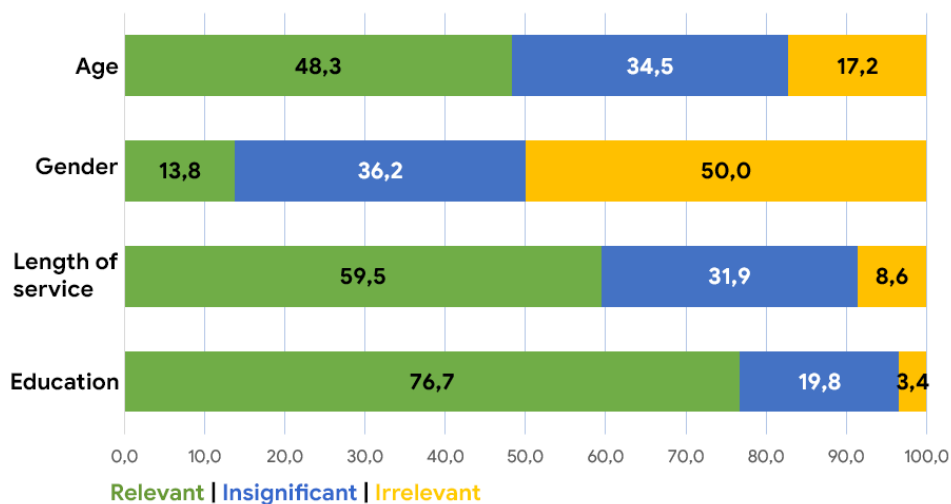
Source: own elaboration.

Development of social competences for improving cross-generational collaboration

Among the five competences most often indicated by the respondents, regardless of generation, one common to all can be identified — teamwork. In the respondents' opinions, this competence is imperative — it requires shaping and development in each age group. Common competence, which was also in the most often indicated features in three age groups, i.e., Generations X, Y, and Z, is the cross-generational change of attitudes. In turn, in Generation BB and X competences, digital skills — ICT and knowledge sharing - should be developed.

In respondents' opinions, Generation BB should develop ICT skills, creativity, experimenting, teamwork, and knowledge sharing (over 46% of indications). On the other hand, respondents less frequently indicated decision-making and leadership responsibility (18.1%; 29.3% respectively).

According to the respondents, competences such as knowledge sharing, ICT skills, teamwork, cross-generational change of attitudes, and cooperation are the most often listed competences needed by Generation X (over 51% of indications). Conversely, the least frequently indicated competences that require development are adapting and breaking down barriers (33.6%; 37.9% respectively).

Negotiations, teamwork, motivation, problem analysis, cross-generational change of attitudes are the competences, which according to the respondents, Generation Y should develop (more than 56% of indications). On the other hand, the competences connected with ICT and creativity were indicated as the least frequently (23.3%; 33.6% respectively) — similarly to generation Z.

According to the respondents, Generation Z should develop such competences as adaptation, communication, teamwork, cross-generational change of attitudes, and empathy (over 61% of indications). On the other hand, the lowest number of indications concerned competences connected with ICT and creativity (respectively: 26.7%; 33.6%) (Fig. 11-14).

Fig. 11. Social competences which should be developed to improve cross-generational collaboration in the workplace in respondents' opinion — Generation BB (data in %); N=116.
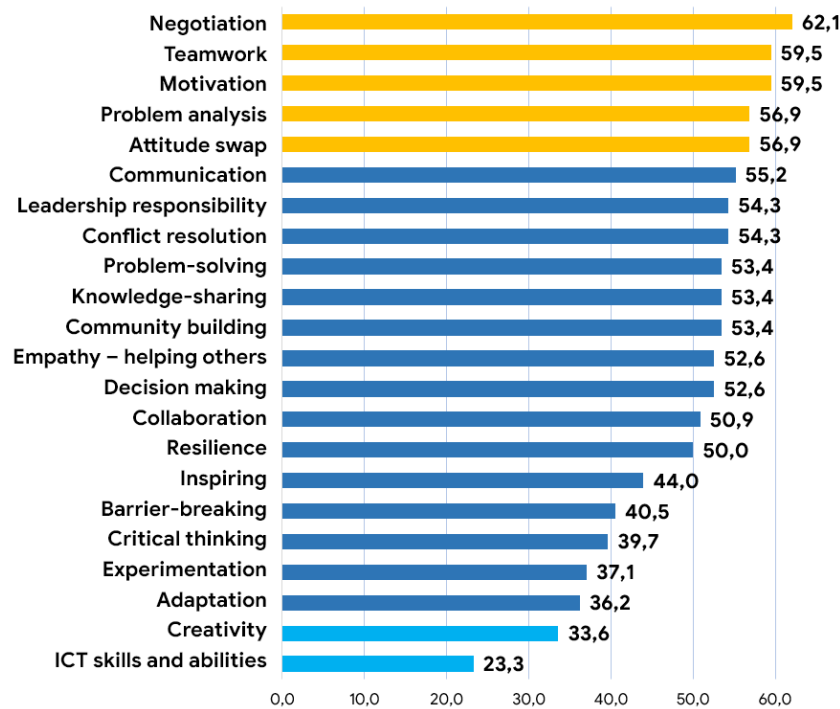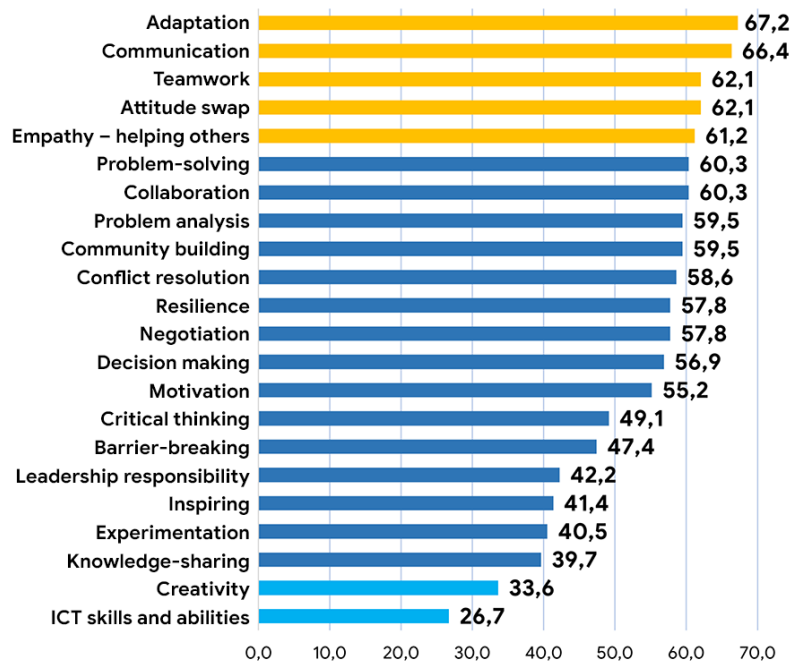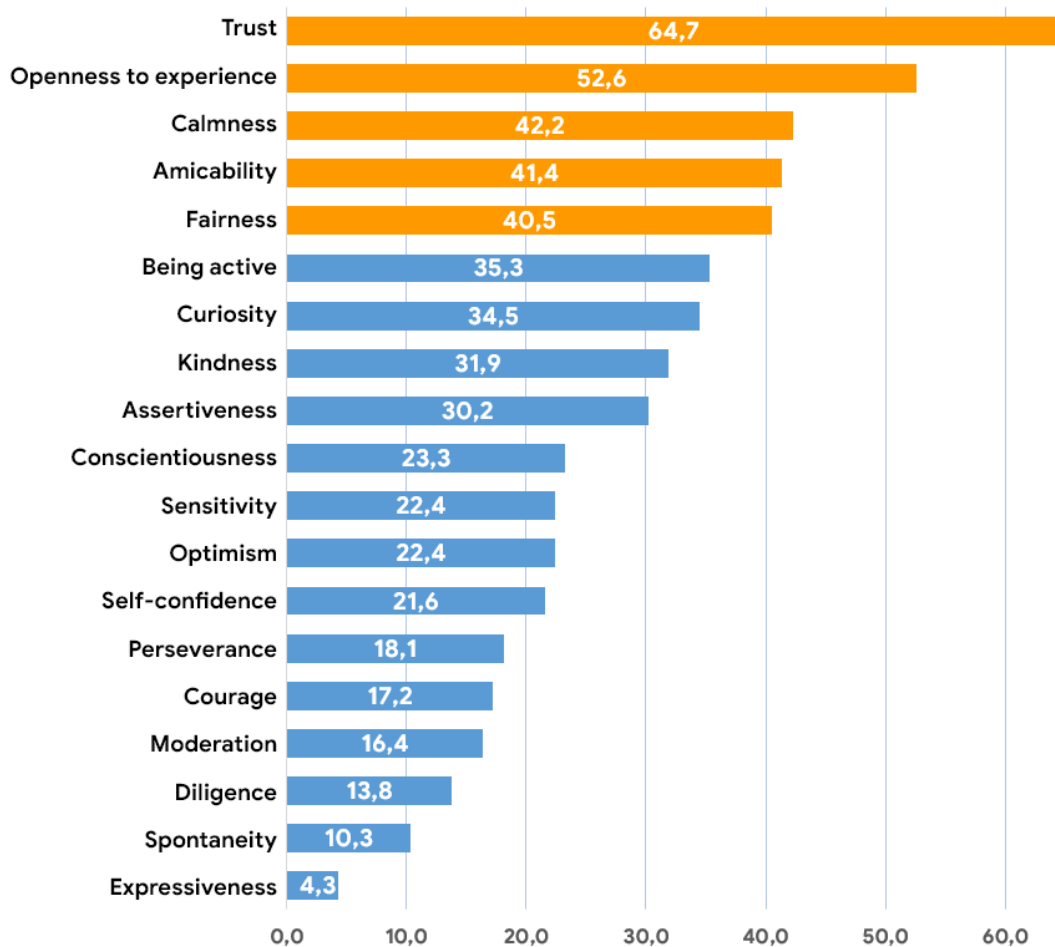

Source: own elaboration.

Fig. 12. Social competences which should be developed to improve cross-generational collaboration in the workplace in respondents' opinion — Generation X (data in %); N=116.
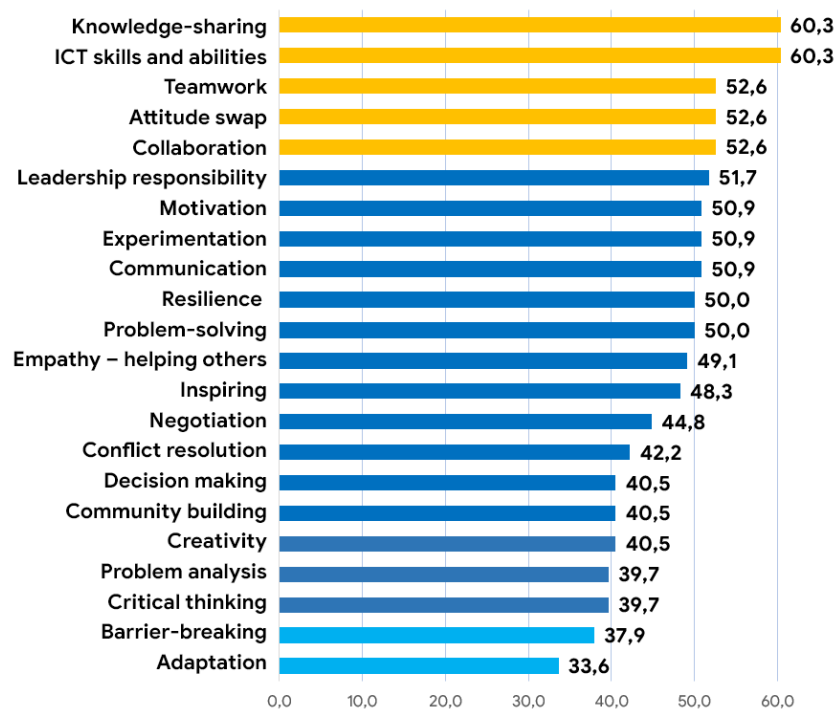
Source: own elaboration.

Fig. 13. Social competences that should be developed to improve cross-generational collaboration in the workplace in respondents' opinion — Generation Y (data in %); N=116.

Source: own elaboration.

Fig. 14. Social competences which should be developed to improve cross-generational collaboration in the workplace in respondents' opinion — Generation Z (data in %); N=116.

Source: own elaboration.

Personality traits relevant to cross-generational collaboration. Characteristics of the four generations in the work environment

Trust, openness to experience, calmness, and amicability were the personality traits most frequently indicated by respondents as necessary for cross-generational collaboration (from 64.7% to 40.5%). At the same time, expressiveness and spontaneity were mentioned least often by the respondents (4.3%; 10.3% respectively) (Fig. 15).

Fig. 15. Personality traits important for cross-generational collaboration in respondents' opinion (data in %); N=116.

Source: own elaboration.

According to almost all respondents, those in Generation BB are hardworking, persistent (95.7% of indications), also resilient to stress (88.8% of indications), and have considerable difficulty defining their expectations in the workplace (87.9% of indications). Respondents disagree with the statements that people in this Generation are less comfortable with modern technology and knowledgeable and experienced (76.7%; 69.9% respectively) (Fig. 16).
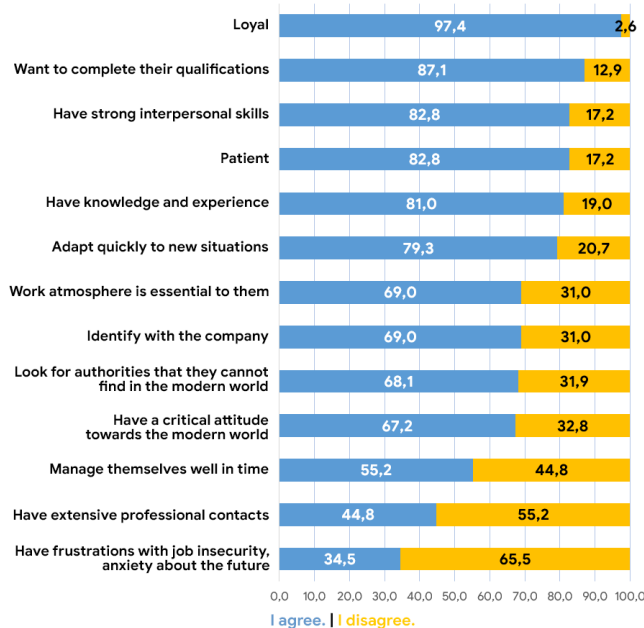
Fig. 16. Characteristics of the Generation BB in the respondents' opinion (data in %); N=116.
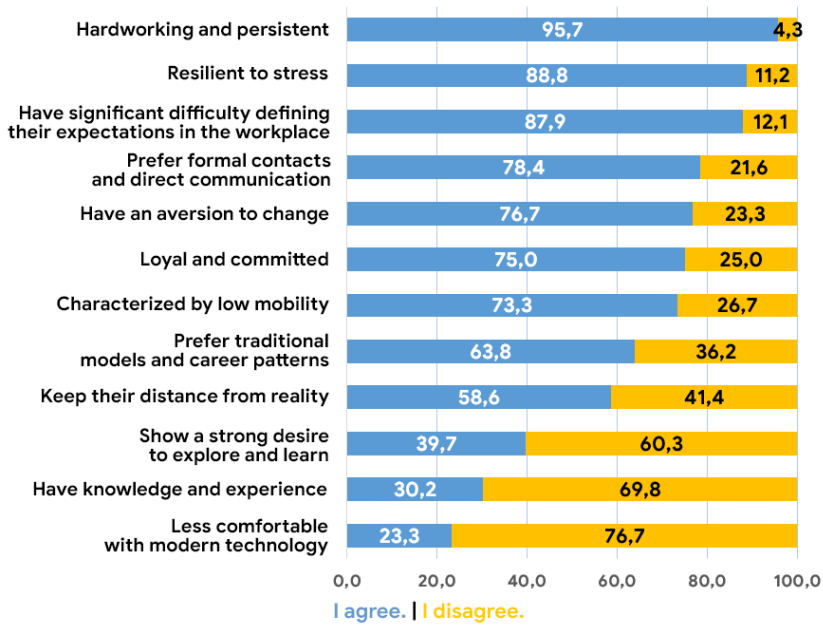
Source: own elaboration.

Generation X individuals in the workplace, according to respondents, are loyal, want to add to their competences, have high cross-personal skills, are patient, and have knowledge and experience (97.4% to 81% indications). Respondents disagree with the beliefs that these individuals have frustrations related to job insecurity, anxiety about the future and that they have extensive professional contacts at work (65.5%; 55.2% respectively) (Fig. 17).
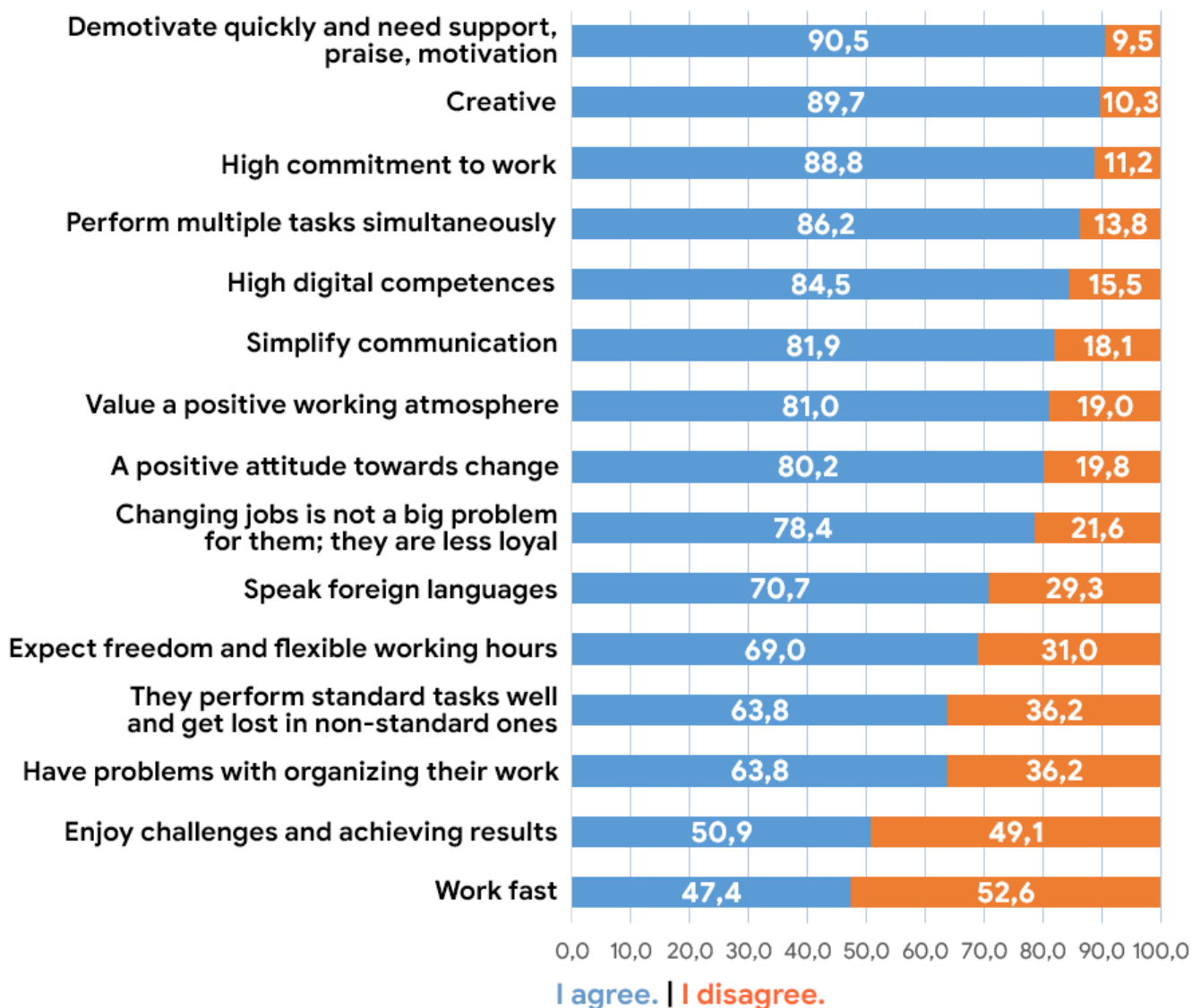
Fig. 17. Characteristics of Generation X in the workplace in the respondents' opinion (data in %); N=116.

Source: own elaboration.

According to the respondents, Generation Y people demotivate quickly and need support, praise, motivation (90.5% of indications). In addition, they are creative, engaged at work, perform many tasks simultaneously, and have high digital competencies (87.9% to 84.5% of indications). However, every second respondent disagrees with the belief that these people work fast and that they like challenges and achieving results (52.6%; 49.1% respectively) (Fig. 18).

**Fig. 18. Characteristics of Generation Y in the workplace in the respondents' opinion (data in %); N=116.**

Characteristic	I agree.	I disagree.
Demotivate quickly and need support, praise, motivation	90,5	9,5
Creative	89,7	10,3
High commitment to work	88,8	11,2
Perform multiple tasks simultaneously	86,2	13,8
High digital competences	84,5	15,5
Simplify communication	81,9	18,1
Value a positive working atmosphere	81,0	19,0
A positive attitude towards change	80,2	19,8
Changing jobs is not a big problem for them; they are less loyal	78,4	21,6
Speak foreign languages	70,7	29,3
Expect freedom and flexible working hours	69,0	31,0
They perform standard tasks well and get lost in non-standard ones	63,8	36,2
Have problems with organizing their work	63,8	36,2
Enjoy challenges and achieving results	50,9	49,1
Work fast	47,4	52,6

Source: own elaboration.

All respondents indicated insufficient knowledge and experience of people from Generation Z. At the same time, these people, in the opinion of managers, expect to share profits (e.g., the company) earned with their participation, flexible working hours, remote, hybrid work, and they break standards or traditions. One in two respondents disagrees with the statement that people in this generation seek change and new experiences and are open and direct (49.1%; 41.4% respectively) (see Figure 19).

Fig. 19. Characteristics of Generation Z in the workplace in the respondents' opinion (data in %); N=116.
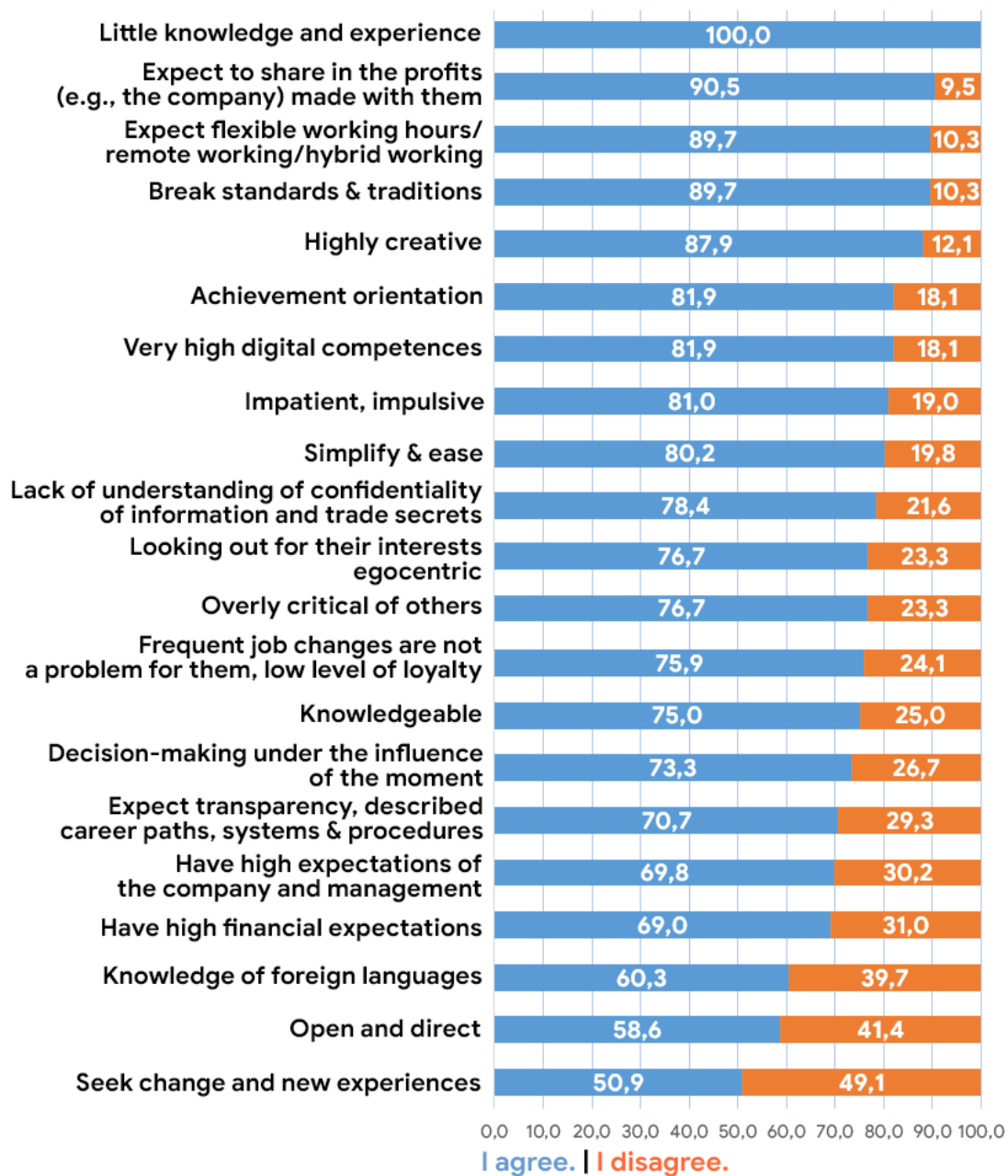
Source: own elaboration.

The essential elements of cross-generational collaboration in the workplace. Difficulties in managing employees from different age groups

The most critical element of cross-generational collaboration for the respondents is exchanging knowledge, experience, mutual complementation of competency gaps of employees of different ages to perform professional tasks and duties (78.4% of indications). Furthermore, every second respondent also indicated different perspectives of perceiving professional tasks (problems), analyzing them through the prism of knowledge and experience of each generation, which leads to more possible actions and solutions (59.5% indications) (Fig. 20).

Fig. 20. Important elements of cross-generational collaboration in the workplace in the respondents' opinion (data in %); N=116.
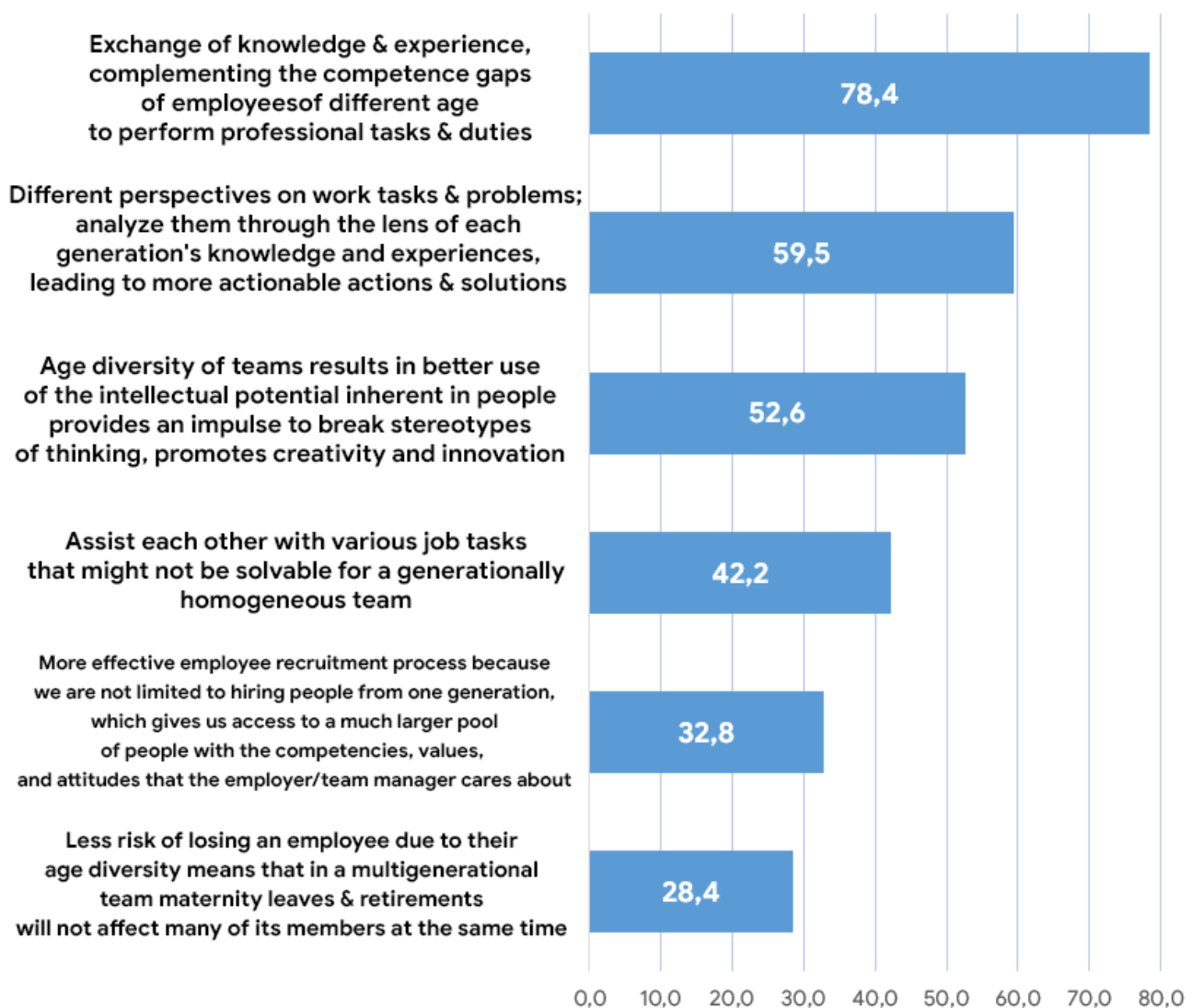
Source: own elaboration.

Among the most frequently mentioned difficulties in managing generations, every second respondent included age-related stereotypes and prejudices in the process of managing generations in the workplace (51.7% of indications). Other difficulties equally often mentioned by respondents were: limited communication skills of different age groups and lack of understanding (43.1%) and cultural differences (different identities, traditions, beliefs, or values) (38.8%) (Fig. 21).

Fig. 21. The most frequently cited difficulties in managing employees of different age in the workplace in respondents' opinions (data in %); N=116.
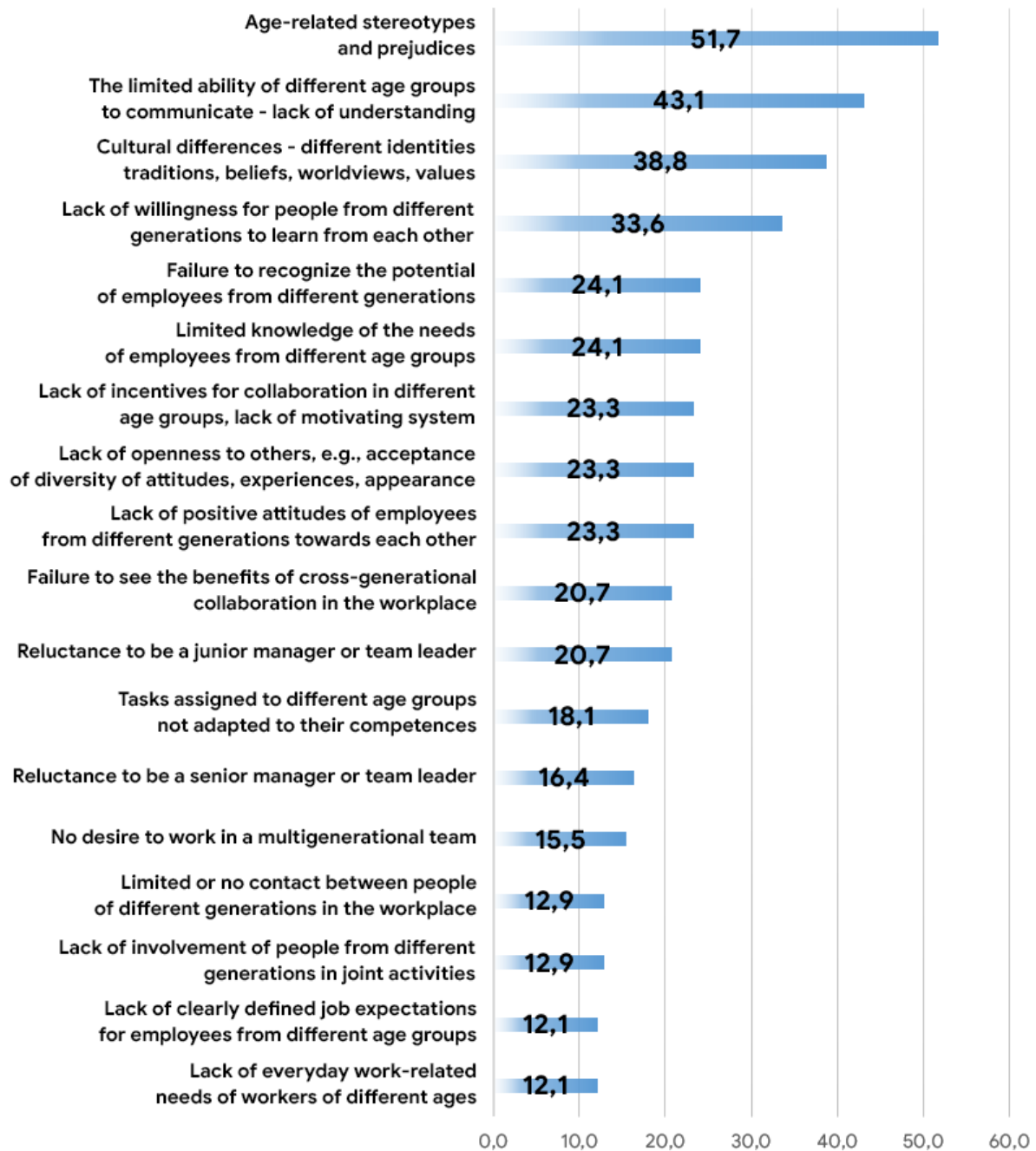
Source: own elaboration.

Diversity — **strategy, and management**

Only in one in three companies, institutions, or organizations, there is a strategy to manage employees from different age generations. In one in three entities, respondents use generational diversity management. Answers: Yes — there is such a strategy. No — there is not such a strategy (Fig. 22-23).

Fig. 22. Management strategy of employees from different generations in institutions and business entities in respondents' opinion (data in %); N=116.
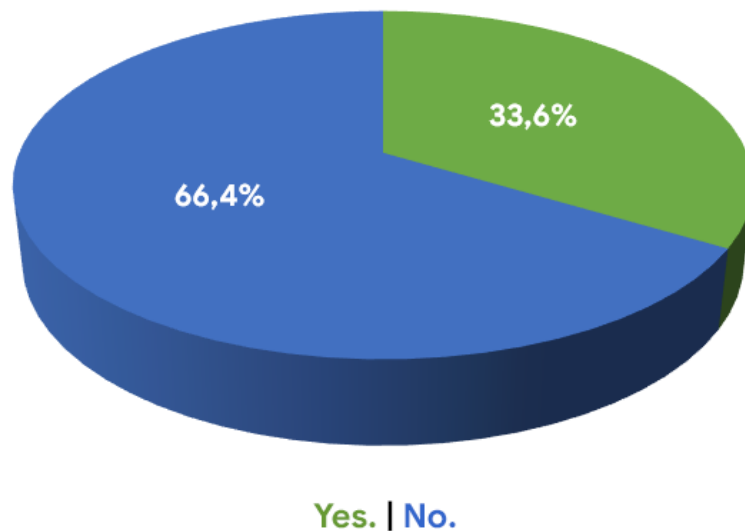
Source: own elaboration.

Fig. 23. Managing generational diversity to improve the performance in the opinion of respondents (data in %); N=116.
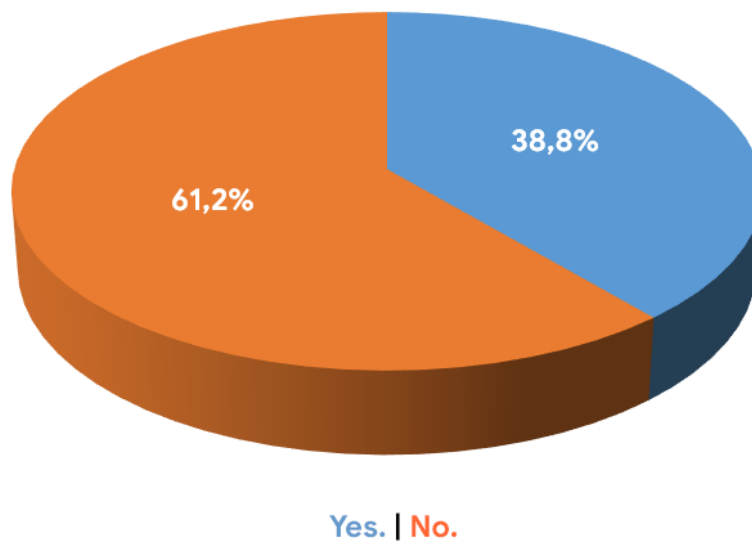
Source: own elaboration.

Conclusions

1. Every second respondent manages a group of employees where people from Generation Y predominate. Every third respondent manages a group of employees where people from Generation X prevail. At the same time, every third respondent does not have in his group subordinates from Generation Z and Generation BB.

2. Respondents rated well the various generations in terms of their collaboration with other employees who differ from them in age. Every second respondent indicated that the collaboration between generations is different in the oldest Generation — BB and the youngest — Z.

3. Education is the most frequently indicated socio-demographic feature important for cross-generational collaboration in the workplace in the opinion of managers.

4. Among the five competences most often indicated by the respondents, which require shaping and development, one common competence can be identified regardless of the generation. It is teamwork. Moreover, a standard competence in the group of most often indicated features in three age groups, i.e., Generations X, Y, and Z, is the cross-generational change of attitudes. In turn, in Generations X and BB, the most often mentioned shared competences, which should be developed, are digital skills — ICT and knowledge sharing.

5. The strengths of Generations Y and Z are ICT competences and creativity (the least mentioned as the ones, which need to be shaped and developed in these generations). The strengths of Generation X are adaptability, and the power of Generation BB is decision-making.

6. Trust, openness to experience, calmness, amicability, and honesty are the most frequently indicated by the respondents as personality traits essential for collaboration between generations.

7. When characterizing the different generations in the workplace, respondents believe that:

- Generation BB individuals are hardworking and persistent, resistant to stress, and have considerable difficulty defining their expectations in the workplace.

- People from Generation X are loyal, want to update their competences, have high cross-personal skills, are patient, and have knowledge and experience.

- People from Generation Y are demotivated quickly and need support, praise, and motivation. In addition, they are creative, committed to working, multi-tasking, and have high digital competences.

- People from Generation Z have little knowledge and experience, expect to share profits generated with their participation, flexible working hours, remote working, break the standards or traditions, and are creative.

8. For the respondents, the most critical element of cross-generational collaboration is the exchange of knowledge and experience, complementing each other's competencies of employees of different ages to perform their professional tasks and duties.

9. Among the most frequently mentioned difficulties in managing the generations, every second respondent mentioned stereotypes and prejudices related to age at work.

10. In every third company, institution, or organization, there is a strategy for managing employees from different age generations. In one in three entities, respondents use generational diversity management to improve operations.

Research:
PART THREE

Cross-Generational Collaboration
In The Work Environment
And Everyday Life.

Opinions Of Seniors

generation:smart

**Cross-Generational Collaboration In The Work Environment
And Everyday Life. Opinions Of Seniors**

I.   Methodological note

The study aims to describe cross-generational collaboration in the work environment and everyday life from the perspective of senior citizens in partner countries.

The following questions frame the research issues:

- How do seniors perceive collaboration with other generations in the work environment and their everyday life?

- What social competences do seniors think should be developed to improve collaboration between different generations?

- What competences are missing in different generations, and what personality traits are most important for cross-generational collaboration in the opinion of seniors?

- What qualities do seniors think characterize different generations?

- What areas may be a source of difficulty in cross-generational collaboration in the opinion of seniors?

- What are the positive aspects of collaboration with other people of different ages, according to respondents?

- Which competences or attitudes would seniors like to develop to improve cross-generational collaboration and in which areas of life?

Method, technique, and research tool

Like in the previous part of the research, the researchers based their work on the survey method with the CAWI technique (Computer-Assisted Web Interview). The respondents are asked to fill in the survey questionnaire in an electronic (online) form in this technique.

Research group and scope of the research

The research group consists of people aged 60 years and above. The planned research group was established to 150 people (30 respondents from each partner country). However, the final number of respondents participating in the research was 84. Due to the unfortunate COVID-19 pandemic situation and still insufficient digital competences of the elderly (it is the area to work on), it was impossible to obtain the quantitatively assumed research group.

II.   Analysis of the collected empirical data

1.   Characteristics of respondents

The survey was conducted in May and June 2021. The largest number of responses came from Turkey and Germany and the smallest from Poland (Fig. 1).

Fig 1. Respondents by country of residence (data in numbers and %); N=84.
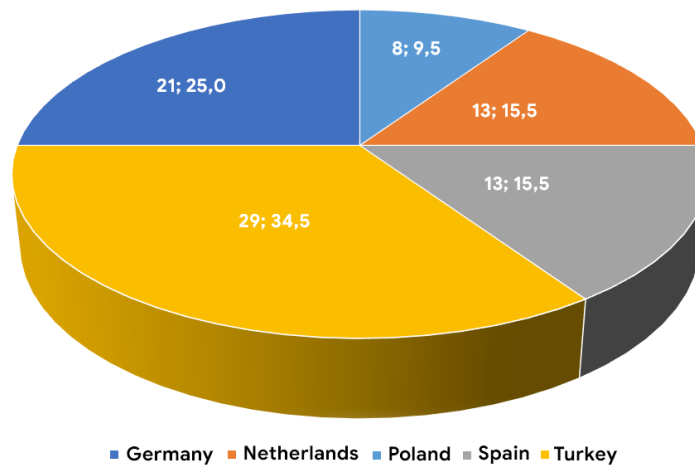
Source: own elaboration.

By place of work or activity and participation in various places, the most significant number of respondents are those who work in enterprises and those who are active in institutions or organizations (Fig. 2).
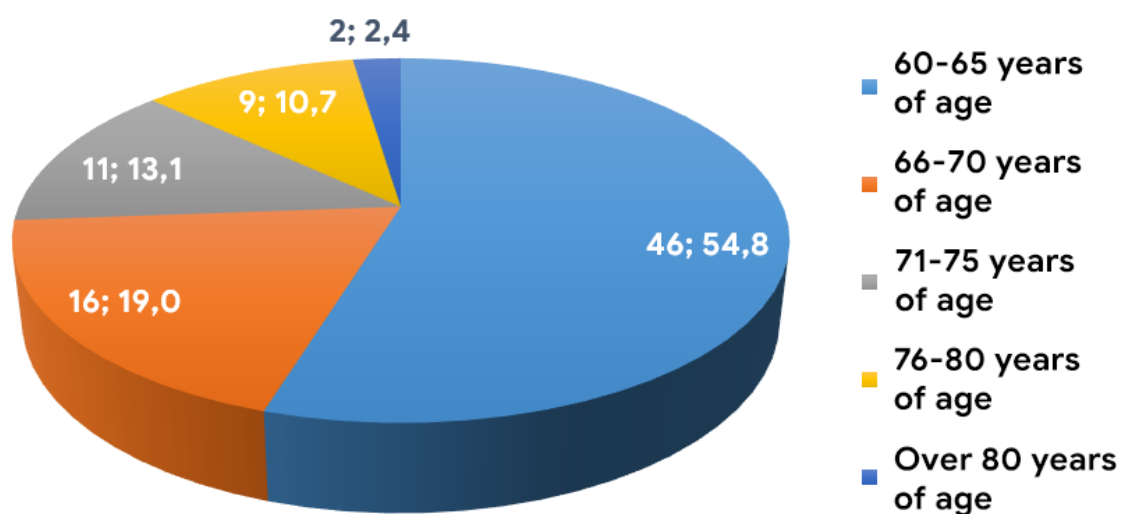
Fig. 2. Respondents by workplace, activity, or participation (data in numbers and %); N=84.
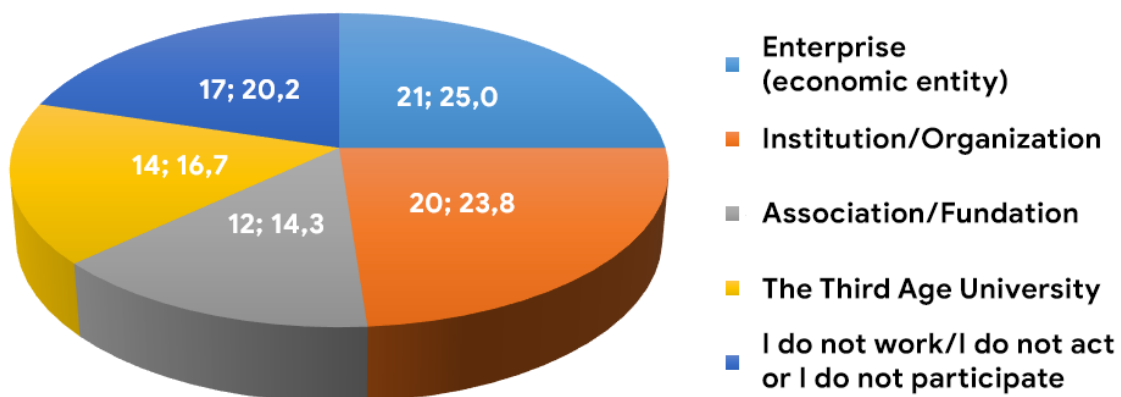
Source: own elaboration.

The largest group of respondents by age was between 60 and 65 years old, and the smallest group was over 80 years old (Fig. 3).
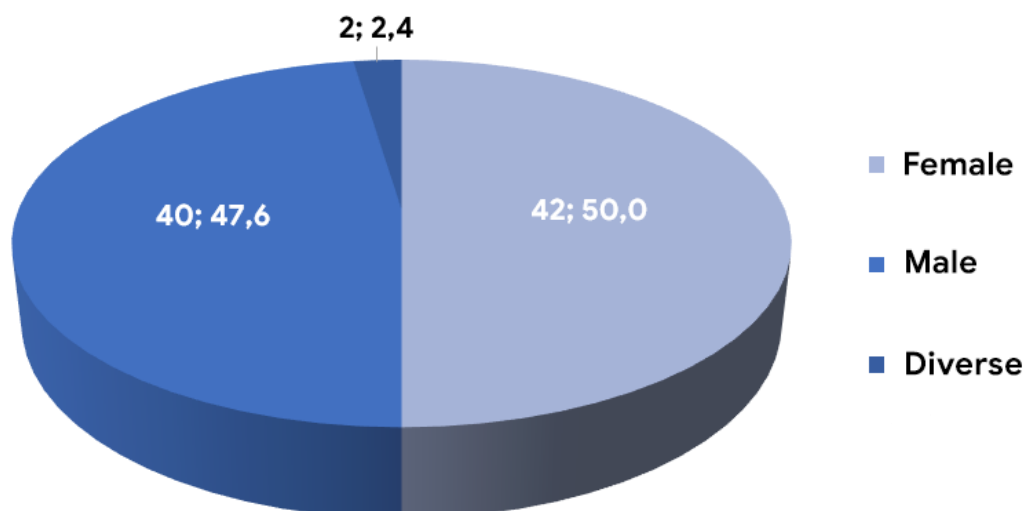
Fig 3. Respondents by age group (data in numbers and %); N=84.

Source: own elaboration.

Almost as many women as men participated in the survey (Fig. 4).
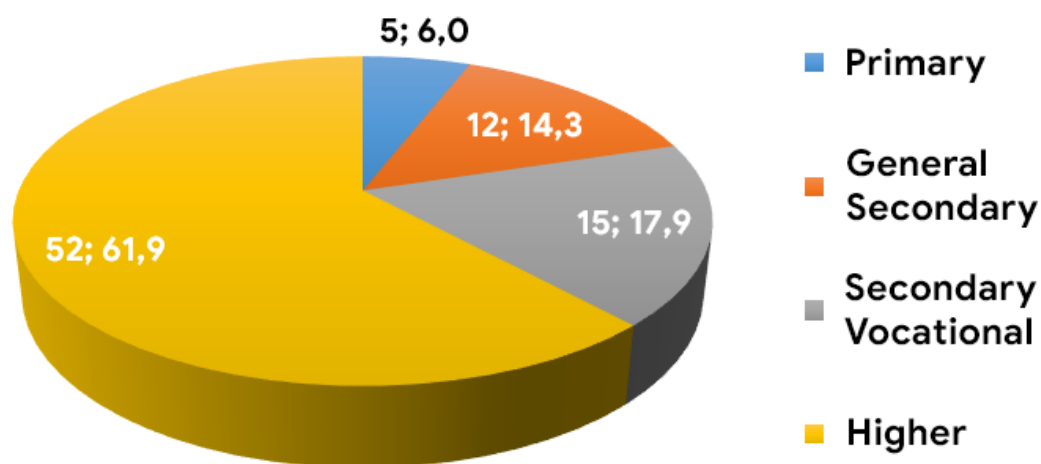
Fig 4. Respondents by gender (data in numbers and %); N=84.

Source: own elaboration.

The largest group of respondents by education level were those with higher education, including higher vocational education — 80% (Fig. 5).
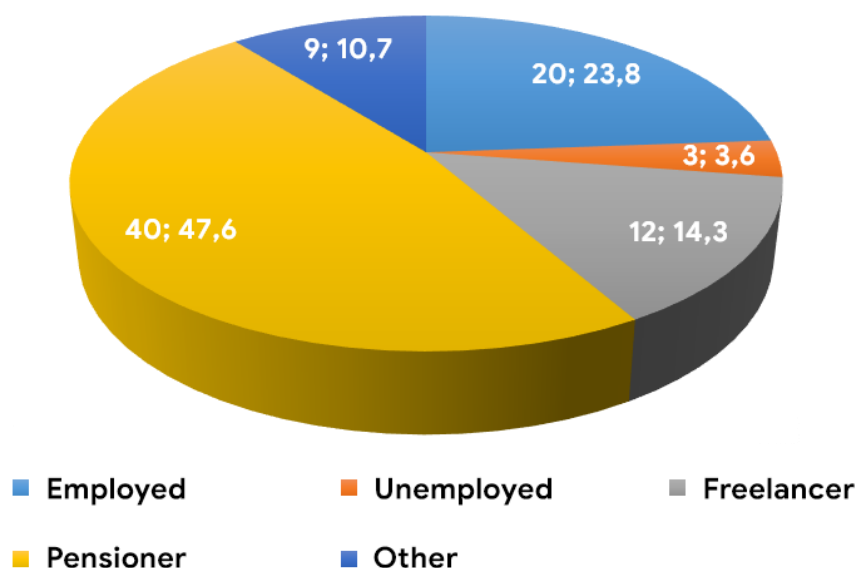
Fig 5. Respondents by education level (data in numbers and %); N=84.

Source: own elaboration.

Every second respondent was a pensioner, and every third one was an employee (employed and non-retired) (Fig. 6).

**Fig 6. Respondents by employment status (data in numbers and %); N=84.**

Source: own elaboration.

2.   Questionnaire analysis

Cross-generational collaboration in the work environment and in daily life as assessed by seniors

According to the respondents, Generation BB and Generations X and Y mainly were rated as having good interactions with other people different from them in the workplace (60.7%; 65.5% respectively). Generation Z was least frequently indicated as having good interactions with others different in age from them in the workplace. At the same time, when evaluating this generation, respondents indicated that this group's interactions with other generations in the workplace are dependent on many different factors — 59.5% of indications; Generation Y was also rated similarly - 46.4% of indications. One in six respondents rated interactions between Generation Z and other age-diverse people in the work-place as rather bad (16.7%). Likewise, interactions of Generation BB with different generations in the workplace were rated as rather bad by one in ten seniors (10.7%) (Fig. 7).

Fig 7. Evaluation of each generation's interaction with others different from them in the work environment as perceived by respondents (data in %); N=84.
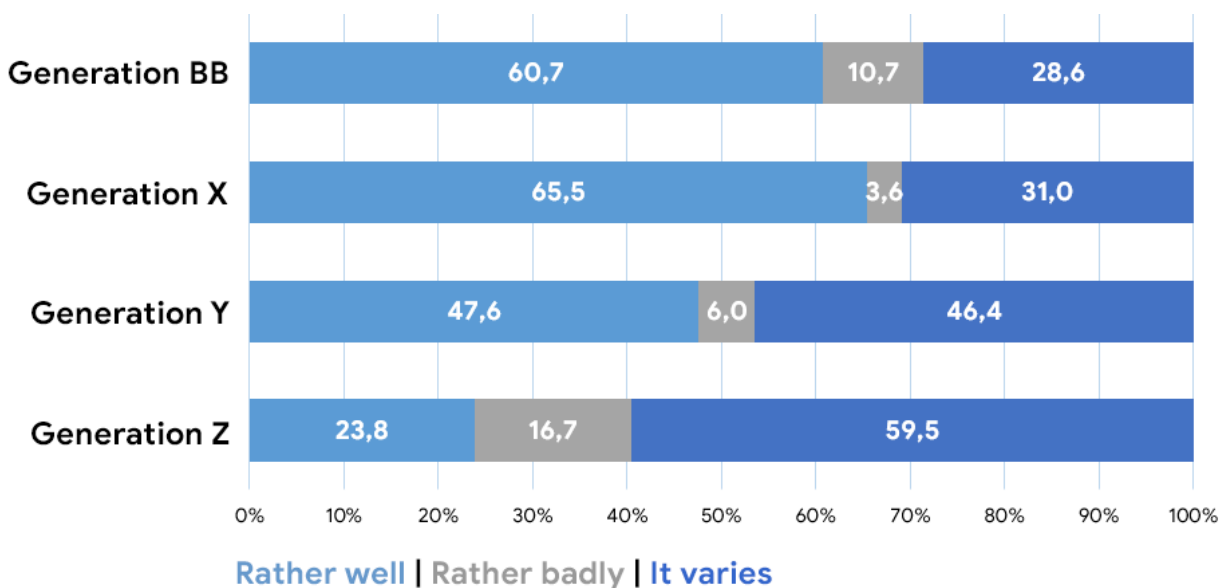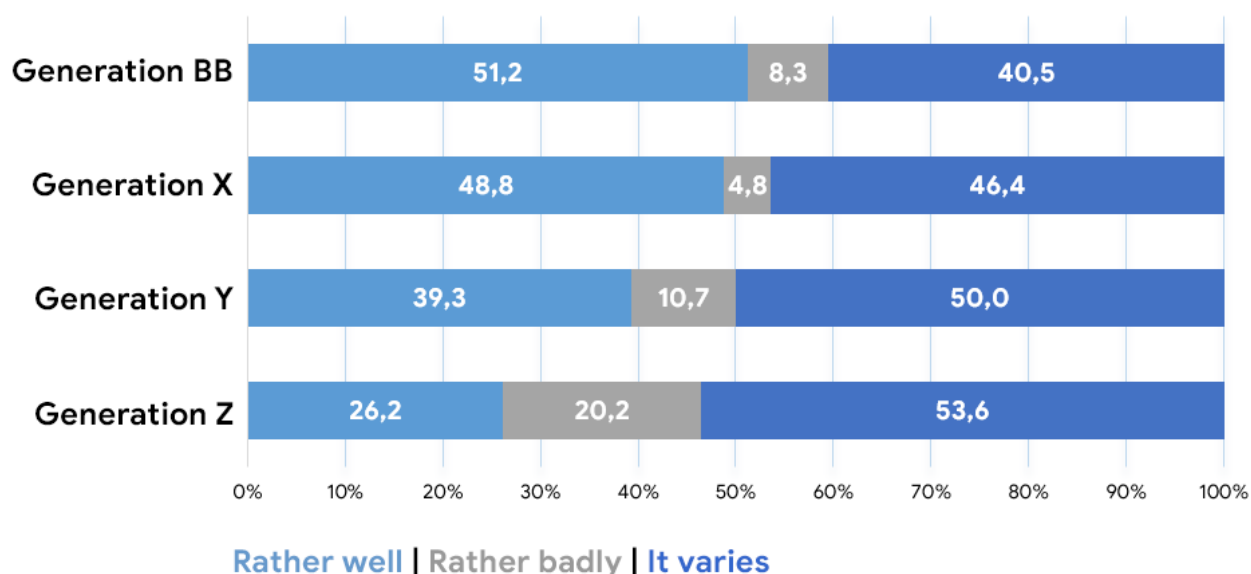

Source: own elaboration.

One in two respondents rated rather well the interactions in daily life between Generation BB and others different in age from them (50.2%), as did Generation X (48.8). One in three respondents also rated these interactions well among Generation Y (39.3%).

Seniors were least likely to indicate good interactions in the daily lives of Generation Z (26.2%). However, regardless of generation, respondents indicated that interactions between different generations depend on many factors — ranging from 40.5% in Generation BB to 53.6% in Generation Z (Fig. 8).

Fig 8. Evaluation of various generations collaborating with other people different from them in everyday life in respondents' opinions (data in %); N=84.
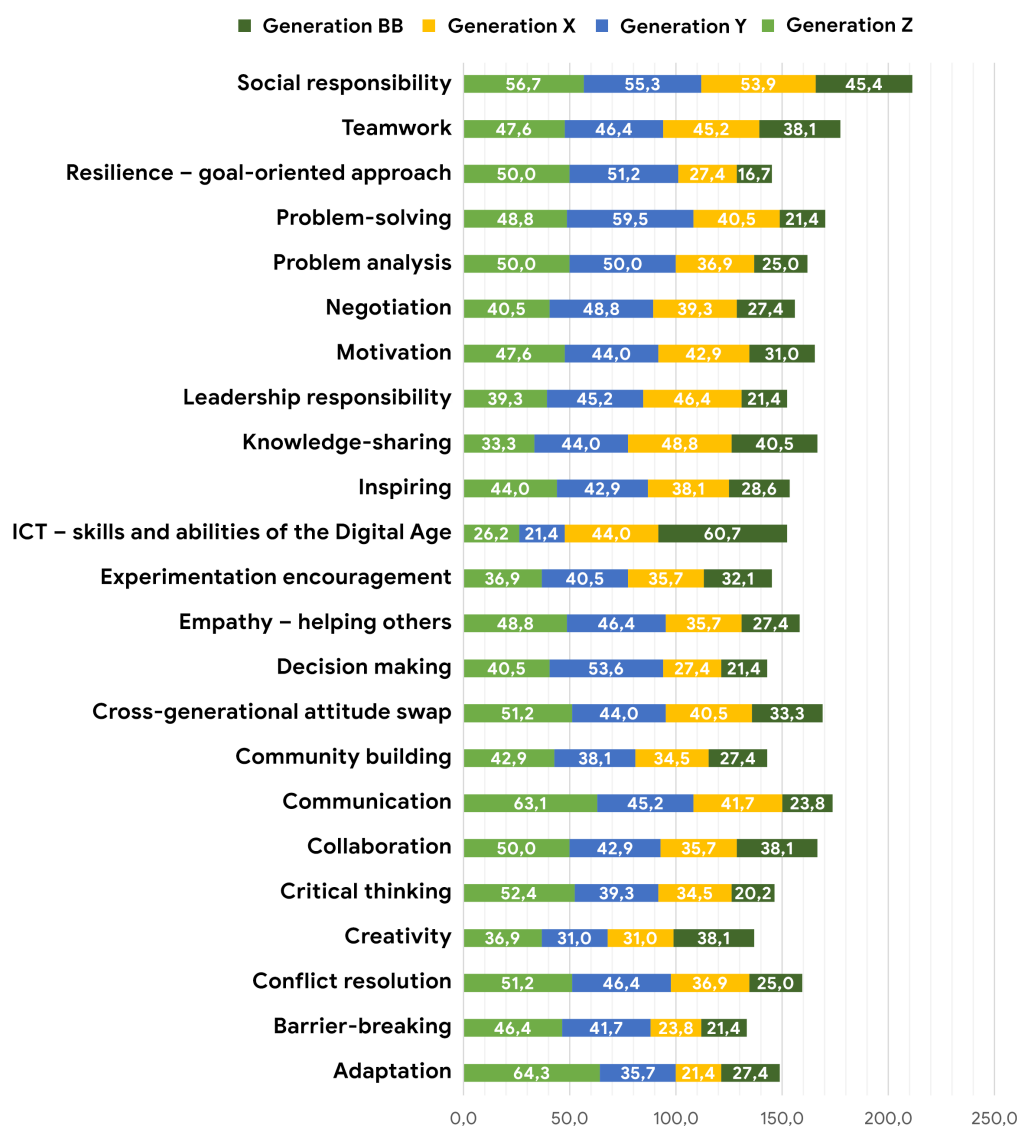

Source: own elaboration.

Social competences and personality traits essential for cross-generational collaboration in the opinion of seniors

According to the respondents, generation BB should develop competences connected with ICT — 60.7% indications, similarly to all other generations, social responsibility — 45.4%, and the ability to share knowledge — 40.5%. Generation BB lacks creativity — 42.9% of indications, tolerance — 39.3% and the ability to cope with stress in the workplace — 38.3%. According to the respondents, Generation X should develop social responsibility — 53.9%, the ability to share knowledge — 48.8%, and leadership responsibility — 46.4%. Generation X lacks tolerance —40.5% of indications, empathy — 31.0% and also openness to the needs and capabilities of others and the ability to cope with stress in the workplace — 29.8% each. Generation Y in turn: the ability to solve a problem — 59.5% indications, social responsibility — 55.3% and decision-making — 53.6%. Generation Y, according to respondents, has deficiencies in assertiveness, conflict resolution, and organization of own work — 41.7% indications each (Fig. 9-10).

According to seniors, to improve collaboration in the workplace, Generation Z should develop such competencies as adaptation — 64.3% of indications, communication — 63.1%, and social responsibility — 56.7%. In the opinion of seniors, the competences and attitudes necessary for collaboration between people which Generation Z lacks are mainly the ability to organize their work — 64.3% of indications, the ability to formulate a problem, search for a solution, the abilities to cope with stress in the workplace — 53.6% each and to communicate — 53.6%. Regardless of generation, among the personality traits most important for cross-generational collaboration seniors included: openness to experience — 50.0% of indications, trust — 48.8%, empathy — 41.7%, tolerance — 41.7% and communicativeness (Fig. 9-11).

Fig 9. Social competences that should be developed in a given generation to improve the cross-generational collaboration in the work environment in respondents' opinions (data in %); N=84.
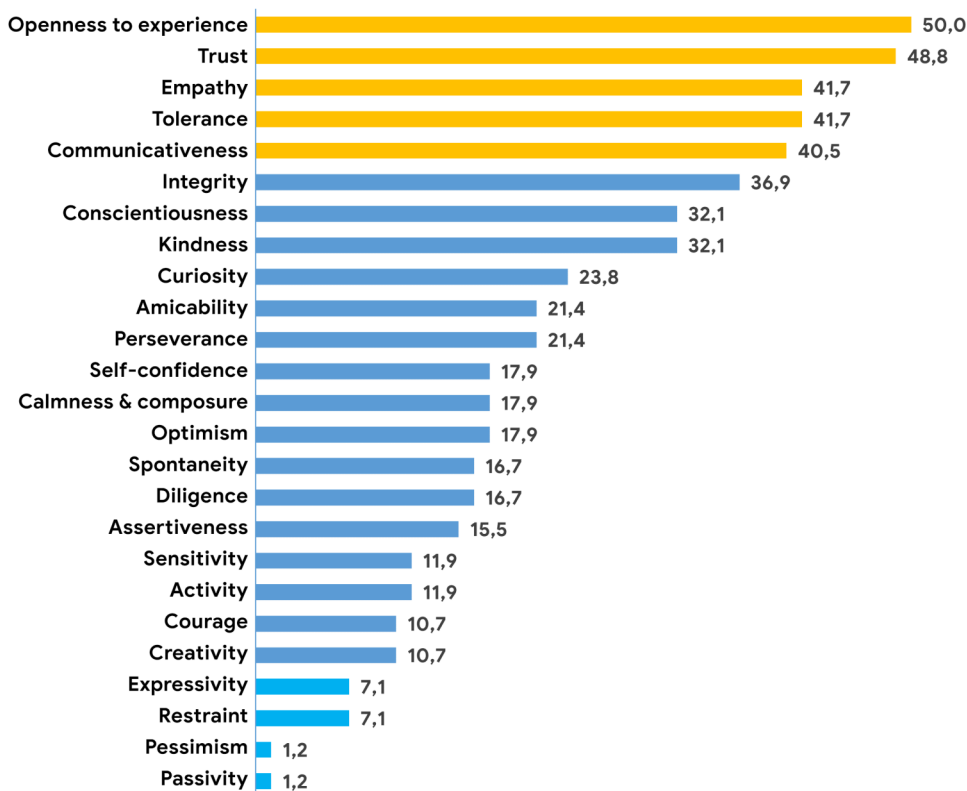

Source: own elaboration.

Fig 10. Social competences and attitudes necessary for collaboration in everyday life between people that different generations lack in respondents' opinions (data in %); N=84.
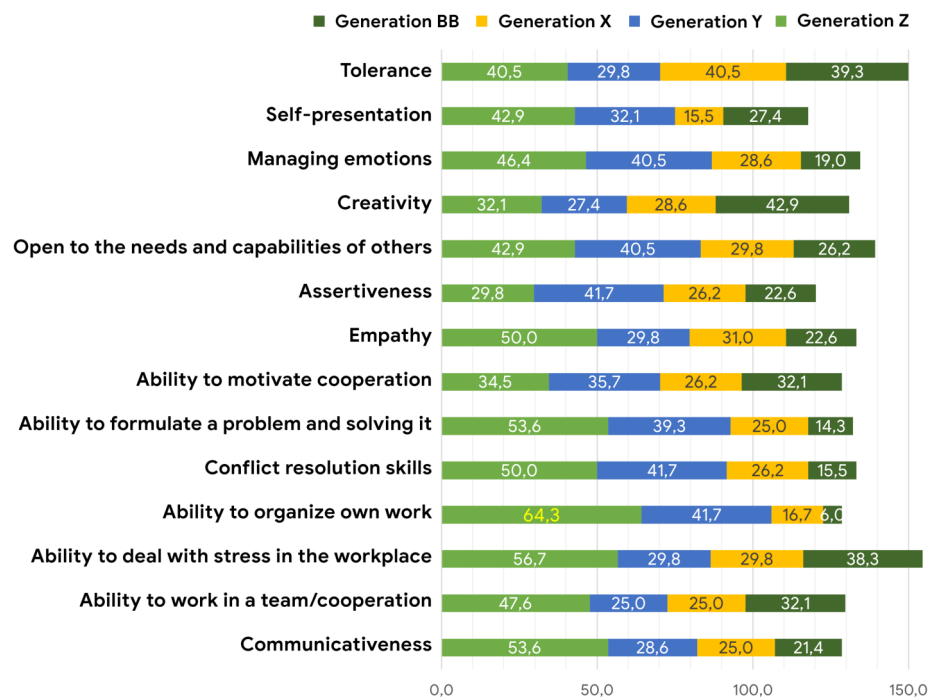
Source: own elaboration.

Fig 11. Personality traits most important for cross-generational collaboration in respondents' opinion (data in %); N=84.
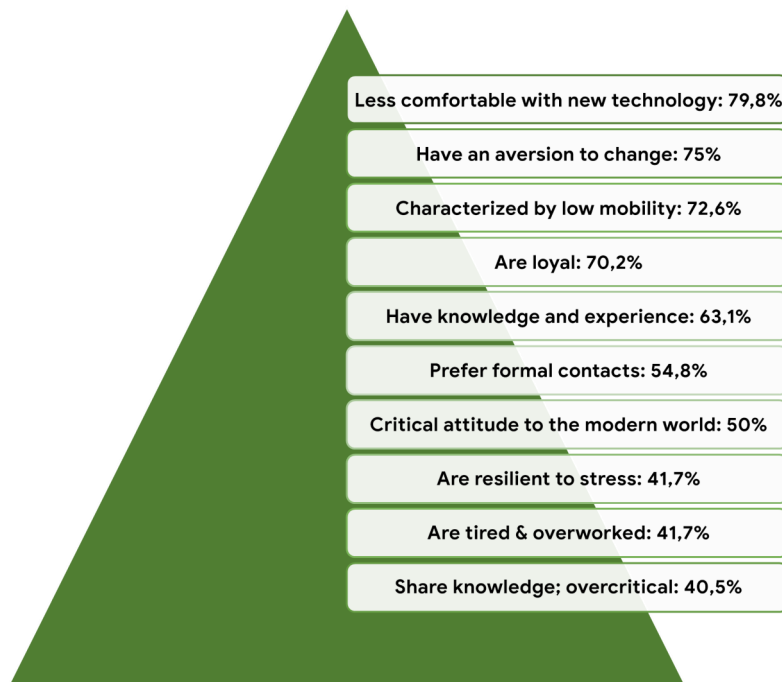

Source: own elaboration.

Characteristics of particular generations in the opinion of seniors

In the survey, respondents were asked to identify the characteristics of each generation. From a list of 49 features, we present here the Top 10 most frequently identified ones. See the Appendix 2 on p. 55 for details (Fig. 12-15).

Fig 12. Top 10 characteristics of the Generation BB.

Less comfortable with new technology: 79,8%

Have an aversion to change: 75%

Characterized by low mobility: 72,6%

Are loyal: 70,2%

Have knowledge and experience: 63,1%

Prefer formal contacts: 54,8%

Critical attitude to the modern world: 50%

Are resilient to stress: 41,7%

Are tired & overworked: 41,7%

Share knowledge; overcritical: 40,5%

Source: own elaboration.

Fig 13. Top 10 characteristics of the Generation X.

Are well organized: 58,3%

Manage themselves well in time: 58,3%

Have knowledge and experience: 51,2%

Identify with the company they work: 51,2%

Are hardworking and persistent: 50%

Ready to share knowledge with younger: 50%

Are tired & overworked: 48,8%

Are resilient to stress: 46,4%

Good working atmosphere is essential: 46,4%

Are committed: 44%
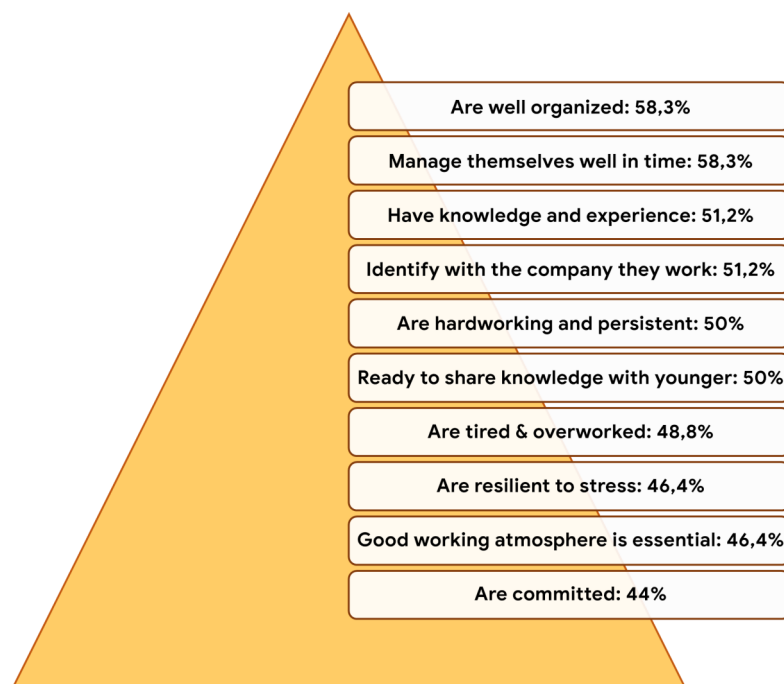
Source: own elaboration.

Fig 14. Top 10 characteristics of the Generation Y.

Adapt quickly to new situations: 65,5%

Speak foreign languages: 60,7%

Want to complete their qualifications: 58,3%

Show a willingness to learn: 56%

Work fast: 53,6%

Are well organized: 48,8%

Are positive about change: 48,8%

Seek change & new experiences: 48,8%

Have strong interpersonal skills: 47,6%

High financial expectations; are open: 47,6%
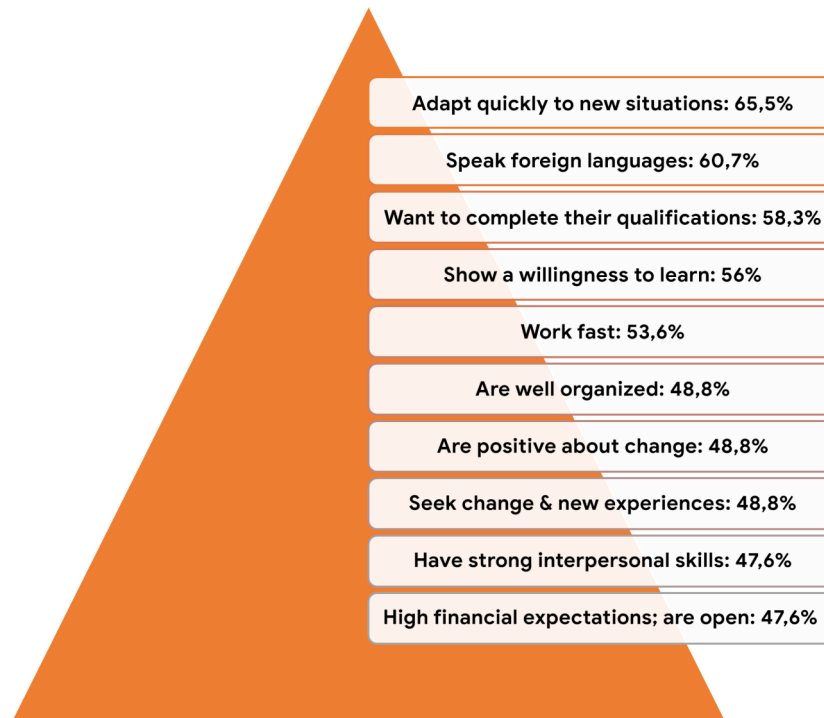
Source: own elaboration.

Fig 15. Top 10 characteristics of the Generation Z.

Have high digital competences: 76,2%

Have little knowledge & experience: 76,2%

Are impatient & impulsive: 73,8%

Have a distance from reality: 72,6%

Need support, praise & motivation: 69%

Decide on the spur of the moment: 69%

They get demotivated quickly: 67,9%

Break standards & traditions: 66,7%

Can't foresee the consequences: 66,7%

Difficulty in defining expectations: 63,1%

Source: own elaboration.

Positive aspects of cross-generational collaboration and areas that may be a source of various difficulties - in the opinion of seniors

The positive aspects of cross-generational collaboration are seen by the surveyed seniors as mainly related to exchanging knowledge and experience, acquiring new skills — 71.4% of indications, mutual learning — 59.6% and assistance in solving tasks and problems — 58.3%. On the other hand, the source of difficulties in collaboration between generations with the youngest generation (up to 18 years of age) according to respondents may be the attitude to work, work ethics and attitudes towards family life — 50.0% indications each, as well as attitude to learning and acquiring knowledge and skills — 46.4%. For Generation BB, in turn, these are the use of modern technologies — 72.6%, communication in foreign languages — 58.3%, and cultural diversity — 51.2%. Difficulties for Generation X may be mainly working conditions and salary expectations — 32.1%, communication in foreign languages — 29.8%, and the attitude to change in the workplace or education — 26.2%. For Generation Y, the difficulty may be caused by working conditions and salary expectations — 35.7% and ways of spending free time and attitudes towards family life — 20.2%. Respondents also indicated that the most frequent source of difficulties in collaboration for Generation Z might be the attitude towards work and work ethics — 36.9% of indications, attitudes towards family life — 33.3% and expectations towards others in the workplace or education — 34.5% (Fig. 16-17).

Fig 16. Positive aspects of cross-generational collaboration in respondents' opinions (data in %); N=84.

Source: own elaboration.

Fig 17. Areas that may be the most frequent source of difficulties in cross-generational collaboration in respondents' opinion (data in %); N=84.
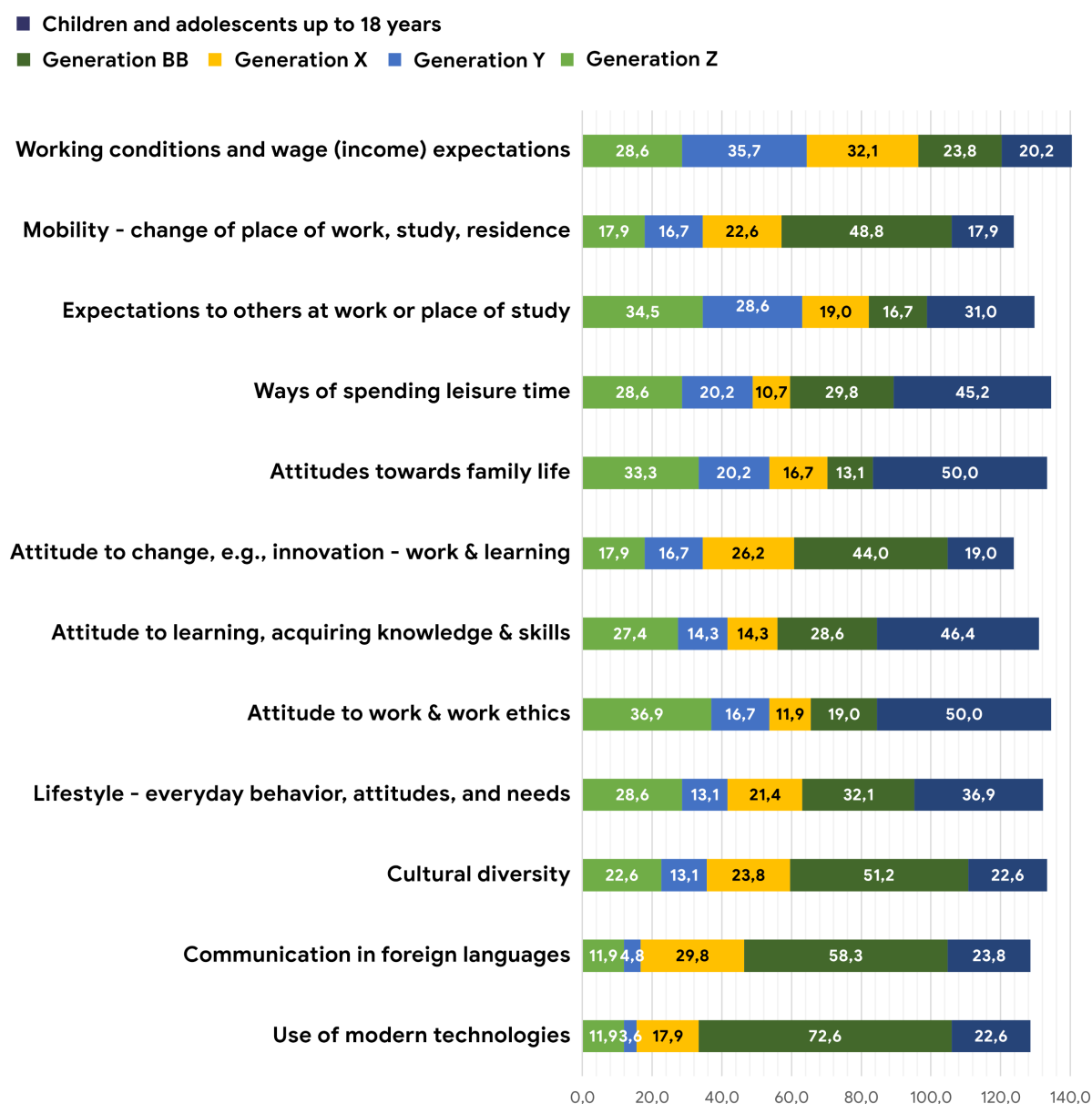
Source: own elaboration.

Social competencies and attitudes, as well as areas of daily life in which seniors would like to develop.

Every second surveyed senior would like to develop such social competences as teamwork and conflict resolution, and communication skills — 52.4%; 51.2; 45.2% respectively. On the other hand, self-presentation and ability to organize one's own work were indicated as the least frequently — 11.9%; 13.1% respectively (Fig. 18).
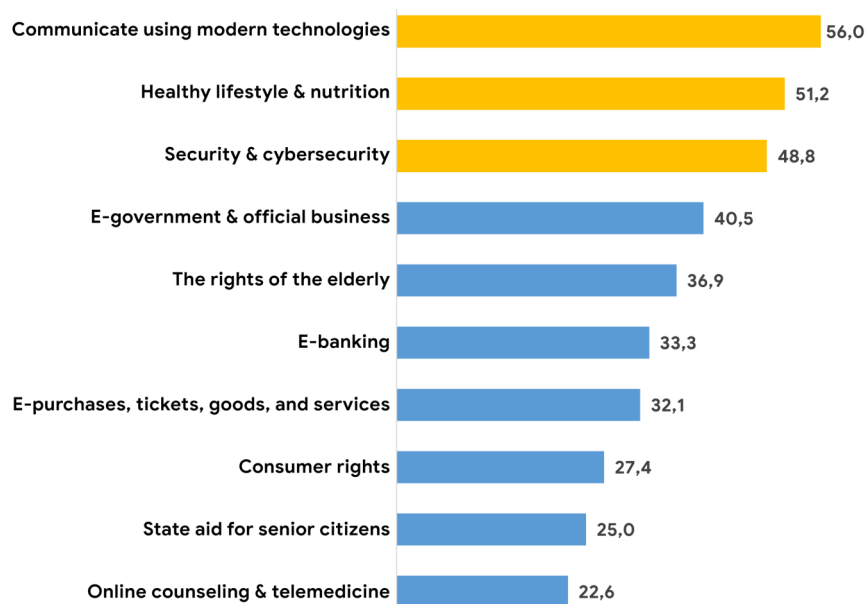
Fig 18. Social competences and attitudes the respondents would like to develop to improve cross-generational collaboration (data in %); N=84.
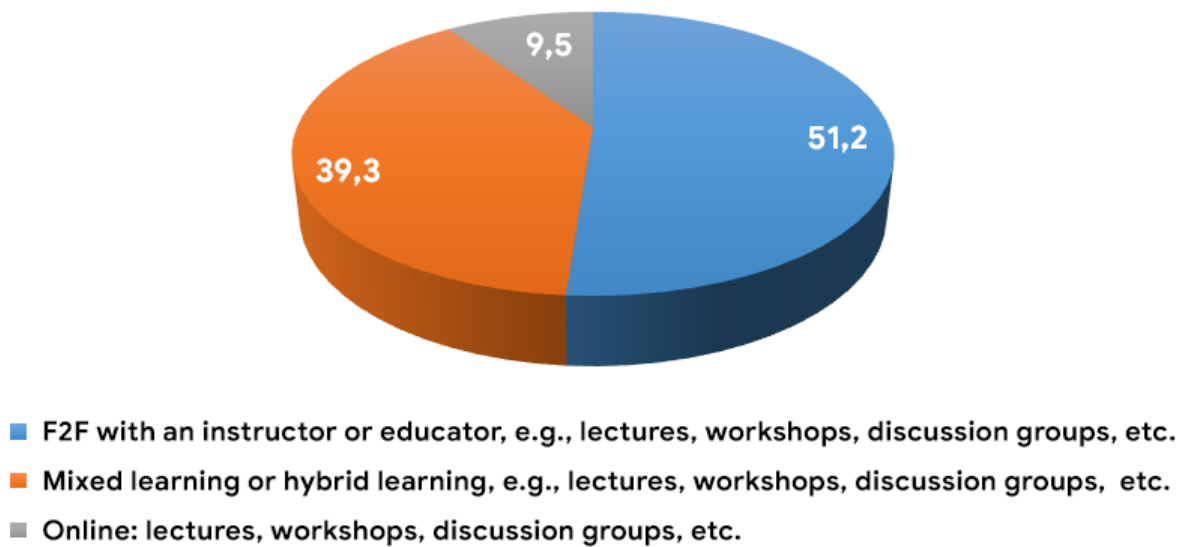

Source: own elaboration.

The most critical areas of life in which the respondents would like to broaden their knowledge and competences include, above all, communication with the use of modern technology — 56.0% of indications, healthy lifestyle and nutrition — 52.1%, security, and cybersecurity — 48.8%. In addition, every second respondent would like to broaden their knowledge and competences in direct contact with an educator, and every third one in a hybrid form (Fig. 19-20).

Fig 19. Areas of everyday life, in which the respondents would like to deepen their knowledge and develop competences (data in %); N=84.

Source: own elaboration.

Fig 20. Form of education most popular with respondents (data in %); N=84.

- ■ F2F with an instructor or educator, e.g., lectures, workshops, discussion groups, etc.
- ■ Mixed learning or hybrid learning, e.g., lectures, workshops, discussion groups, etc.
- ■ Online: lectures, workshops, discussion groups, etc.

Source: own elaboration.

Conclusions

1. Generation BB and Generations X and Y were rated mainly by respondents as those who have good interactions with others different from them in the work environment. On the other hand, Generation Z was least often indicated as having good interactions in the workplace. At the same time, this generation was characterized by seniors most often as having these interactions rather bad.

2. One in two respondents rated the interactions in daily life between Generation BB and others different in age from them rather well, similar to Generation X. One in three respondents also rated Generation Y interactions well. On the other hand, seniors were least likely to indicate good interactions in daily life by Generation Z.

3. According to seniors, to improve interaction in the workplace, Generation Z should primarily develop competences such as adaptability, communication, and social responsibility. The necessary competences and attitudes for collaboration between people, which Generation Z lacks in the opinion of the surveyed seniors, are primarily: the ability to organize their own work, the ability to formulate a problem and search for a solution, and the ability to cope with stress in the workplace and communication skills.

4. Generation BB should develop competences connected with information technology (digital age skills) to improve collaboration in the work environment. In addition, according to the respondents, generation BB lacks creativity, tolerance, and the ability to cope with stress in the workplace.

5. In the respondents' opinion, Generation X to improve interaction in the workplace, should develop social responsibility, the ability to share knowledge, and leadership responsibility. However, in terms of competences and attitudes, generation X lacks tolerance, empathy, and openness to the needs and capabilities of others, and the ability to cope with stress in the workplace.

6. To improve interaction in the work environment, Generation Y should develop problem-solving skills, social responsibility, and decision-making. However, according to the respondents, Generation Y has competence deficiencies in assertiveness, conflict resolution skills, and own work organization.

7. Regardless of the generation, the most critical personality traits for cross-generational collaboration were: openness to experience, trust, empathy, tolerance, and communicativeness.

8. Generation BB is less willing to use modern technologies, has an aversion to change, and is characterized by low mobility. Generation X is well organized, manages itself well in time, and has knowledge and experience. Generation Y is characterized by the ability to quickly adapt to new situations, learn foreign languages, and strive to complete their competences. In the opinion of seniors, generation Z is mainly characterized by: high digital competences, little knowledge, and experience, and is impatient and impulsive.

9. The positive aspects of cross-generational collaboration are perceived by the surveyed seniors primarily in exchanging knowledge and experience, acquiring new skills, mutual learning, and mutual assistance in solving tasks, problems, or crisis situations.

10. According to the respondents, the source of difficulties in collaboration between generations of the youngest generation (up to 18 years of age) may be the attitude to work and work ethics and attitudes towards family life and attitude to learning and acquiring knowledge and skills. For Generation BB, these are modern technologies, communication in foreign languages, and cultural diversity. Difficulties for Generation X can be mainly: working conditions and salary expectations, communication in foreign languages, and attitudes to change in the workplace or education.

11. Generation Y finds difficulties in dealing with working conditions and salary expectations, leisure activities, and attitudes towards family life. Finally, respondents indicated that the most common sources of problems in cross-generational collaboration for Generation Z might be attitudes towards work and work ethics, attitudes towards family life, and expectations of others in the workplace or education.

12. Every second surveyed senior would like to develop such social competences as teamwork, conflict resolution, and communication skills. However, self-presentation and the ability to organize one's work were mentioned least frequently.

13. The most critical areas of life in which the respondents would like to broaden their knowledge and competencies include, above all: communication with the use of modern technology, healthy lifestyle and nutrition, security, and cybersecurity.

14. Every second respondent would like to broaden their knowledge and competences in direct contact with an educator, and every third in a hybrid form.

Appendix 2: Generational characteristics

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STICHTING
on EDUCATION
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LIBERATING STRUCTURES

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