



**EUROPEAN RESEARCHERS'NIGHT 2017
FAWORIT 722562**

**DELIVERABLE 3 PERIOD 2
REPORT ON THE IMPACT ASSESSMENT**

Contents

ABOUT THE IMPACT ASSESSMENT.....	3
1. Methodology	3
1.1 Contact sheets	3
1.2 Omnibus nationwide survey	3
1.3 On-line survey	3
2. The respondents: main social and demographical characteristics	4
2.1. Demographic and social characteristics of our visitors	4
2.2. Social background of our visitors	7
2.3. Personal contact with scientific research	8
3. Professional aspirations after graduation	10
3.1. Professional plans and decision making	10
3.2. The qualities of "the perfect job"	10
4. Research and scientists	12
4.1. The social representation of the researcher	12
4.2. The notoriety of Hungarian scientists	13
4.3. Prestige ranking of professions	13
5. Participation at the European Researchers' Night 2016	16
5.1. Information about the Event	17
5.2. Programmeme preferences	18
Data protection policy	19

ABOUT THE IMPACT ASSESSMENT

The impact assessment study measures the changes in the social attitudes and perceptions of the researcher, focusing on the main target group, the 5–24 years old generation before and after the events. The socio-demographic characteristics of the participants and the general perception of the researcher are presented through qualitative and quantitative data.

- Before the event we conducted a secondary analysis of existing statistical data, of previous surveys and studies presenting the results and the data from the European European Researchers' Night programmemes of 2010–2016 are the basis of the comparison;
- a short (omnibus) survey of a representative sample of the Hungarian population to assess the current situation was used;
- contact sheets were collected during the event;
- an on-line survey after the event was conducted among the participants of the event;
- semi-structured interviews were conducted with MA, PhD students and early stage researchers from the field of social sciences and natural sciences.

1. Methodology

1.1 Contact sheets

To better understand the changes of attitudes towards researchers and the perception of researchers a study was carried out among a large group of attendants. The collection of contact-sheets and the cooperation with schools ensures that our results reflect the opinion of the visitors. We were present across the country: in 2016 at 11 venues in Budapest and at 7 institutions in other major cities of Hungary. Totally in 2016 3,895 visitors filled out the contact sheets anonymously and voluntarily while in 2017 4,002 visitors filled out them. Through the contact sheets we collect basic socio-demographic data (gender, the age, the educational level, occupation, place of residence), e-mail addresses and phone numbers.

1.2 Omnibus nationwide survey

A short questionnaire¹ (6 minutes long) was conducted to describe the attitudes of the Hungarian population towards science as a career, scientists in general and Marie-Curie fellows in particular.

1.3 On-line survey

After the Event, using the e-mail addresses obtained through the contact sheets, the visitors' opinions were analysed in a 15 minutes long on-line survey. The survey helps us to describe the socio-demographic characteristics of the attendants of the programmemes, also to better understand the perception of researchers' role in society and to identify the most effective activities. Together with the omnibus survey we can compare the differences between the attitudes toward researchers and expectations of participants toward a career as a researcher in the future of the Hungarian population and the participants of the Event. 1,037 replies were received in 2016 from the respondents of the contact sheets and 1,001 replies in 2017.

¹ The 5 minutes long survey was the part of a so-called omnibus survey, and it is representative on the Hungarian population over 18.

2. The respondents: main social and demographical characteristics

This section of the report presents the most important social and demographic characteristics of the visitors (based on the results of the contact sheets) and the respondents of the online and omnibus survey. The contact sheets are based on the on-the-spot responses of the visitors and the online questionnaire was filled out by 1001 people from the ones who provided data on the contact sheets. Furthermore, the omnibus national survey gave us the chance to reach out to 1,000 people across Hungary.

In the following we present the gender and age composition of the respondents, further the report describes their residential situation and their educational background. Then we present their economic status, and the typical groups of visitors.

2.1. Demographic and social characteristics of our visitors

According to the contact sheets that provide the largest sample, women are in majority among the visitors, with 55.5% in 2015 and 60.2% in 2017. The tables show that the educational level and the age of the visitors are interconnected: the average visitor was only 27 years old in 2017, and 25.48 in 2015, the most of them is 17 years old in 2017, while only 16 in 2015, and only half of them are older than 21 years (17 in 2015). This data explains the two highest percentage of the educational level (elementary and high school) and the 62.9% (59.8% in 2015) is a student by occupation, significantly represented from the capital, Budapest.

However, in the case of the national omnibus survey, the average age of the respondents was much higher than the visitors of the Event, namely 47.96 years. The distribution of the educational level is dependent on this result; the majority of the respondents are graduates from school and 54, 8 % of them are employed. From the 1000-respondent sample it is important to highlight that 52, 8 %, a significant majority declared to live in a town (not in the capital), therefore the Event for them is less accessible.

Table 2.1. Age of respondents (years)

Age	Contact sheets		Online survey		Omnibus survey	
	2015	2016	2015	2017	2014	2016
Mean	25.48	25.44	27.2	27	47.96	48.1
Median	21	21.0	22	21	39,00	48.0
Mode	16	21.0	17	17	71	59.0
<i>Minimum:</i>	2	1.0	10	9	18	18.0
<i>Maximum:</i>	77	77.0	74	77	89	88.0
Standard deviation		12.4		13.9		17.62
N Total Valid	2938	3997	615	972	1000	1000

Source: "European Researchers' Night" Impact Assessment, Contact Sheets, Omnibus and Online survey 2017

Table 2.2. The gender composition of the visitors

Gender	Contact sheets		Online survey		Omnibus survey	
	2015	2017	2015	2017	2014	2016
Male	43.6	48.3	44.5	39.8	49.8	49.8
Female	56.4	51.7	55.5	60.2	50.5	50.5
Total	100.0	100.0	100.0	100	100.0	100.0
N Total Valid	2940	3998	631	992	1000	1000

Source: "European Researchers' Night" Impact Assessment, Contact Sheets and Online survey, 2017

Table 2.3. The highest educational level of the visitors (%)

Educational level	Contact sheets		Online survey		Omnibus survey	
	2015	2017	2015	2016	2015	2016
Max. 8 years elementary	35.9	31.9	35.1	40.7	28.8	28.8
Vocational school	1.8	2.4	0.2	0.7	22.2	22.2
High school graduate	25.9	34.4	30.0	26.8	31.3	31.3
Graduate school	11.4	10.2	-	-	14.1	17.7
Higher education	22.1	21.1	34.6	29.9	3.6	
Other	2.8	4.0	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0
N Total valid	2881	3979	630	999	1000	1000

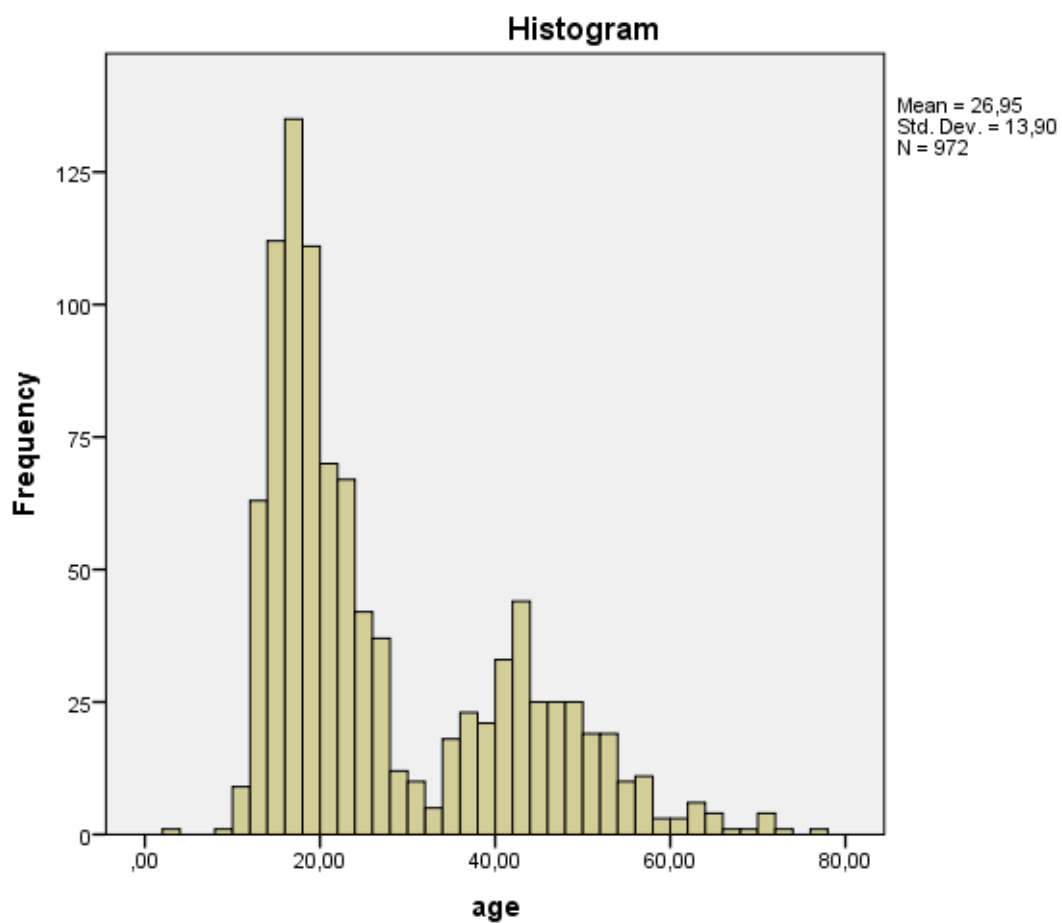
Source: "European Researchers' Night" Impact Assessment, Contact Sheets, Omnibus and Online survey 2017

Table 2.4. The residence of the respondents – contact sheets

Residence types	Contact sheets		Online survey		Omnibus survey	
	2015	2017	2015	2017	2014	2016
Budapest	57.7	40.3	55.0	38.7	18.1	18.1
County capital	16.4	20.1	9.5	19.9	17.9	17.9
Town	17.5	11.4	23.5	25.1	35.0	35.0
Village	4.6	21.3	10.6	12.8	29.0	29.0
Other	3.8	6.9	1.4	3.5	-	
Total	100.0	100.0	100.0	100.0	100.0	100.0
N Total valid	2940	3995	631	998	1000	1000

Source: "European Researchers' Night" Impact Assessment, Contact Sheets, Omnibus and Online survey 2017

Figure 2.1. The age of respondent according to the online survey



2.2. Social background of our visitors

In order to describe the social and economic status of our visitors we used a general indicator as the occupation, but we included also the educational level of the parents to the survey, because our previous results showed us that the majority of the visitors are high school and university students.

According to the contact sheets, our presumption of previous years was proven by the fact that 58% of the visitors declared him/herself as a student. The second biggest group was of the employees with 27.6% in 2017.

Table 2.9. The occupation of the respondents – contact sheets (%)

Occupation	2015	2017
Student (high school, BA/BSc, MA/MSc)	59.8	62.9
Employee	30.2	27.6
Entrepreneur	4.9	5.9
Retired	1.2	0.9
Other	3.9	2.7
Total	100.0	100.0
N Total valid	2891	3936

Source: "European Researchers' Night" Impact Assessment, Contact Sheets, 2014-2017

Table 2.10. The occupation of the respondents (%)

Occupation	Online survey 2014	Online survey 2017	Omnibus survey 2014	Omnibus survey 2016
Student (high school, BA/BSc, MA/MSc)	-	60.8	0.6	4.6
Employee	63.0	25.4	54.8	52.43
Employee (has subordinate)	11.5	5.0	-	3.11
Entrepreneur	12.0	4.2	5.1	4.85
Retired	4.6	1.5	31.0	29.5
Seasonal worker	1.1	0.1	-	-
Works in the household	1.4	0.1	-	4.8
Unemployed	2.0	0.8	-	3.7
Other	4.3	2.0	8.5	-
Total	100.0	100.0	100.0	100.0
N Total valid	349	392	932	993

Source: "European Researchers' Night" Impact Assessment, Omnibus and Online Survey, 2014-2017

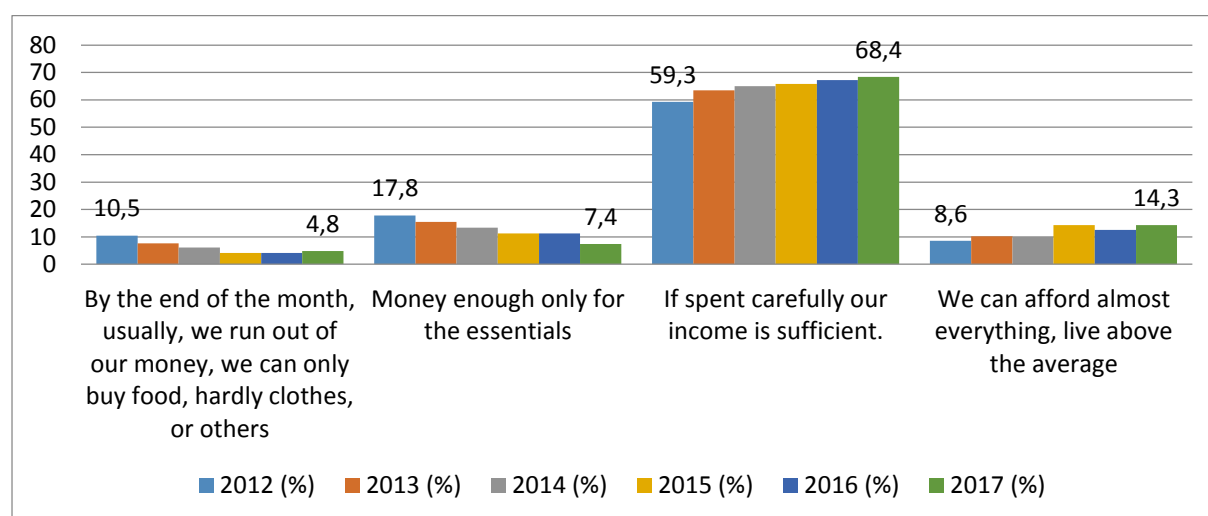
Table 2.11. The highest educational level of the parents of the respondents – online survey

Educational level	father (%)	mother (%)
Max. 8 years elementary	3.8	5.2
Vocational school	20.0	13.5
High school graduate	34.5	36.2
Higher education (university, post-graduate, or PhD)	41.6	45.2
Total	100.0	100.0
N Total valid	990	990

Source: "European Researchers' Night" Impact Assessment, Online Survey, 2017

The following table shows a subjective data on the financial situation of the visitors. Respondents were asked to assess their own financial possibilities by choosing one or the other option. We decided not to ask for exact sums of money, since it seemed unlikely for students, who were the majority of our respondents to be familiar with their parents' income. The table compares the data of the years between 2012-2017. The percentages show clearly that more than half of the respondents consider themselves in the middle, or the average, who have to economise, but live on decent standard; our data show that their proportion grows continuously.

Figure 2.2. Self-assessment of the family's financial situation



Source: "European Researchers' Night" Impact Assessment, Online Survey, 2012-2017

2.3. Personal contact with scientific research

Interviewees were asked whether they had researchers in their network of relations. 3 categories were set, namely family member (the closest), family friend, friend and acquaintance (the farthest). The background of the significant gap in the comparison presented in table 2.13. is the fact that the majority of the online survey's respondents were high school and university students, consequently they have greater chance to have personal contact with scientific research and researchers themselves. The data show, that the bias between the visitors and the everyday people is stable also across the years.

Table 2. 13. Researchers in the respondents' network (%)

	Omnibus survey		Online survey	
	2014	2016	2014	2017
A family member working as a researcher.	1,6	2.7	22.0	24.9
A family friend working as a researcher.	1,4	3.4	25.4	29.2
A friend working as a researcher.			30.0	29.9
An acquaintance working as a researcher.	4,6	6.0	62.1	66.4

Source: "European Researchers' Night" Impact Assessment, Omnibus and Online Survey, 2014, 2017

3. Professional aspirations after graduation

3.1. Professional plans and decision making

In the online survey, information was requested on how the students reach their decision to choose a profession. The result is an outstanding majority on the family's side in decision-making with 83, 4% in 2015, 86% in 2017.

Table 3.1. Guidance and assistance in decision making for the years ahead – online survey

	2014 %	N of respond	2017 %	N of respond
Family members	83,4	789	86.0	981
Teachers at my school	55,7	758	56.0	959
Friends, classmates	49,3	761	51.6	956

Source: "European Researchers' Night" Impact Assessment, Online Survey, 2014, 2017

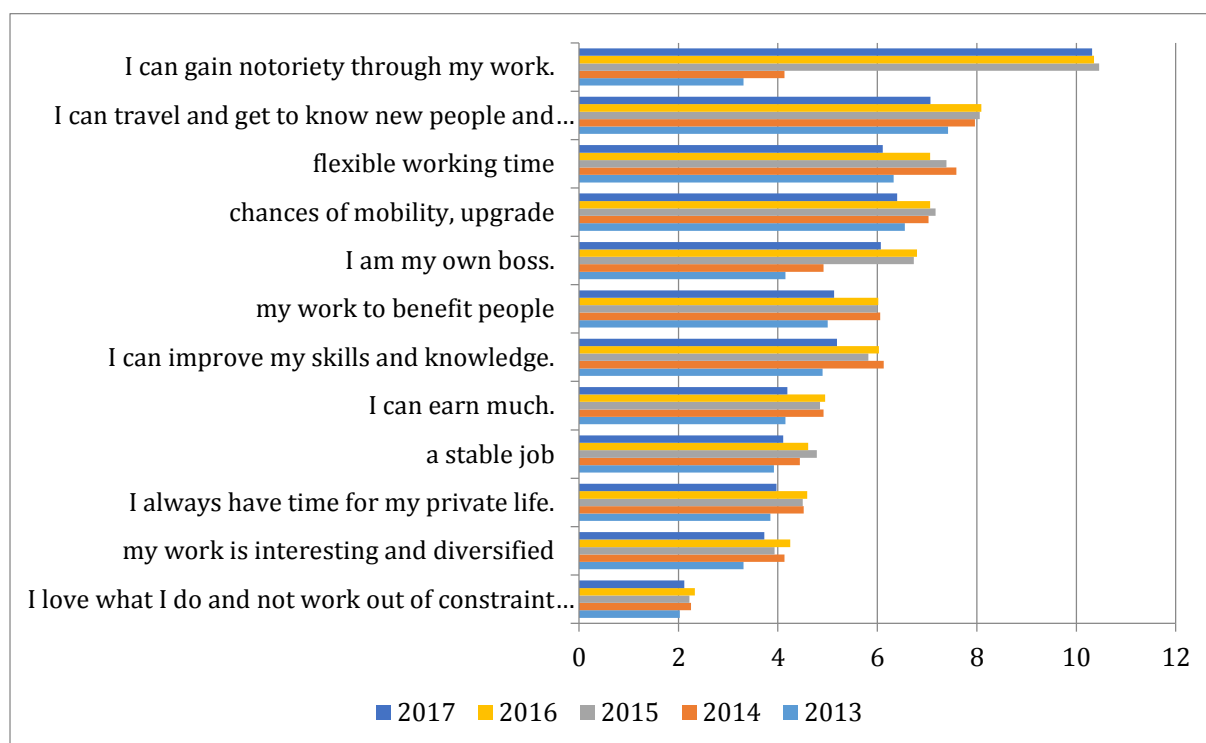
3.2. The qualities of "the perfect job"

Having seen the result about the decisiveness of the opinion, advice, or sample of family members the next step was to know on what line the students would choose their future job, i.e. "What are the characteristics of the perfect job?". The data from 2013-2017 were available for comparison with the actual results in the online survey and omnibus survey.

As the tables below show, according to the 2013 online survey results the most important characteristics of a good job are: *loving it and doing it without constraint; benefit people; provide notoriety; interesting and diverse*. The 2014-2017 online survey results are not significantly different from this, but the stability of the job and time for private life came into the picture. However, if we take the omnibus survey results for comparison, we see a divergent picture in the following: the *stability and high salary* are the two most important characteristics, which are followed by the *love for the job and work without constraint or routine and by having time for private life*.

This divergence is due to the fact that the majority of the respondents of the online survey is student-age, but the majority of the omnibus survey is above 40 years. The high salary is only in the fourth place in the ranking for student-age people, but for elder ones it is almost the first one (18, 9% of the respondents put it on the 1st place, 19% was the love for the job).

Figure 3.1. Characteristics of the ideal profession



Source: "European Researchers' Night" Impact Assessment, Online Survey, 2013-17

Table 3.2. Characteristics of the ideal profession (%) – omnibus survey

Characteristics	Importance			
	1 st	2 nd	3 rd	4 th
I always have time for my private life.	7.6	9.3	10.9	12.0
I can gain notoriety through my work.	1.7	2.4	2.8	2.0
I can improve my skills and knowledge.	4.9	4.0	4.2	3.6
My work to benefit people	5.1	4.3	4.2	5.3
I can travel and get to know new people and places.	2.9	3.0	2.6	3.5
I am my own boss.	8.0	6.4	8.8	7.2
I love what I do and not work out of constraint or routine.	12.0	14.8	9.7	10.3
a stable job	19.0	16.0	17.5	13.9
flexible working time	5.8	8.3	6.4	6.9
chances of mobility, upgrade	6.1	5.0	4.7	5.6
my work is interesting and diversified	8.2	8.1	11.5	9.9
I can earn much.	18.9	18.3	16.7	19.8
Total	100.0	100.0	100.0	100.0
N Total Valid	1000	1000	1000	1000

Source: "European Researchers' Night" Impact Assessment, Omnibus Survey, 2016

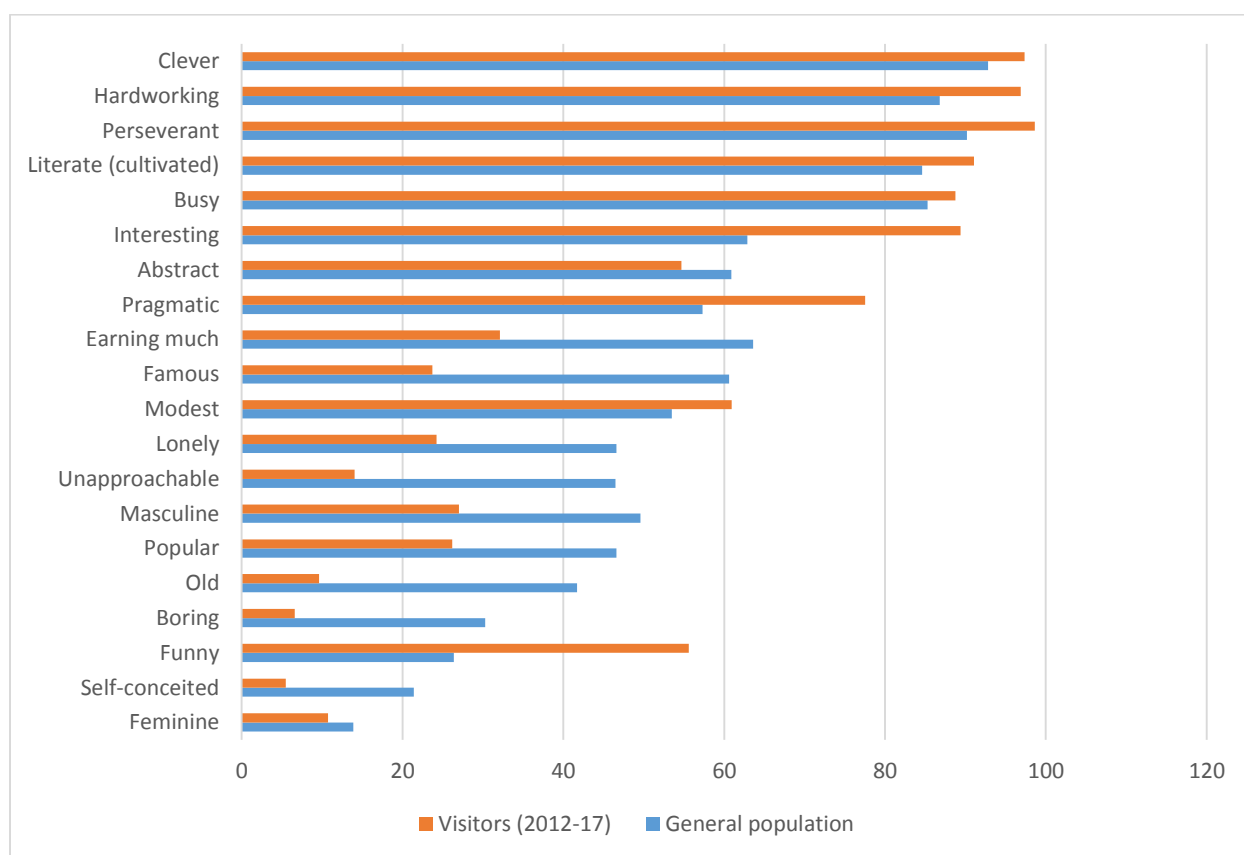
4. Research and scientists

4.1. The social representation of the researcher

This sections deals with the data about how the researcher is seen by people. The following figure contains different characteristics that relates to the personality of the researcher. The respondents were asked to mark which are relevant and not in case of a researcher. The figure presents the result of the five online surveys (conducted between 2012-2017) comparing with the results of the omnibus national survey of 2017.

The two surveys' results are similar regarding certain characteristics. The researcher is considered as a *clever, cultivated, perseverant, hardworking, and busy* person. However, there are huge differences.

Figure 4.1. Characteristic traits of the researcher (%)

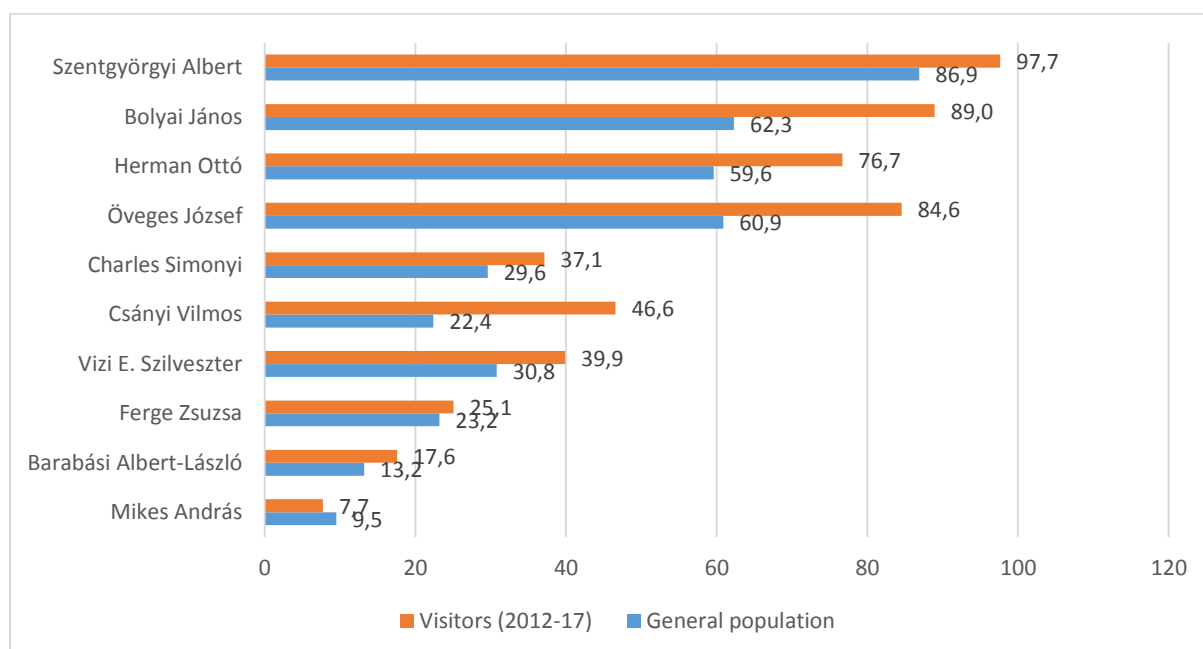


Source: "European Researchers' Night" Impact Assessment, Online Survey, 2013-17; Omnibus 2016

4.2. The notoriety of Hungarian scientists

The previous figure allow to state that respondents do not consider scholars well-known. We directly asked in both online and omnibus surveys about the familiarity of certain Hungarian scholars. The most famous scholar is Szentgyörgyi Albert, doctor and pharmacologist, Nobel-prize holder in each year more than 90% of the respondents knew his name. The second most famous is Bolyai János, the famous mathematician. His name was familiar to around 89% and ~64%. Herman Ottó, the famous polyhistor, who is known by 84.0% and 60.3% of the respondents of our survey is the third one. Öveges József, in the fourth place, is a famous teacher, who also had a TV and radio scientific programmemes. Vízi E. Szilveszter, a medical scientists, also a former-president of the Hungarian Academy of Sciences, and a well-known figure of the Hungarian scientific scene cannot be considered widely known. Also Csányi Vilmos (an ethnologist) and Charles Simonyi (IT specialist, businessman, and hobby astronaut) are not well-known, despite their presence in the mass-media. The ranks seems to be quite stable across the years.

Figure 4.2. The notoriety of Hungarian scientists (%)

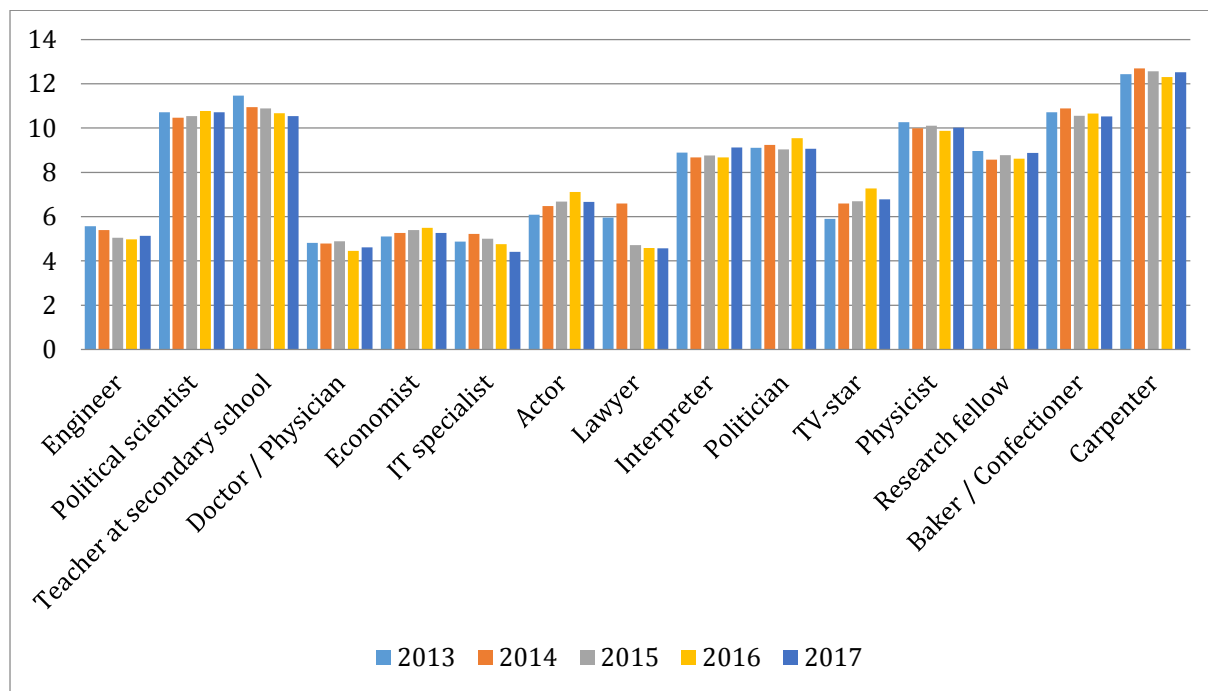


Source: "European Researchers' Night" Impact Assessment, Online Survey, 2013-17 Omnibus Survey 2016

4.3. Prestige ranking of professions

On all surveys, online and omnibus, we asked the respondents to rank the listed professions according to their preferences. The result also helped us to discover if the researcher's career is attractive to people, especially to the youth, or not. Firstly, the online survey's figure contains data from 2013-2015 as well and in comparison with 2016, we can see that there are only slight differences among years. In 2013, people marked only the *lawyer* as the most preferred profession, but in 2014, the *economist* came also in the first place together with the lawyer. On second places the *actor* remained in both years, and in 2014 *doctor* came with it, too. In the omnibus survey of 2014, the doctor and the lawyer were the most popular in the preference list. However, many people marked the engineer, economist, TV star and actor as preferable professions, as well.

Figure 4.3. Ranking of professions – online survey



Source: "European Researchers' Night" Impact Assessment, Online Survey, 2013-17

Table 4.5. Ranking of professions (%) – omnibus survey

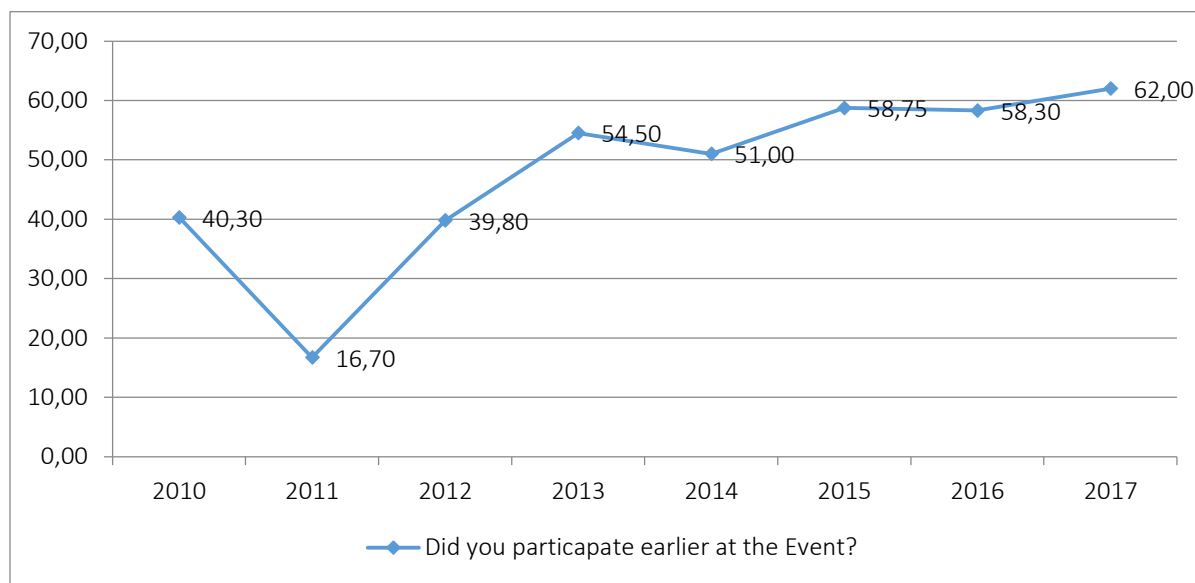
Professions	Attractiveness			
	1 st	2 nd	3 rd	4 th
Engineer	9.9	10.2	8.3	7.5
Political scientist	1.2	1.3	2.9	1.9
Teacher at secondary school	2.7	2.6	3.3	3.8
Doctor / Physician	14.9	13.3	13.0	15.4
Economist	8.2	6.7	7.7	6.8
IT specialist	11.6	9.3	8.9	10.7
Actor	8.8	11.3	10.5	9.5
Lawyer	15.9	14.5	17.7	16.8
Interpreter	2.9	3.2	2.6	2.2
Politician	6.7	6.9	5.5	4.3
TV star	8.5	10.8	11.3	11.8
Physicist	1.6	2.1	1.4	1.8
Research fellow	2.2	3.4	2.1	2.7
Baker / Confectioner	3.0	2.3	2.4	2.7
Carpenter	2.0	2.1	2.5	2.2
Total	100,0	100,0	100,0	100,0
N Total valid	1000	1000	1000	1000

Source: "European Researchers' Night" Impact Assessment, Omnibus Survey, 2016

5. Participation at the European Researchers' Night 2016

In this section of the assessment we analyse data related to the participation the visitors in previous years in order to see how many people, yearly return deliberately to the European Researchers' Night. The records here date back to the year of 2010. Apart from 2011, where only 16, 7% of the interviewees declared that they participated also in 2010, in all the other years, the percentage is around the half of respondents. We can believe from this data that there are people, who return to the Event year by year and besides a significant number of new people get to know the message of the European Researchers' Night.

Figure 5.1. Participation at previous European Researchers' Nights' programmemes (%)



Source: "European Researchers' Night" Impact Analysis, 2011-16, On-line survey 2017

	2016	
	%	Estimated
Heard about the RN	33.6	~3,311,280
Ever visited the RN	5.9	~581,475
Visited in 2016	4.4	~433,642

Source: "European Researchers' Night" Impact Analysis, Omnibus survey 2016

5.1. Information about the Event

An important information, mainly for the organisers from where the visitors got to know about the Event and its programme. We compared the data from 2013-2016 with those of 2017. An outstanding number of persons received the information via Internet, in all three years. In the second place, the visitors heard about the event from their friends and in their school or at their university. Compared to 2013, in 2014, 2015 2016 and 2017 there were significantly more people who were informed through an educational institution and the background here is also the over-representation of students among respondents.

Table 5.2. Participation of respondents – how they were informed about the event – online survey 2013, 2014, 2015, 2016 & 2017

Channels of information	2013 – Mentioned	2014 – mentioned	2015 - mentioned	2016 - mentioned	2017 - mentioned
School/university	180	401	316	534	573
Radio/television	100	126	95	111	105
Internet	320	488	383	648	568
Newspaper/magazine	68	57	35	60	54
Friends/acquaintances	234	369	296	489	435
Parents	47	68	77	95	122
Street posters/ads- columns	118	171	117	214	170
Other	44	40	43	76	58
Have not heard at all	1	0	3	6	2
N Total valid	503	800	631	1031	1001

Source: "European Researchers' Night" Impact Assessment, Online Survey, 2013-17

5.2. Programme preferences

From the organisational point of view it is also important to know which programmes the participants preferred from the different offers during the Night. We used a method here, when the respondents had to choose the three most preferred programmes according to their experience at the Event. Even if we detected that the majority of the participants was of student-age, the most preferred programme that stands with big difference ahead is the scientific lecture. However, it is important to highlight that the two programmes that were mentioned the most times in all the three places accumulatively were the presentation of modern-tech-equipment and of the inventions.

Table 5.3. Programme preferences of the European Researchers' Night event 2017 – online survey

Programmes	1 st	2 nd	3 rd
Scientific lecture	476	121	92
Presentation of modern tech-equipment	130	165	153
Presentation of inventions	77	146	150
Games	115	93	76
Conversation with the researchers	52	144	112
Competitions	22	56	56
Exhibition	30	121	113
Theatre play	6	10	7
Professional counselling	12	9	26
Beer-drinking	12	9	13
Classical concert	2	2	7
Pop concert	1	6	4
Talk show	11	7	20

Source: "European Researchers' Night" Impact Assessment, Online Survey, 2016

Data protection policy

The information during the impact assessment of the European Researchers' Night 2017, was collected and used fairly, stored safely and not disclosed to any other person unlawfully. The information for this research was obtained for this specified and lawful purpose of measuring the impact of the European Researchers' Night 2017 and it is not processed in any manner incompatible with that purpose. The obtained data was kept secure from unauthorised access and as communicated in advance. The contact sheets and the online survey were filled anonymously and the focus group discussions were held in this way, as well. The sensitive data (e-mail address and phone number) was deleted at the end of the impact assessment (December, 2017).