European Researchers' Night



D7.1 Impact Assesment (2022)





European Researchers' Night 2022 EVALUATION REPORT

by

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Presentation

The institutions that make up Group 9 Universities (G-9), coordinated by the University of Cantabria, have come together for the third consecutive year in a consortium to celebrate the European Researchers' Night held on September 30, 2022 The activities that Group 9 Universities developed were financed by the European Commission (EC) within the framework programme for scientific and technological dissemination G9 Missions (UE-22-G9MISSIONS-101061455).

The participating universities are:

- University of Castilla La Mancha
- University of Cantabria
- University of Extremadura
- University of the Balearic Islands
- Public University of Navarra
- Universidad de Oviedo
- University of the Basque Country
- University of Zaragoza

The following report presents the impact evaluation results of the activities organized during the European Researchers' Night that took place on September 30, 2022. The evaluation of the Researchers' Night is carried out by the Group of Social Studies of Science (STS Group) of the University of Oviedo, led by José Antonio López Cerezo.

The Evaluation Report was conducted by Belén Laspra (STS Group | University of Oviedo), with the collaboration of María Alejandra Rivas (University of Oviedo) and the support of the STS Group.

The STS Group thanks the Scientific Culture Units (UCC) of the participating universities for their priceless collaboration throughout the evaluation process and extends its gratitude to all the volunteers who participated in the collection of information.





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Characteristics of the study

The impact evaluation of the European Researchers' Night 2022 (N22) was based on two data collection tools, a quantitative one, which was a questionnaire administered online the days after the N22 activities; and a qualitative one, consisting of a series of face-to-face interviews conducted the same day of the event where the N22 was held.

Characteristics of the quantitative study

- Questionnaire. The questionnaire (available here) was distributed via Google Forms to the people who participated in the N22 activities through the UCCs of the G-9 Universities. Access to the questionnaire was also possible through QR codes arranged on posters.
- Field work. The survey was open between September 30 and October 31, 2022.
- N. A total of 150 valid responses have been collected.

Characteristics of the qualitative study

- Interviews. The interviews (available in Appendix 2) were carried out by volunteers, recruited by the UCCs the days prior to the European Researchers' Night. Interviewers were previously trained on collecting information through an online seminar that took place on Monday, September 26.
- **Field work.** The interviews were conducted on September 30, simultaneously at the places where the European Researchers' Night was held by the G-9 Universities.
- N. A total of 273 interviews have been collected.

Number of interviews by University: University of Castilla La Mancha (11), University of Cantabria (26), University of the Balearic Islands (24), Public University of Navarra (19), University of Oviedo (28), University of the Basque Country (26), University of Zaragoza (66), University of Extremadura (73).





QUANTITATIVE STUDY RESULTS

Participation in the survey

The number of total responses was 150. The largest number of responses comes from those who participated in the N22 activities organized by the University of Cantabria (33%), followed closely by those who participated in those of the Public University of Navarra (30%). A smaller number of responses comes from those who participated in the activities of the University of Zaragoza (10%) and Extremadura (9%). The people who participated in the activities of the other G-9 Universities provided quite a low response, particularly in the University of Castilla La Mancha. It is important to notice that the percentages of response to the survey do not correspond in any case with the level of public attendance and participation in the N22.

1. Number of responses per participating university

University	Number of responses	Percentage
University of Cantabria	49	32,9
Public University of Navarra	45	30,2
University of Zaragoza	16	10,7
University of Extremadura	14	9,4
University of Balearic Island	9	6,0
University of Oviedo	9	6,0
University of Basque Country	6	4,0
University of Castilla La-Mancha	1	0,7
Total	149*	100%

^{*} In one case the place of participation was missed, therefore the total indicates 149 instead of 150.

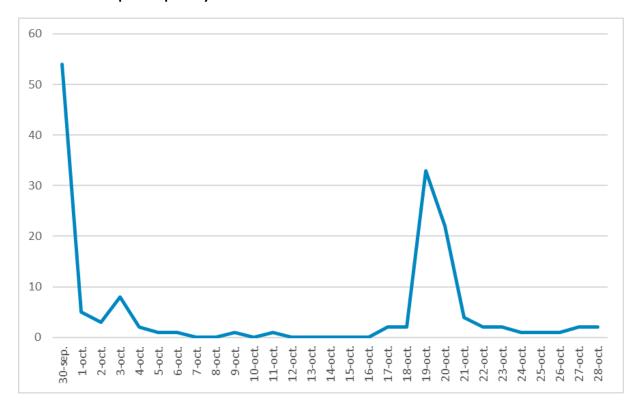




The amount of responses collected through the questionnaire has been less than the previous edition. This decrease in participation very possibly has to do with two relevant changes in relation to the 2021 evaluation. Firstly, the RN21's activities were carried out mostly online due to the face-to-face restrictions of the pandemic, and being online facilitated dissemination of the links and QR to the survey. Secondly, the 2022 evaluation has been carried out in a hybrid way, combining the survey with the interview. Therefore, it is possible that conducting interviews has affected online participation, decreasing participation in the survey. In fact, the total number of responses in 2022, all together surveys and interviews, adds up to 423, which is the highest to date. In 2021 it was 263, and in 2020 it was 158.

The analysis of the data shows that, on the same day that the survey was launched, on September 30th, 36% of the responses were collected. Suggesting that the access to the questionnaire was through the QRs that were set at sight through posters and stickers placed on the stands and selected places the day of the event. There is a second peak of responses corresponding to October 19th and 20th, coming from the participants in the activities of the University of Cantabria and from those who participated in the activities of the Public University of Navarra. The most reasonable explanation is that these peaks correspond to the reminders sent by the UCCs through the mailing lists.

2. Number of responses per day







Sociodemographic data of the people surveyed

The average age of those who answered the survey is 41 years (range: 12–71). There is a considerably greater presence of women (75%). Regarding the highest level of studies achieved, 88% have completed higher education. More than a half, 67% of respondents, claim to have children. This is a profile that we have seen before in previous editions of the Researchers' Night, people with a high educational level who, if having children, usually attend activities with them. Detailed data on socio demographic issues is presented below.

Place of residence

As expected, the answers come from the Autonomies of the Universities that make up the G-9, except for one case that comes from Madrid and another from Valencia, both of which have participated in the activities organized by the University of Zaragoza. The largest participation in the survey is concentrated in Cantabria (32%) and Navarra (31%). To a lesser extent, Aragon (9%), Extremadura (9%), Asturias (6%) and the Balearic Islands (6%) have also participated. Participation in the survey has been very low in the Basque Country (3%) and Castilla La Mancha (0.7%).

3. Autonomous Community of which the people surveyed originated



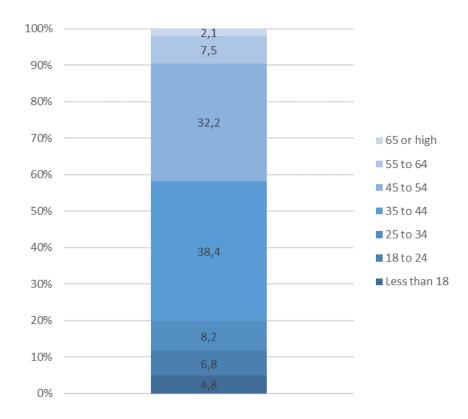




Age

As mentioned above, the average age of those who answered is 41 years. The highest percentages of participation in the survey take place among people between 35 and 44 years of age (38%), followed by the age group between 45 and 54 years (32%). For those under 25 years old, the percentage is 11%, close to those over 55 years old (9%). At the end of this document, in Appendix I, the data segregated by participating universities can be found).

4. Age ranges of the people who responded to the survey



Gender

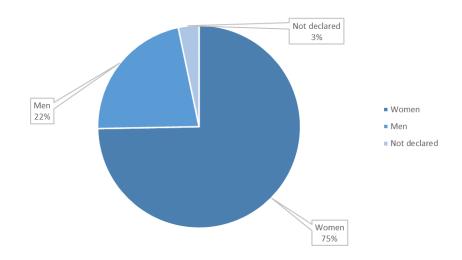
The percentage of people who answer the survey is substantially higher in the case of women, 75% of respondents are women, while 22% are men. This intriguing result has been seen in previous years, it seems that women are more likely to enroll in the survey, and to participate in the evaluation of the European Researchers' Night. Surprisingly, respondents from the University of the Balearic Islands



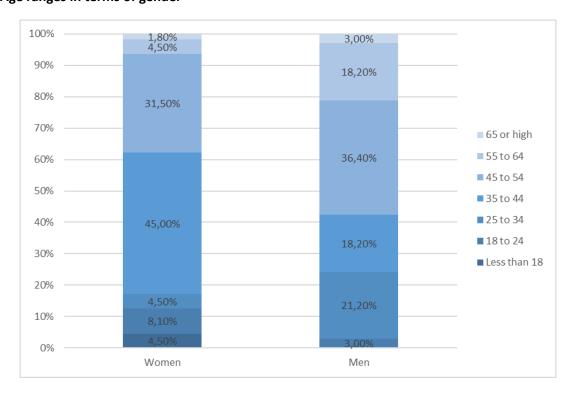


were all women. Almost half of the women respondents (45%) are between 35 and 44 years old. In the case of men, 36%, the largest group, belongs to the age range between 55 and 64 years old. No man under the age of 28 answered the survey. Among the cases that preferred not to declare their gender, only one provided information about his age, 15 years.

5. Declared gender of the people who answered the survey



6. Age ranges in terms of gender



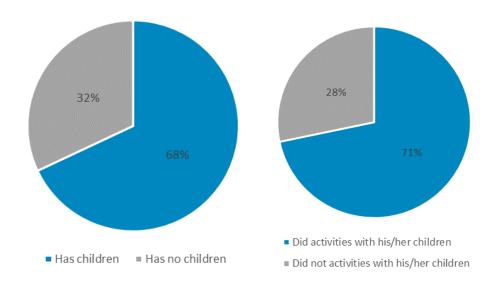




Children

The questionnaire included a first question in which people were asked to answer whether they had children or not, and a second question that collected information on whether they had carried out the N22 activities with them or not. 68% of the total respondents claimed to have children; of this group, 71% claimed to have carried out N22 activities with them. The average age of those who do not have children is 31 years, and the average age of those who have children and did activities with them is 44 years old. Matching the findings of previous European Researchers' Night Evaluation surveys, most of the people who have children attend the activities with them.

7. Having children and participating with them in activities



Educational attainment

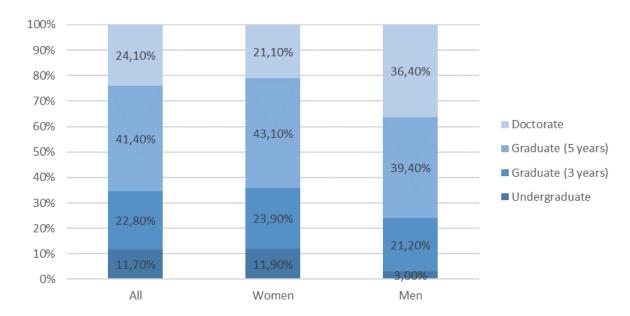
As prior editions, data shows the high level of educational attainment achieved by those who respond to the survey. More than half of the sample indicated to have completed careers of three, and four to six courses, or to have completed a doctorate degree. Again, as in previous surveys, there are differences between men and women, 36% of men respondents who participated in the survey have a doctorate degree, whereas 21% of women respondents have a Ph. degree. The same happens when looking at the lower category of the variable. 11% of female respondents have no college studies, and 3% of male respondents don't have a college degree. When looked at the age, this is not an explanatory factor. The average age of the people who answered the questionnaire is 41 years. In addition, the crossing of the variables "age", "gender" and "education level" shows that between 45





and 54 years old, and between 55 and 64 years old, male respondents indicated higher educational level than women for the same age group.

8. Educational attainment by gender



In short, the profile shown by this data suggests that the people who answered the survey are adults, to a large extent women, with children and a medium-high educational level.

Data on how respondents find out about the N22

This section presents information related to the sources from which those who participated in the survey found out about the activities of the N22, as well as their participation frequency in previous editions.

Sources

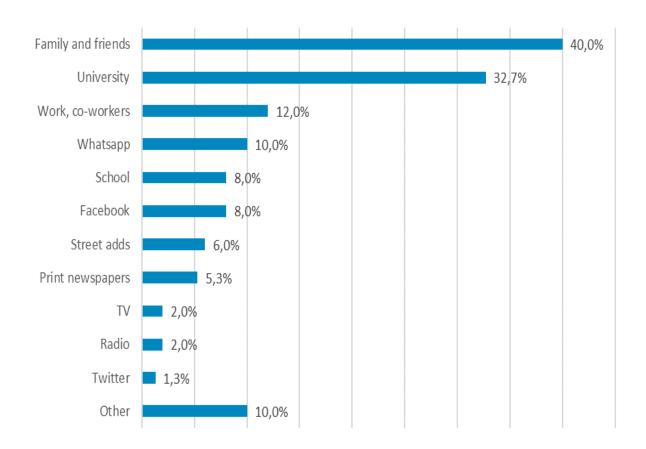
A question of the survey asked respondents to provide information about the sources through which they found out about the N22. The question allows more than one item to be selected, therefore the percentages add up to more than 100. The University itself and nearby surroundings kept appearing as the main sources. The data suggests that word of mouth, which begins with university staff, stands





out as the most effective way to publicize the European Researchers' Night. There are no major changes compared to the previous evaluations reports among the social networks. Facebook seems to have been more effective than Twitter; and among the traditional media, it is the press that shows to have been more effective compared to television and radio. Also noteworthy is the increase shown by "Other channels" compared to the previous year, which accumulated 10% of responses.

9. Sources by which the Night was learned about



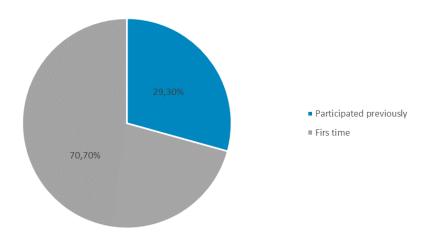
PARTICIPATION IN PREVIOUS EDITIONS

Although a significant number of respondents found out about the N22 by word of mouth, the publicity of the N22 has had an effect that manifests itself in the number of people who stated that they did not know about the event from previous editions, and participated in the N22 for the first time. 70% of those who responded to the survey stated that they had not participated in previous editions, which is a higher percentage than in the two previous years.



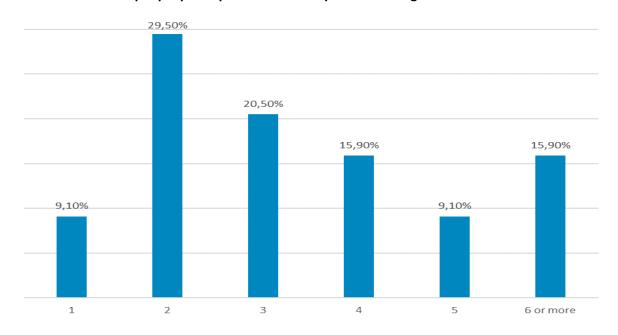


10. Participation in previous editions



A large number of people participated in the N22 for the first time, but the number of people who repeat is also noteworthy. This year's results are similar to those of the two previous ones. 29% of those who participated also did so in at least one previous edition, and 20% did so in at least three of them. The percentage of people who have attended more than five editions of the European Researchers' Night reached 16% this year. The question asked in the questionnaire included a scale from 1 to 10 and more than 10, which implies that there are people who have been attending for more than 10 years.

11. Number of times people participated in editions prior to the Night







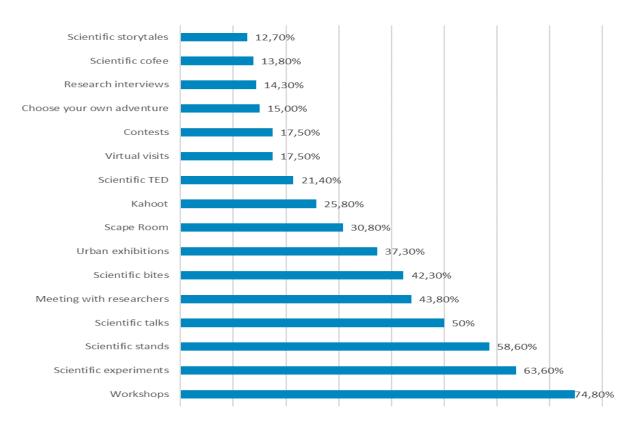
N22 in person and online activities

Results related to the in-person activities of the European Researchers' Night and the use of online resources are presented below.

In-person activities

Respondents were asked to indicate whether or not they had participated in activities offered in the N22. As is to be expected in an in-person event, activities such as workshops, scientific experiments, or the stands themselves are some of the most mentioned. There is a second group of activities that can be characterized by direct interaction with scientists, but with a lower degree of participation than the three mentioned before. It includes scientific talks, meetings with researchers, and scientific tastings. Activities such as urban exhibitions, the escape room or Kahoot are also well received, as are monologues, virtual tours and contests.

12. Type of activities carried out



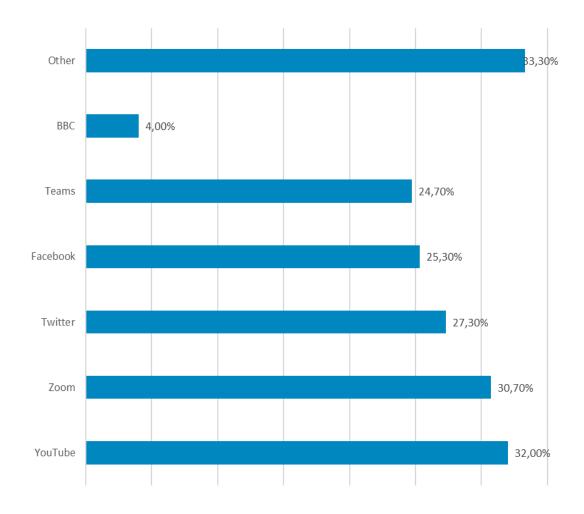




Online activities

Although this year the European Researchers' Night has back to a face to face event -because of the Covid pandemic, last two years most of the activities were entirely online-, the use of online resources has been a helpful resource, besides the use of online activities is less frequent than during the pandemic. YouTube and Zoom are the most used platforms, followed by social networks. Teams and BBC are platforms that depend on the University hostage; therefore, their percentages must be analyzed according to the University of the participants (see Appendix I). Each respondent was asked to answer for a listed platform, if they have or have not used it. There are 33% of respondents that selected "Other". Unfortunately, we don't have data about what possible platform they have used.

13. Platforms used







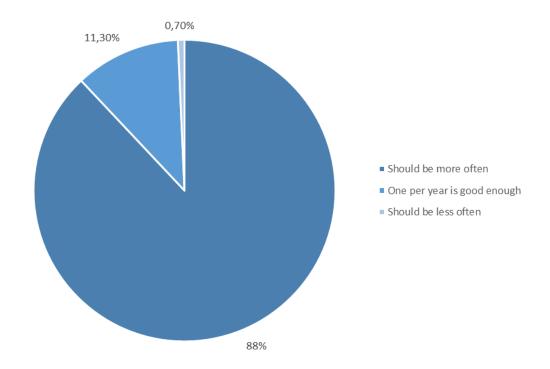
Perceptions on N22

Data on the European Researchers' Night frequency, and positive and negative views on N22 are analyzed here. People's recommendations are also shown.

Frequency of the European Researcher's Night

Majority of the respondents to the N22 evaluation survey agreed that this kind of research dissemination activities should be carried out more frequently, in this edition the percentage reaches 88%. 11% assert that the frequency with which these activities are carried out is adequate, and only 0.7% claim that they should be conducted less often.

Graph 14. Opinions about the frequency with which this type of activity is carried out



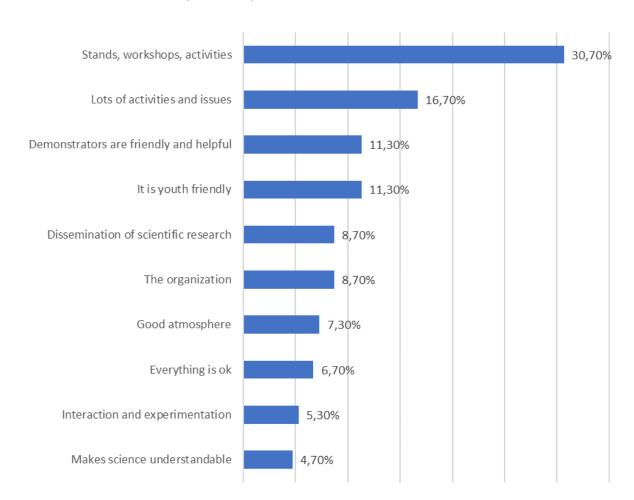




Positive views

The questionnaire included an open-ended question in which participants were asked to provide information on what they liked best about the N22. Most of the responses mention a specific workshop or activity. Beyond these specifications, the variety of activities and thematic diversity have been mentioned with special emphasis. The commitment of researchers had a very positive impact on those who attend the N22, many participants highlighted the kindness and closeness of researchers, communicators, and all the people who made the N22 possible. Respondents positively evaluated how the activities involving the N22 bring scientific research to young people, and make science issues understandable in a comprehensible lenguaje. This kind of activity that engages people with science is very well considered. Organization and the good mood of everybody were also highlighted.

15. The N22's most notable positive aspects





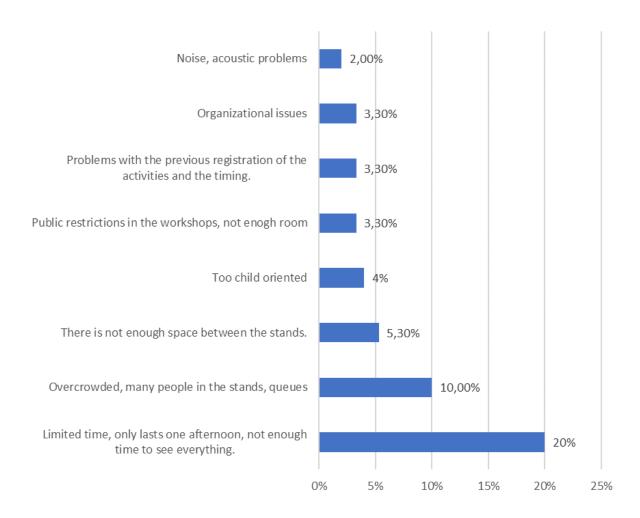


Negative views

Among the things to be improved, the one most frequently mentioned is on the timing. A majority claimed that the duration of the N22 was not enough to join all the activities available. Many people indicated that the whole activity should last longer, not just an afternoon but a day or a weekend. In general, every claim is related to the massive attendance. People point to overcrowding, queues, and no space within stands, and suggest taking turns, or to establish a capacity limit as possible solutions. Issues related to the general organization and problems involving registrations were also mentioned.

Some respondents were disappointed with the fact that a high number of activities were child oriented. On the other hand, some respondents demand more activities for earlier ages, between 0 and 6 years.

16. The N22's most notable negative aspects







Social perception on researcher profession

This section explores data on social perception of scientific research, researches and views on scientific and technological development. Data on gender and science issues is also addressed.

Risk-Benefits perceptions

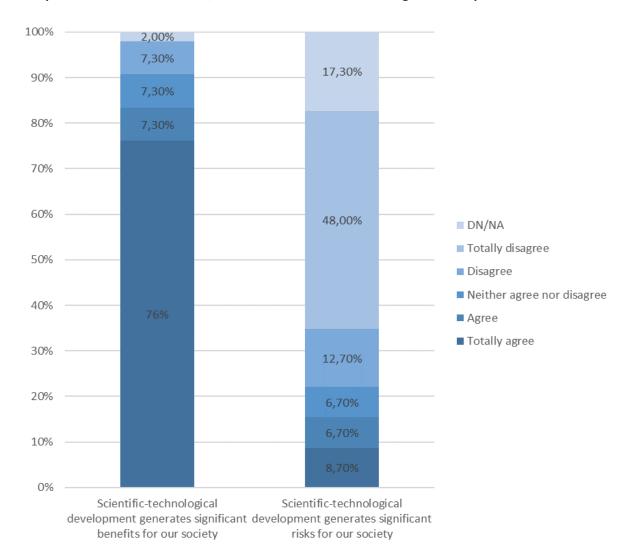
The people who responded to the survey can be characterized as enthusiastic about science, that is, people who view scientific-technological development as bringing many benefits and few risks. The Spanish Foundation for Science and Technology (FECYT) set four major profiles for the Spanish population: "uninformed", "skeptical uninformed", "moderate pro-science" and "enthusiastic pro-science".

- The "uninformed" are characterized by a low level of interest and information in scientific
 and technological matters, have a modest income, a low level of studies, and are located in
 small towns.
- The "skeptical uninformed" are also characterized by a low level of interest and information
 in science and technology; they perceive the hazards of scientific-technological development
 more intensely, are more easily found in small towns and are usually low-income people.
- The "enthusiastic pro-science" show the highest level of interest and information and value the scientific profession better; they are very optimistic regarding the risk-benefit balance in the social effects of scientific-technological development. There is a greater presence of people with a high level of education and income, and residence in medium-sized cities (between 100 and 500 thousand inhabitants).
- The "moderate pro-science" are very similar to the previous segment, but with more moderate positions in interest, information, assessments and optimism. They also present a level of income and studies above the average. It has a high incidence in large cities.





17. Opinions about the benefits / risks of scientific and technological development



In the sample, 76% fully agree with the statement that scientific-technological development generates important social benefits to our society, and 48% do not agree with the statement it generates important risks for society. The agreement on the benefits seems to be greater than the agreement on the risks. The percentage of "Don't know / No answer" is higher in the latter. When the results of the two questions are crossed, a more complex profile is revealed. 48.7% agree or totally agree that scientific-technological development generates important benefits and disagree or totally disagree that it generates risks, something expected by the pro-enthusiastic to science profile. But there is 14.75% that hold a more skeptical view, they acknowledge that scientific and technological development entail many benefits, but also many risks. .





18. Cross table on opinions about risks and benefits

	•		•	Ri	sks			Total
		DN/NA	Totally disagree	Disagre e	Neither agree nor disagree	Agree	Totally agree	
	DN/NA	0,7%	0,7%	0,7%	-	-	-	2,0%
	Totally disagree	-	-	-	-	-	-	-
	Disagree	1,3%	3,3%	2,7%	-	-	-	7,3%
Benefits	Neither agree nor disagree		4,0%	0,7%	2,0%	0,7%	-	7,3%
	Agree	-	2,7%	2,7%	-	1,3%	0,7%	7,3%
	Totally agree	15,3%	37,3%	6,0%	4,7%	4,7%	8,0%	76,0%
	Total	17,3%	48,0%	12,7%	6,7%	6,7%	8,7%	100,0%

Another feature of the enthusiastic pro-science profile is a greater confidence in science and therefore those with this profile tend to agree more with the statement that "decisions on matters of general interest are better left in the hands of experts". In this sample, 52% of the respondents agree somewhat or totally agree with the statement, while 42% agree with the opposite, that "citizens should have a greater role in decisions about science and technology that directly affects it". It is important to note that 30% fairly or totally agree with both statements.

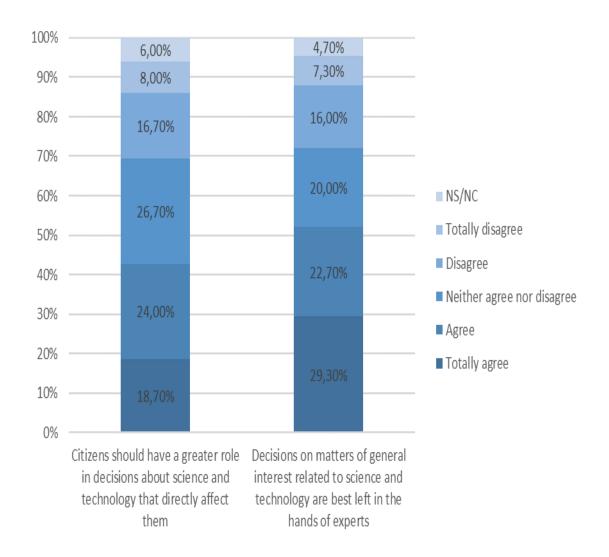
Attitudes to science and scientists

There is a very good conception of the research profession, the people surveyed fairly or totally agree that it contributes to improving the country's competitiveness (89%), to the well-being of society (88%) and to solving social problems (82%). There is also a high agreement that they transmit knowledge and train future professionals (81%). Finally, there is a strong consensus that its role is little known in our society, 79% fairly or totally agree with this statement.





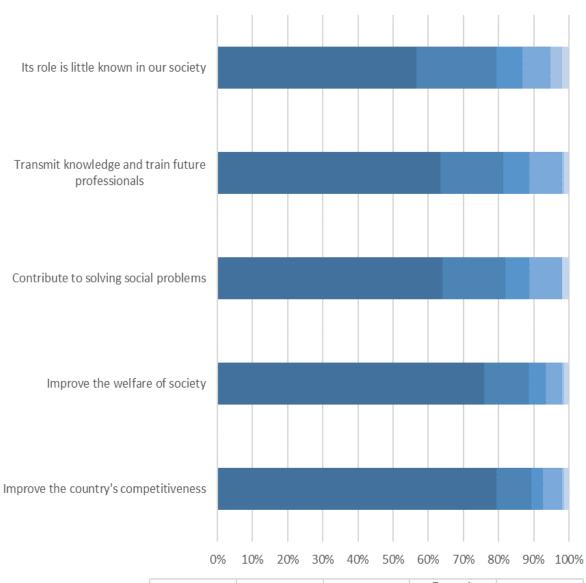
19. Opinions about the decisions made in topics related to science and technology







19. Opinions about the research profession



	Improve the country's competitiveness	Improve the welfare of society	Contribute to solving social problems	Transmit knowledge and train future professionals	Its role is little known in our society
■ Totally agree	79,30%	76,00%	64,00%	63,30%	56,70%
■ Agree	10,00%	12,70%	18,00%	18,00%	22,70%
■ Neither agree nor disagree	3,30%	4,70%	6,70%	7,30%	7,30%
■ Disagree	5,30%	4,70%	9,30%	9,30%	8,00%
■ Totally disagree	0,70%	0,70%	0%	0,70%	3,30%
■ DN/NA	1,30%	1,30%	2,00%	1,30%	2,00%





One of the aspects addressed in relation to the public understanding of science and technology has to do with which factors can contribute to generate an unequal situation in the access of girls and young women to scientific careers. Participants were presented with a series of reasons that might be hindering or discouraging girls' choice of STEM careers, and they were asked to agree or disagree with them. According to the data, the main reason may be the stereotypes in society and in the cultural tradition, and the lack of references in these fields, 65% fairly or totally agree. Another highly mentioned reason is the difficulty of reconciling personal and professional life in scientific-technological fields, 58% fairly or totally agree. These reasons are closely followed by the recognition of the existence of access barriers based on gender in the scientific profession because science and technology are traditionally male sectors, 50% fairly or totally agree.

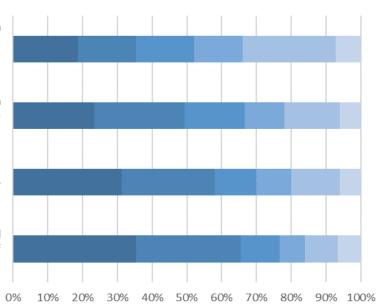
20. Factors that complicate girls' access to STEM careers

Girls and women have a low perception of their capabilities in these areas and consider that they cannot successfully approach STEM disciplines

Barriers to access based on gender in the scientific profession and because they are traditionally male sectors

The difficulty of reconciling personal and professional life in these scientifictechnical fields

The existing stereotypes in society and in the cultural tradition and the lack of feminine references in these fields



	The existing stereotypes in society and in the cultural tradition and the lack of feminine references in these fields	The difficulty of reconciling personal and professional life in these scientifictechnical fields	Barriers to access based on gender in the scientific profession and because they are traditionally male sectors	Girls and women have a low perception of their capabilities in these areas and consider that they cannot successfully approach STEM disciplines
■ Totally agree	35,30%	31,30%	23,30%	18,70%
■ Agree	30,00%	26,70%	26,00%	16,70%
■ Neither agree nor disagree	11,30%	12,00%	17,30%	16,70%
■ Disagree	7,30%	10,00%	11,30%	14,00%
■ Totally disagree	9,30%	14,00%	16,00%	26,70%
■ DN/NA	6,70%	6,00%	6,00%	7,30%





QUALITATIVE STUDY RESULTS

The survey was conducted to get data on those who attend the European Researchers' Night, but the aim of the interviews was to provide useful data to those who carried out the event, this is, the Units on Scientific Cultures of the G-9 Universities of the universities.

The interviews were conducted the same afternoon of the N22, face to face, in person, to participants selected from among the attendees. The questions collected information on several issues. Questions of the interview can be found in the Appendix 2. Interviewees were asked:

- How did you find out about the European Researchers Night?
- Which three things did you like more?
- Which three things did you like less?
- Do you think activities like this help to provide a more accurate portrait of scientific research?
 - o [if YES] Why?
 - o [if NO] Why?
- Do you have any suggestions to improve...
 - o ...the organization?
 - o ...the contents?
 - o ...the dissemination campaign?
- [if age between 12 and 18] We would like to enroll more young people. What can we do to encourage people of your age to enroll the European Researchers' Night

Preliminary results to these questions are presented below, although more detailed analysis of the data will be necessary.





Responses to the interview

A total of 273 interviews were collected from different universities. Hereunder the data from the interviews is analyzed. Important notice: For technical reasons, the interviews conducted at the University of Extremadura have not yet been processed. The results will be available as soon as possible.

21. Number of interviews by place and age group

City	Total	Women	Men	To 11 years	Between 12 and 18	Higher tan 18 and below 65 years	Higher than 65 years
Albacete	11	3	5	4	0	6	1
Bilbao	26	14	12	7	4	9	6
Huesca	24	12	12	6	6	6	6
Oviedo	28	10	16	8	5	9	6
Palma	24	11	12	0	5	17	2
Pamplona	19	7	7	2	4	7	3
Santander	26	11	12	6	7	8	5
Teruel	20	10	10	6	6	7	1
Zaragoza	22	9	13	9	6	6	1
Total	200	87	99	48	43	75	31

Although 273 interviews were conducted, some of them failed to collect data on gender or age group. The vast majority of the interviews were conducted between 6:00 p.m. and 8:00 p.m., except for the University of the Balearic Island, where all the interviews were conducted after 9:00 p.m.

Information on how the night had been known

The information provided by the interviews reflect that most of the people who attended the N22 found out about the event through the University. A significant volume of attendees also found out about the event at the very moment it was held, mainly because they were walking around the place





where it was taking place. Institutes and schools also played their role in publicizing the event, as well as social networks.

The diffusion efforts made by the people who arrange the activities of the N22, and the University itself that sponsors the event were the mechanisms that had the greatest impact when it came to publicizing the European Researchers' Night. Several interviewees reported that they had found out about the European Researchers' Night through a family member or friend who worked or studied at the University and had previously been informed of the event, in many cases because they collaborated with it. Beyond the role of the University and the Scientific Culture Units, there are some particular considerations that are worth mentioning.

The University's ability to publicize the activities of the N22 seems to have been especially effective in the case of the Public University of Navarra and the University of Zaragoza. In both cases there are several mentions to the web page of these institutions and the email distribution lists. Although, having passed by at the time of the event, by chance, has been a relevant factor in all the venues, it has been mentioned more regularly at the University of the Basque Country and at the University of Zaragoza, particularly in Huesca headquarters. Social networks have been especially effective at the University of the Balearic Island and the University of Castilla La Mancha. At the University of Oviedo, several people have mentioned the local press. In the case of the University of Cantabria, prior knowledge of the event is mentioned.

Positive views

Interviewees were asked to highlight at least three positive aspects of the European Researchers' Night. Considering all the answers together, there are some aspects that were repeatedly mentioned. In the first place, the fact that the activity was oriented to children was especially valued; secondly, the variety of topics and activities was also emphasized; thirdly the event itself was a place for social engagement of science. These three aspects were highlighted at least 20 times.

22. Positive views on European Researcher's Night by University

	UO	UC	UPV	UCLM	UPN	UIB	UZ
Activity focused on children and adolescents	4	8	0	5	1	0	8
Activity for all audiences, free admission	1	1	1	0	1	3	4





Location, and right time	2	2	2	1	0	1	3
To be held outdoors, at the street	0	3	2	1	0	1	4
The willingness, kindness and closeness of the researchers	2	1	1	3	2	0	6
Fun, educational, interesting and entertaining	0	2	0	1	5	3	2
Possibility to see new things about science and technology	1	1	0	1	1	3	3
Possibility to interact with science and researchers	3	12	1	2	3	2	5
Quantity and variety	5	3	2	0	8	1	3
Shows the research carried out at the university and promote scientific culture	2	2	6	0	5	9	6
Good atmosphere	1	4	2	1	4	6	5
Food (food trucks, cafeteria)	0	0	0	2	3	4	0
Music	0	0	0	0	0	6	0

Practically all of the respondents pointed out a stand that they particularly liked. A particular stand was pointed up to 100 times, the monologues (17 times mentioned), the itineraries (10 times) and the talks (9 times) were also highlighted. Cinema, scientific bites and experiments were mentioned at least five times each. The location of the event was highly valued, specifically doing the activity outside, on the street. Answers such as "I like that they are in the street", "Use outdoor spaces", "It makes people go out into the street" or "Outdoors encourage people to go out" were phrases that were collected at least 15 times. The fact that it was accessible to everyone was also valued and that admission was free of charge. The respondents also highlighted both the date in which it took place and the schedule, as reflected in the following selected statements: "The day of the week is very good to come with family and children", "The timetable is very good, as nightfall creates a sense of mystery, especially for children".

It has already been mentioned that N22 was a great opportunity to bring science to society, something positively evaluated by respondents. Additionally, the public appreciates the number of stands and the variety of topics. Another factor that has been mentioned repeatedly is the possibility to learn new things about science and technology, and to interact with researchers. Phrases such as





"You learn a lot about things for the future", "The possibility of seeing technological advances" are eloquent. The participants have also valued the willingness, friendliness and closeness of the researchers when it comes to explaining and carrying out the demonstrations. On several occasions the participants highlighted "That you can talk to the researchers and ask them", "The ease with which they bring you closer to science", "The very good doing of the researchers, they make you want to learn", "The researcher were so excited to share their knowledge" or "The friendliness of the people at the stands".

Negative views

The negative aspect that was highlighted most frequently was by far the overcrowding of the event. At least up to 37 times it was mentioned that there were too many people. In relation to this, numerous queues (at least 13 times) and noise (10 times) have also been mentioned. Examples of these statements are "I am very happy, but I did have the feeling that there was a lack of space in the stands, people were very close together and it seems that there is little space". Another frequently mentioned aspect, which is actually a positive aspect, is the need to do these activities more often and to make them last longer. On at least 26 occasions the public complained that the event did not last long enough and on 11 occasions that a number of activities were scheduled at the same time, and that there was no time to see everything. This statement serves as an example: "Because of the coinciding schedules between the itineraries and the film, I was forced to choose one or the other!". On six occasions reference has been made to the fact that the activities are too oriented towards children.

Regarding the stands, the data seems to reflect that they have improved if compared to previous editions, there have been few criticisms related to the organization. The insufficient space between the stands has been mentioned up to 17 times, and on 10 occasions reference has been made to the need for more information on what is done in each of the stands.

23. Positive views on European Researcher's Night by University

	UO	UC	UPV	UCLM	UPN	UIB	UZ
Insufficient information about what is done in each of the stands	5	4	0	0	1	0	0
Overly technical information	0	0	0	0	2	0	2





Need to expand to other areas of research, more dissemination of the research carried out at the university itself	0	2	2	0	1	1	0
Insufficient space between stands	3	5	0	4	1	0	4
Excessive targeting of a child audience	0	4	0	0	2	0	0
The schedule is too late, unsuitable schedule for children	0	1	0	0	0	2	4
Too many activities at the same time	1	1	0	1	5	1	2
Too many people, many queues	8	10	1	4	7	8	11
Noisy	1	1	0	3	1	4	0
Lack of places to sit	1	0	0	0	0	0	2
The event lasts a short time	3	3	2	0	0	6	12
absence of music	1	0	3	0	0	1	0
Insufficient dissemination prior to the event	1	2	6	0	2	1	4
adverse weather conditions	3	6	4	0	1	2	33

Much of the criticism has referred to adverse weather conditions, especially in events organized in Asturias, the Basque Country and Aragon. On 49 occasions reference has been made to the cold, the wind and the possibility of rain, indicating the need to arrange the event indoors.

In some cases, the respondents have called attention to the importance of expanding the subject matter and content to other areas, as well as to the need of a stand that publicizes the research activity of the University, disseminating the research projects that are in progress or research groups' activity, as exemplified by the statement "Mainly I would like there to be more presence of researchers who have carried out or are carrying out research projects". The need for greater dissemination from other institutions, setting aside the University, has been mentioned at least 16 times.

Some of the things missing have been music, places to sit and a dinner or a treat after the event.





Impact of the European Researchers' Night on scientific profession perception

Interviewees were asked whether or not they believed that the European Researchers' Night helped in providing a more realistic image of scientific activity. Furthermore, they were asked to give reasons for their answer. In the vast majority of cases, the respondents answered yes. The reasons given for this answer varied guite considerably.

The data shows that the most recurrent of them were related to bringing scientific investigation closer to ordinary people, especially in the events organized by the University of Zaragoza, the University of the Balearic Islands, and the University of Castilla-La Mancha. The respondents that participated in these events frequently complimented the Night on its success in making science available to people of all backgrounds by taking laboratory investigation to the streets, mitigating the complexity of scientific concepts, and offering a more interactive and entertaining way of learning science.

These reasons were followed by those that had to do with increasing scientific vocations, which seem to have had more popularity among the Universities of Oviedo and Cantabria. In fact, one may consider there to be a causal relationship between rendering scientific investigation more accessible to the general public and the increase in people pursuing scientific careers. Teaching scientific concepts and laws by means of games and experiments during the event was frequently judged by respondents as an ideal method to awaken in young people the desire to become scientists in the future.

Another reason that was often given, mainly in the Universities of Oviedo, Zaragoza and the Balearic Islands, involved the role of science in transmitting new knowledge and therefore educating society. Although this reason should supposedly incentivize the social promotion of scientific investigation, comments about the importance of this promotion were a lot less frequent in all the universities.

Other less mentioned but still noticeable reasons were related to debunking the stereotypical image of the isolated scientist. This aspect was repeatedly stressed not only by the Universities of Oviedo and Cantabria, but also by the Public University of Navarre, which insisted that scientists were not wizards, but ordinary people. In some cases, especially in the Universities of Zaragoza and the Basque Country, the reason why yes was given for an answer was because the event allowed the public to see the practicality of science in our everyday lifestyle.

According to the data collected, very few were the cases where the respondents answered no, most of which took place in the University of Cantabria and the University of the Balearic Islands.





Generally, these respondents claimed that the Night failed in showing the arduous work reality behind scientific investigation, and therefore that the image of science it conveyed was incomplete.

Recommendations on the organization

The recommendations that have been made most frequently have to do with holding this type of event more often, extending its duration, and increasing the number of stands, activities, workshops, experiments, etc. Another set of recommendations specifically had to do with organizational issues. On at least 22 occasions it has been mentioned that the space in which the event is held is insufficient to satisfactorily house the size of the public it attracts. Up to 15 times the need for greater control of capacity has been indicated, suggesting the establishment of shifts to access the venue, either by age ranges or by charging the access. A greater access control has been especially demanded at Oviedo, where using a covered venue that allows the event to be held even in case of rain has also been suggested.

Other specific recommendations are the incorporation of music and a food and drink stall. In the case of the University of the Balearic Islands, where the food truck was very well received, the recommendations suggested maintaining it and improving it, mentioning the long queues and the need to set up more tables. Likewise, the participants enjoyed the music, and they recommended that it last longer.

Many of the people interviewed did not make recommendations about the organization, although they did record how efficient it had been and expressed their acknowledgements and congratulations.

24. Recommendations for the organization by University

	UO	uc	UPV	UCLM	UPN	UIB	UZ
Increase the time of the whole activity	2	2	1	0	1	0	1
Increase the frequency with which the event occurs	0	2	1	2	3	2	8
Hold it in a broader place	3	6	3	1	2	0	5
Hold it on a covered space	1	5	0	0	0	0	3
Decentralize it, do not locate everything at the same place	1	1	1	0	0	1	4





Increase the number of stands, activities, workshops, etc.	1	5	4	1	2	1	8
Improve accessibility	1	0	2	1	0	1	0
Improve the visibility of stands' label information	1	4	1	0	0	0	0
improve lighting	1	0	0	0	0	0	0
Access restrictions to reduce queues	8	2	0	2	0	1	2
Expand the topics covered	0	2	0	0	0	1	0
Food and drink stall	1	0	0	1	0	2	0
Collaborate more closely with schools and institutes	0	1	0	1	0	0	1
Increase pre-event dissemination	0	1	1	0	2	1	1
Add music	0	0	0	0	0	2	0

Recommendations on the contents

In general, the people interviewed have affirmed that the topics that are dealt with in the N22 are many and diverse. However, there are some topics that have aroused more interest than others, such as space, technology (mobile phones and smartphones), robotics and virtual reality, as well as biology, geology and chemistry (cells, animals, fossils, minerals). There is also a demand regarding the dissemination of research that is not of a scientific-technological nature, such as history (especially prehistory), social and human sciences, art and literature. Other topics that have been mentioned were medicine and sports. Additionally, some people complained about the lack of a critical perspective, demanding the treatment of environmental or ethical problems.

The incorporation of a greater number of shows and demonstrations in the street and the possibility of visiting research centre has been suggested, as well as holding contests and distributing some type of merchandise.

Recommendations on public diffusion





According to the responses of the people interviewed, social networks (Facebook, Instagram, TikToc, Twitter, YouTube) are the most demanded means of dissemination. Followed closely, respondents call for greater dissemination of the event through schools and institutes. Other places mentioned are the regional television channels, the local press; the posters on buses, lampposts, and to a much lesser extent, the radio.

25. Recommendations for the public diffusion

Social Networks	45
Schools	36
Local TV	19
Labels on bus stop, streetlights, buses	14
Local newspaper	12
Radio	5

However, it is important to highlight that this demand is not distributed equally throughout the participating universities. At the University of Oviedo, increasing the dissemination of the event through the press and local television is mentioned more frequently than at other universities. The respondents from the University of Zaragoza frequently demand greater dissemination through schools and institutes. On the other hand, the respondents from the Universities of Oviedo and Cantabria frequently demand greater dissemination of the event through social networks.

26. Recommendations for the public diffusion by university

	UO	UC	UPV	UCLM	UPN	UIB	UZ
Local newspaper	6	2	1	0	2	0	1
Radio	2	1	0	0	0	0	2
School	6	7	3	1	4	0	15
Labels and adds on bus stop, streetlights, buses	1	2	4	0	1	0	6





Social networks	11	13	6	2	1	0	6
Local TV	8	5	0	1	2	0	3

Recommendations to attract a young audience

The interview included an additional question that was intended to inquire about possible strategies to attract young audiences to the Night's activities. Those interviewed were in the age range between 12 and 18 years old and were asked to answer the following question: "In your opinion, what could we do to encourage participation in this age group?" The ideas contributed by the people interviewed are presented below.

- Link the activities of the Night with topics that are taught in schools and institutes.
- Take researchers to give talks in schools or do workshops during the days before the event.
- That the participation in the Night's activities be valued positively by the teachers.
- Increase the dissemination of the event through social networks and educational centres.
- Offer activities that are of interest to this age group, such as films or music.





Final remarks

Survey and interview. The report on the European Researchers' Night was made using a hybrid format, combining for the first time the survey and the interview. This format has turned out to be valuable both for the ability to attract more public, a total of 350 responses were reached, and to acquire valuable information, since it was possible to capture the particularities of the N22 in each of the places where it was held. The number of responses obtained through the interviews is considered sufficient to obtain valuable information about the event.

Follow-up. Reminders through the UCC mailing lists seem to be an effective mechanism to encourage response to the questionnaire. It is recommended to send reminders from the UCC through the mailing lists, 10 and 20 days after the completion of the NI in a coordinated and simultaneous manner. As for the QRs, they have been especially effective in capturing responses to the survey. It is recommended to encourage its use in subsequent editions, mainly through posters in visible places. It is recommended not to place them on the tables of the stands, as they are hidden under the elements of the stand

Public. Thanks to the data collected by the survey, we know that the profile of the people who participate in the European Researchers' Night is that of an adult, with a high educational level, interested in science and technology, who, in case of having children, go with them. The interviews revealed that a significant number of people have previous contact with someone from the University, and had learned of the Night through family members or friends directly or indirectly involved in the Night's activities.

Sources. The results of the survey reveal that the most effective source when publicizing the European Researchers' Night was the University itself. The people of the University, through word of mouth, spread the information about the event. Far above social networks or traditional media such as the press, television or radio. The data from the interviews allow us to add that the chance of being in the surroundings on the day of the event was a relevant factor. In any case, the mechanisms to publicize the activities of the European Researchers' Night were effective, the survey revealed that 70% of those who responded to the survey was their first time participating in the N22 activities.

Scientific vocations. The orientation of the activities to a child audience is perceived as something very positive. A significant number of people attend the European Researchers' Night with their children and value being able to do this type of cultural activity with them. They believe that the European Researchers' Night familiarizes children with science and awakens in them a scientific vocation. The thoughts of the minors seem to coincide with this, in many cases the members of this age group indicated that it would be desirable for this type of activity to also be carried out in their own schools. This orientation towards a children's audience is not a unanimous perception. Some responses have pointed out that the activities were excessively infantilized.





Diversity. The data showed that the diversity of activities is a well valued aspect. It is not just a matter of many stands offering different themes, it is about the large variety of activities offered. The stands are, without a doubt, the heart of the Night, but the workshops, meetings with scientists and talks complete and enrich the Night. The public values the activities that allow them to get closer to research, but they also value the activities that allow them to get closer to researchers.

Improving. Compared to previous years, complaints on the organization and the lack of information have decreased. The sources of displeasure have been basically two, the overcrowding of the place and the short duration of the event. In this regard, and bringing here some proposals from the people who attended the event, one possibility for future editions is to diversify the venue of the event and increase the type of group activities such as workshops, conferences, talks or itineraries. Music and food are also demanded.

N22. The people who attend the European Researchers' Night do so with a very positive image of science, and a somewhat idealized image of the research profession. The data we have collected shows that the European Researchers' Night awakens an image of research and researchers that is much more in line with reality and, at the same time, also shows research as something friendly and reachable. The European Rerearcher's Night experience shows a more accessible, understandable, and handy science. Both the results of the survey and those of the interviews agree that the European Researchers' Night is a place for building bridges between research and society, and specifically, between scientific research and society.





Appendix I

Data segregated by participating university

1. G-9 Universities and average age

	Age average	N
University of Castilla la Mancha	47,00	1
University of Cantabria	41,29	49
University of Extremadura	39,79	14
University of Balearic Island	41,14	7
Public University of Navarra	43,44	45
University of Oviedo	40,25	8
University of Basque Country	39,50	6
University of Zaragoza	39,37	16

The average age of the people who responded to the survey is around 40 years, being a little lower in the Universities of Extremadura, the Basque Country and Zaragoza.





2. G-9 Universities and age range

	Less than 18	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 o higher	Total
University of Castilla la Mancha	-	-	-	-	100,0%	-	-	100%
University of Cantabria	8,2%	2,0%	2,0%	46,9%	38,8%	-	2,0%	100%
University of Extremadura	7,1%	7,1%	7,1%	50,0%	21,4%	7,1%	-	100%
University of Balearic Island	-	28,6%	-	28,6%	42,9%	-	-	100%
Public University of Navarra	2,2%	2,2%	20,0%	28,9%	26,7%	15,6%	4,4%	100%
University of Oviedo	12,5%	12,5%	-	12,5%	50,0%	12,5%	-	100%
University of Basque Country	-	16,7%	16,7%	33,3%	16,7%	16,7%	-	100%
University of Zaragoza	-	18,8%	-	50,0%	25,0%	6,3%	-	100%

At the University of Cantabria, the age group where the greatest participation in the survey takes place is between 35 and 44 years old, as is the case at the University of Extremadura, at the University of the Basque Country and at the University of Zaragoza. At the University of the Balearic Islands and at the University of Oviedo, the age group between 45 and 54 predominates. In the case of the Public University of Navarra, the greatest participation occurs between the two age groups mentioned. No data can be offered regarding the University of Castilla la Mancha since we only have a single answer.





3. G-9 Universities and gender

	Not declared	Women	Men	Total
University of Castilla la Mancha	-	-	100,0%	100%
University of Cantabria	4,1%	83,7%	12,2%	100%
University of Extremadura	-	71,4%	28,6%	100%
University of Balearic Island	-	100,0%	-	100%
Public University of Navarra	-	68,9%	31,1%	100%
University of Oviedo	11,1%	77,8%	11,1%	100%
University of Basque Country	-	33,3%	66,7%	100%
University of Zaragoza	-	81,3%	18,8%	100%

In all cases, except for the Basque Country, the survey was answered mainly by women. The case of the University of the Balearic Islands stands out, where one hundred percent of the people who responded were women.

4. G-9 Universities and having children and participating in activities with them

	Has children	Has done activities with them
University of Castilla la Mancha	100,0%	88,6%
University of Cantabria	89,8%	70,0%
University of Extremadura	71,4%	25,0%
University of Balearic Island	44,4%	40,7%
Public University of Navarra	60,0%	100,0%
University of Oviedo	66,7%	50,0%
University of Basque Country	33,3%	85,7%
University of Zaragoza	43,8%	88,6%





In general, the people who participated in the survey stated that they had children, only in the case of the Universities of the Basque Country, Zaragoza and the Balearic Islands, the percentage of people who stated that they had children fell below 50%. As regards carrying out activities with them, in the case of the Public University of Navarra it reaches one hundred percent, the percentage is also high in the Universities of the Basque Country, Zaragoza and Cantabria.

5. G-9 Universities and study level reached

	Undergraduate	Graduated (3 years career)	Graduated (4 to 6 years career)	Doctorate	Total
UCLM	-	-	100,0%	-	100%
UC	12,5%	31,3%	43,8%	12,5%	100%
UE	14,3%	14,3%	57,1%	14,3%	100%
UIB	14,3%	28,6%	42,9%	14,3%	100%
UPN	11,1%	17,8%	40,0%	31,1%	100%
UO	25,0%	-	62,5%	12,5%	100%
UPV	-	50,0%	33,3%	16,7%	100%
UZ	6,3%	18,8%	12,5%	62,5%	100%

The intersection of the educational level reached, and the participating G-9 University, shows a public with a high level of study. The highest percentages occur in the case of second cycle university education (four-to-six-year courses); The exception is the University of the Basque Country, where 50% of those who responded to the survey state that they have completed second cycle education (3-year degrees), and the University of Zaragoza, where 62% of those who responded to the survey declared having achieved doctoral studies. Once again it is important to consider the amount of participation in the online survey, which has been especially low in the Universities of Castilla La Mancha, the Balearic Islands, Oviedo and the Basque Country.





6. G-9 Universities and means by which the Night was learned about

	Twitter	Facebook	WhatsApp	Local newspaper	TV	Radio
UCLM	-	-	-	-	-	-
UC	6,1	16,3	10,2	4,1	4,1	2,0
UE	14,3	14,3	14,3	14,3	-	-
UIB	11,1	22,2	-	-	-	-
UPN	-	-	11,1	2,2	-	-
UO	-	-	-	11,1	-	-
UPV	16,7	-	-	16,7	-	-
UZ	12,5	-	18,8	6,3	6,3	12,5

	Labels at the street	School	University	Work	Friends and family	Other
UCLM	-	-	100	100	100	-
UC	4,1	18,4	30,6	8,2	38,8	10,2
UE	7,1	14,3	28,6	21,4	42,9	14,3
UIB	-	-	66,7	-	-	-
UPN	6,7	-	20,0	15,6	46,7	8,9
UO	22,2	11,1	33,3	11,1	33,3	33,3
UPV	16,7	-	33,3	16,7	33,3	16,7
UZ	-	-	56,3	6,3	43,8	6,3

Although most of the people who responded to the survey stated that they had learned about the N22 through their family environment or their University and workplace, there are differences between the G-9 Universities.





- University of Cantabria. Those who participated in the Night's activities organized by the
 University of Cantabria stated that they had learned about the event, in addition to the two
 categories mentioned above, through school and high school. Social networks, especially
 Facebook, seem to have been useful in spreading the Night's activities. So have the
 traditional media (press, television and radio). Posters are also one of the media that have
 been mentioned.
- University of Extremadura. At this University, social networks (Twitter and Facebook) have been especially effective. The traditional media have not, with the exception of the press. The posters are also mentioned in this University.
- University of the Balearic Islands. Although there have been few responses received from the
 University of the Balearic Islands, the data shows that social networks have been useful to
 publicize the activities of the night, neither the traditional media nor the posters are
 mentioned.
- Public University of Navarra. Neither the traditional media nor the social networks seem to have been very effective when it comes to spreading the Night, whereas the posters have been.
- University of Oviedo. In the case of the University of Oviedo, the posters placed along the streets and in the press have been especially effective.
- University of the Basque Country. In the Basque Country, Twitter, posters, and the press are indicated as the means through which the Night has become known.
- University of Zaragoza. At the University of Zaragoza, posters do not seem to have been useful, but the traditional media, especially the radio, were. Twitter is also one of the media that have been mentioned, as well as WhatsApp.





7. G-9 Universities and participation in previous editions

	Has participated in previous editions	Has not participated in previous editions	Total
UCLM	-	100,0%	100%
UC	42,9%	57,1%	100%
UE	42,9%	57,1%	100%
UIB	-	100,0%	100%
UPN	13,3%	86,7%	100%
UO	66,7%	33,3%	100%
UPV	16,7%	83,3%	100%
UZ	25,0%	75,0%	100%

The percentage of people who participated for the first time in the Night's activities is high at all G-9 Universities. There are some differences that are worth noting. Participation for the first time has been especially high at the Public University of Navarra, at the University of the Basque Country and at the University of Zaragoza. At the opposite extreme, it is at the University of Oviedo where people repeat the most.

8. G-9 Universities and number of times people participated in previous editions

In order to interpret the results of this table, it is important to consider the participation percentages in the survey. Only the data from the University of Cantabria and the Public University of Navarra allow us to draw conclusions. In the case of Cantabria, the number of times that people have participated in previous editions is fairly distributed; in the case of Navarra, the percentages coincide with total sample's data, that is, the majority of respondents have participated in at least two previous editions of the Night.





	1	2	3	4	5	6 or more	Total
University of Castilla la Mancha	-	-	-	-	-	-	100%
University of Cantabria	-	19,0%	23,8%	19,0%	14,3%	23,8%	100%
University of Extremadura	33,3%	16,7%	16,7%	16,7%	-	16,7%	100%
University of Balearic Island	-	-	-	-	-	-	100%
Public University of Navarra	16,7%	50,0%	16,7%	16,7%	-	-	100%
University of Oviedo	16,7%	16,7%	16,7%	16,7%	16,7%	16,7%	100%
University of Basque Country	-	100,0%	-	-	-	-	100%
University of Zaragoza	-	75,0%	25,0%	-	-	-	100%

9. G-9 Universities and activities

The question included in the questionnaire asked the people participating in the survey to provide information on whether or not they had carried out each of the activities listed. Some activities, such as the scientific stands, were carried out in all the venues, but not all the venues offered the same activities, therefore the value "0.0" shown in some cells means that the activity was not available and therefore it was not performed, or that the activity was available but was not performed.

- University of Cantabria. According to the data, workshops, corners, scientific experiments, meetings with researchers, and urban exhibitions are the five most carried out activities.
- University of Extremadura. The five activities out of the those organized by the University of
 Extremadura that are most frequently mentioned are the workshops, the scape room, the
 urban exhibitions, the scientific talks, and the corners.
- University of the Balearic Islands. The five activities indicated by those who participated in the activities of the University of the Balearic Islands are the meetings with researchers, the scientific talks, the workshops, and equally mentioned, the kahoot, the scape room and the urban exhibitions.





- Public University of Navarra. The five activities that accumulate the most mentions at the Public University of Navarra are scientific tastings, scientific experiments, workshops, scientific talks, and corners.
- University of Oviedo. Corners, scientific experiments, choose your own adventure, micro-stories, and kahoot are the five activities with the most mentions at the University of Oviedo.
- University of the Basque Country. The scientific talks, the corners, the workshops, and the virtual visits stand out, and in equal mention the scientific tastings, the scientific experiments, and the urban exhibitions.
- University of Zaragoza. The five activities with the highest number of mentions in the case of the University of Zaragoza are scientific exhibitions, workshops, scientific talks, corners, and urban exhibitions.

	Scientific coffee	Scientific bites	Scientific talks	Contests
University of Castilla la Mancha	0,0	0,0	0,0	0,0
University of Cantabria	13,0	5,0	27,3	9,5
University of Extremadura	28,6	28,6	62,5	57,1
University of Balearic Island	0,0	0,0	50,0	20,0
Public University of Navarra	6,3	75,8	47,8	13,3
University of Oviedo	0,0	50,0	60,0	0,0
University of Basque Country	25,0	33,3	80,0	0,0
University of Zaragoza	22,2	37,5	75,0	2,2

	Choose your own adventure	Meeting with researchers	Researcher interviews	Scientific experiments
University of Castilla la Mancha	0,0	100	0,0	0,0
University of Cantabria	10,0	39,1	4,8	59,3
University of Extremadura	50,0	37,5	14,3	57,1
University of Balearic Island	20,0	57,1	20,0	20,0
Public University of Navarra	0,0	40,9	0,0	64,0





University of Oviedo	66,7	50,0	50,0	71,4	
University of Basque Country	0,0	25,0	25,0	33,3	
University of Zaragoza	12,5	50,0	50,0	92,3	

	Urban exhibitions	Kahoot	Scientific TED	Scientific story tales	
University of Castilla la Mancha	0,0	0,0	0,0	0,0	
University of Cantabria	37,5	15,0	9,1	13,4	
University of Extremadura	71,4	50,0	28,6	28,6	
University of Balearic Island	40,0	40,0	33,3	20,0	
Public University of Navarra	12,5	13,3	11,8	0,0	
University of Oviedo	50,0	66,7	33,3	66,7	
University of Basque Country	33,3	0,0	25,0	0,0	
University of Zaragoza	55,6	44,4	50,0	0,0	

	Stands	Escape Room	Workshops	Virtual visits
University of Castilla la Mancha	100	0,0 100 0,0		0,0
University of Cantabria	64,5	15,0	88,6	18,2
University of Extremadura	62,5	75,0	91,7	16,7
University of Balearic Island	20,0	40,0	42,9	0,0
Public University of Navarra	45,0	13,3	52,4	6,7
University of Oviedo	83,3	50,0	60,0	0,0
University of Basque Country	50,0	25,0	50,0	40,0
University of Zaragoza	72,2	50,0	83,3	33,3





10. G-9 Universities and media used

The data for the entire sample showed that YouTube and Zoom are the most used platforms, however, the intensity of the frequency in which they are used varies depending on the G-9 University, as it is used more in the Universities of Extremadura and Zaragoza. The social networks Facebook and Twitter are especially used at the University of Extremadura. Of all the participating universities, the University of Extremadura seems to have had the most online activity.

	Teams	Zoom	ввс	YouTube	Facebook	Twitter	Other
University of Castilla la Mancha	1	-	-	-	-	1	-
University of Cantabria	32,4	37,1	-	28,6	25,7	27,3	41,0
University of Extremadura	62,5	80,0	16,7	72,7	70,0	76,9	75,0
University of Balearic Island	22,2	50,0	12,5	44,4	33,3	22,2	44,4
Public University of Navarra	28,6	32,1	4,2	38,7	33,3	25,9	35,3
University of Oviedo	50,0	40,0	-	40,0	40,0	40,0	20,0
University of Basque Country	40,0	-	-	50,0	-	60,0	0,0
University of Zaragoza	38,5	69,2	25,0	69,2	53,8	50,0	80,0





Appendix 2

Interview

Entrevista Noche Europea de los Investigadores e Investigadoras 2022

[Encuestador/a] ¡Hola! Estamos recogiendo las impresiones de quienes acuden a la Noche Europea de los Investigadores y nos gustaría hacerte unas breves preguntas para recoger tu opinión. La entrevista es voluntaria, anónima y los datos nos serán de mucha utilidad para mejorar.

Para empezar, ¿cómo has conocido la Noche?

¿Qué tres cosas dirías que son las que más te gustan de la Noche Europea?

¿Y qué tres cosas te gustan menos?

¿Crees que actividades como esta ayudan a dar una imagen más realista de la actividad científica? [Si "sí"], ¿En qué sentido? [Si "No"] ¿por qué no?

¿Tienes alguna recomendación?

- ...sobre la organización
- ...sobre los contenidos

...sobre la difusión de las actividades que se realizan en la Noche

[Sólo si Edad = entre 12 y 18] Nos gustaría que a la Noche acudieran más jóvenes de entre 12 y 18 años. En tu opinión, ¿qué podríamos hacer para incentivar la participación de este rango de edad?

