

How do citizens build their thoughts related to scientific issues in contemporary life?

CAROLINA MORENO-CASTRO
University of Valencia





London, May 1st 2019





<u>Communication role on perception and beliefs of EU Citizens about Science</u>

- Almost 1.2 million EUROS
- 2 years
- 5 countries
- 9 partners
 - 5 Universities
 - 2 NGOs
 - 2 SMEs







ScienceFlows

















H2020- Swafs-Call-19: Taking stock and re-examining the role of science communication

Communication role on perception and beliefs of the EU citizens about science

CONCISE

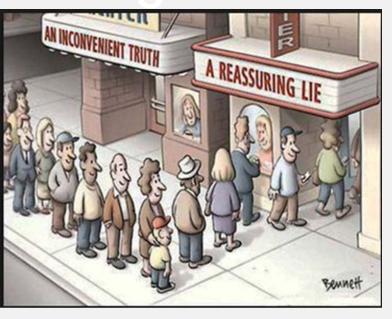






Background

CONCISE



For the public it may be difficult to distinguish genuine scientific claims from pseudoscientific claims that are lacking scientific evidence.



It must be urgently acknowledged that the communication of facts alone, as in the deficit model, is mainly reaching an already engaged audience.



Future science communication efforts should address the scientific controversy.





The Public and Science Communication

CONCISE



The use of communication channels without personal engagement dilutes the effectiveness of the message and makes feedback difficult.



The power of anecdotes comes from the relationship that exists between the receiver and the provider of the message about science-related stories.





Objectives

CONCISE

- ☐ The main objective of CONCISE is to know the origin of beliefs, perceptions, attitudes, point of views and knowledge about specific issues related to science and technology among European citizens.
- □ Identify the channels by which they are informed, i.e. through media and social networks (celebrities, politicians, scientists, religious leaders, etc.), or personal contact (closely relatives and extended family, friends, workmates, acquaintances, neighbors, etc.).
- □And what or who influences them to determine their attitudes towards a specific scientific issue?





Method for collecting data

CONCISE



Citizen consultations

CONCISE will explore the understanding of 500 citizens of four selected topics: vaccines, CAM, GMOs and climate change. All of them are burning issues on the science-related political agenda.

The consultation in each country will be held on a single day, with the researchers interviewing all the respondents either in focus groups or on a one-to-one basis, depending on the criteria of the partners.





Criteria of the sample

CONCISE

- Gender: 51% female and 49% male
- Immigrant population from outside the EU: 5%
- Educational background:
 - University: 28.5%, Eurostat 2016
 - Secondary and tertiary/non-tertiary: 37.5%, Eurostat 2016
 - Less than primary, primary and lower secondary: 34%, Eurostat 2016
- Impaired people: 14% (Disability statistics, Eurostat, 2011)
- Lultural minorities: according to Turton and Gonzalez (1999), in Europe there are cultural identities and ethnic minorities such as the Kvens, Jews, Taters, Romani and Gypsies, among others. Because gypsies are a cross-national ethnic-minority in each one of the countries where the consultation will be held, a representative sample of gypsy citizens will be selected.

Turton, D., & Gonzalez, J. (1999). Cultural identities and ethnic minorities in Europe. Universidad de Deusto.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824537.

<u>Link to</u>
<u>Eurostat</u>
Statistics

Tentative agenda of the whole consultation

CONCISE

CONCISE PUBLIC CONSULTATION AGENDA		
8:30 – 9:15	Registration and welcome	
9:15 – 9:30	Introduction	
9:30 – 9:45	Presentations (ice break activity)	
9:45 – 10:45	Focus group discussion I	
10:45 – 11:15	Semi-quantitative activity I	
11:15 – 12:00	Coffee break (provided by CONCISE partners)	
12:00 – 13:00	Focus group discussion 2	
13:00 – 13:30	Semi-quantitative activity 2	
13:30 – 14:30	Lunch break (provided by CONCISE partners)	
14:30 – 14:45	Presentations (ice break activity)	
14:45 – 15:45	Focus group discussion 3	
15:45 – 16:15	Semi-quantitative activity 3	
16:15 – 16:30	Coffee break (provided by CONCISE partners)	
16:30 – 17:30	Focus group discussion 4	
17:30 – 18:00	Semi-quantitative activity 4	
18:00 – 18:15	Closing	

We will select 100 representative citizens of each country where the consultations will take place: Lisbon, Lodz, Valencia, Vicenza and Trnava. We will launch a call to register citizens by local media, consumer associations, journalists associations, social networks.

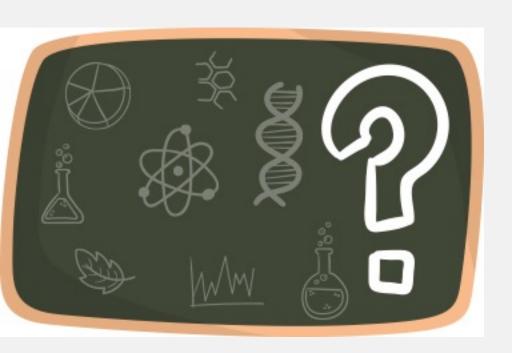
At Barcelona, we held the pilot consultation last March. We are right now analysing the transcription of speeches recorded.





Methodology

CONCISE



The consultation should be carried out in a single day and the four topics should be discussed: vaccines, climate change, genetically modified organisms and alternative medicine. In each of the consultations a total of 100 citizens will participate, they will be organized in subgroups of 8-10 people and the different discussions will be carried out in parallel.

Activity 1: Reliability test of headlines.

Activity 2: Trust ranking of sources.

Activity 3: Frequency ranking of sources.





Expected results of the consultations



The respondents' opinions will be recorded, transcribed and analyse with a corpus linguistic software in order to **identify indicators** that will help science communication researchers, playmakers, scientists, science journalist and the audience.





Consortium following up the discussion

CONCISE









Discussion of the Focus Group II

CONCISE









After pilot consultation, CONCISE meeting

CONCISE



- A crucial question for us would be the selection and recruitment of citizens.
- The three objectives that would be included in the script of the consultation.
 - 1: How citizens are informed
 - 2: Reliability of sources
 - 3: Proposals from citizens to improve science communication





The gender dimension

CONCISE

CONCISE QUESTIONS	PUBLIC CONSULTATION QUESTIONS
 Is science communicated (disseminated or popularised) differently by women and men? Do women currently play an essential role in science communication in comparison with men? 	 Do you prefer female or male science communicators? Can you recall any female science communicator?
 Do science news stories have a different effect or impact on women and men? Could this difference depend on the topic? 	 What kind of news stories about science, technology, health and the environment do you consider to be most important for your life?
 Are women more engaged with science communication than would first meet the eye? 	 If you were offered the chance to participate as a citizen in research projects on a voluntary basis to help to further scientific knowledge, would you accept?
 Do women or men have more confidence in institutional science information? 	 Do you trust the science and technology information that is disseminated by different governments?
 Do men influence women's views on the four consultation topics? 	 Have you ever felt that your ideas are not being taken into account?
 Do women tend to consult alternative therapists more than men? 	 If you have ever consulted an alternative therapist, can you tell us why? Did you feel better afterwards?
 Are women more positive and optimistic about the possibilities of halting climate change? Do women have a greater environmental awareness? 	When you watch TV stories about the effects of climate change, do you think that you can do something about it?





Outcomes expected from citizen debates

CONCISE

- ➤ Making science stories accessible to the public
- Scientists understand that citizens are part of the science communication.
- Increase the participation of scientists in media.
- Increase debate between citizens and scientists.
- Improve the different types of democratic participation in science and technology, through mechanisms such as deliberative conferences, science shops, citizens' science, etc.
- Make it easy to share information in different format.
- Build the story in such a way that is attractive and true to the public.







Thank you

Ďakujem

Dziękuję

Danke

Gràcies

Obrigado

Grazie

Gracias



