



Public attitudes to life sciences research in six European countries

Executive Summary



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EXECUTIVE SUMMARY

The report is based on a survey involving 6,000 respondents in six ORION partnering countries, Czechia, Germany, Italy, Spain, Sweden and the United Kingdom (1000 people per country).

Building on existing knowledge regarding public attitudes to science, the objective has been to develop new knowledge on the general public's attitudes towards life sciences research and, more specifically, genome editing.

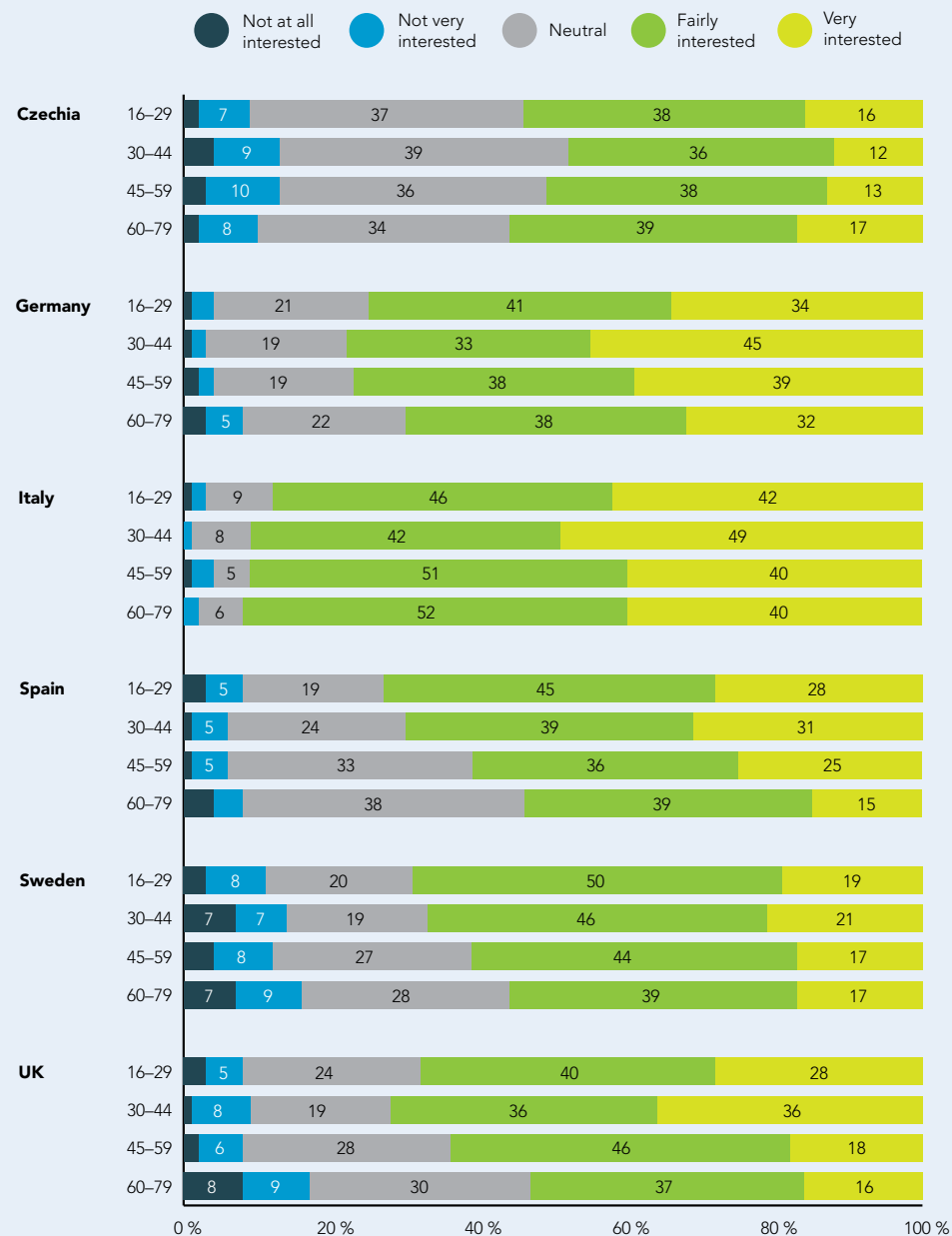
The survey was directed towards the general public and revolved around three themes:

- ▶ Interest and confidence in life sciences research
- ▶ Views on personal involvement on life sciences research
- ▶ Awareness and concerns about genome editing. A selection of the results is summarised below.

INTEREST AND CONFIDENCE IN LIFE SCIENCES RESEARCH

- ▶ Interest in life sciences research is generally high with the number of respondents being fairly or very interested ranging from 52 percent (Czechia) to 91 percent (Italy).
- ▶ Levels of interest depend more on country of origin than any other demographic variable (age, gender, level of education, or a job related to research).
- ▶ The respondents are most interested in finding out more about research findings, practical applications of research findings and the methods used in research.
- ▶ Respondents with high levels of interest in life sciences research also express high levels of confidence in life sciences.
- ▶ Age and level of education had only marginal effect on confidence levels.

Figure 1: Interest in life sciences research in relation to age and country (percent).



PERSONAL INVOLVEMENT IN LIFE SCIENCES RESEARCH

- ▶ Respondents saying that it is fairly or very important for the general public to be involved in life sciences research ranges from 68 percent (Czechia) to 93 percent (Italy). The positive views hold through all demographic variables.
- ▶ Fewer respondents would consider personal involvement in life sciences research, ranging from 39 percent (Czechia) to 84 percent (Italy).
- ▶ Men tend to be more interested in being personally involved in life science research than women.
- ▶ Respondents aged between 60 and 79 years are less willing to consider personal involvement in research than younger respondents across all countries.
- ▶ Respondents with a high interest in life sciences research are much more willing to be personally involved.
- ▶ The most attractive ways to be involved in research include several activities associated with citizen science projects: collaborating in data collection, giving opinions on research questions/topics, collaborating in data analysis and donating research material.
- ▶ The two most interesting topics that would motivate involvement are to understand the impact of lifestyle on health and that of DNA on health and disease.

Figure 2: Importance that the public gets involved across countries (percent).

- Very important
- Fairly important
- Neutral
- Not very important
- Not at all important

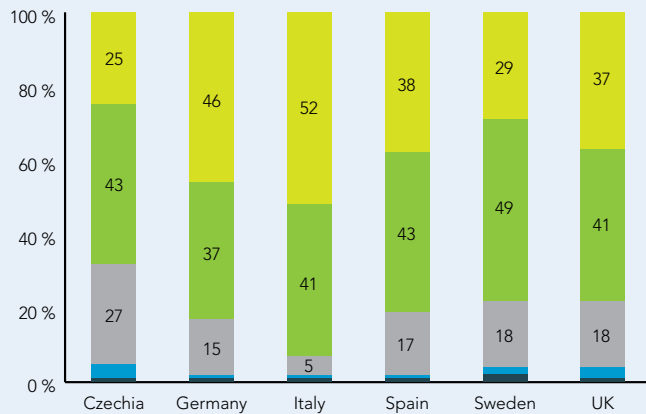


Figure 3: Interest in getting personally involved in relation to age across countries (percent of 'yes' answers).

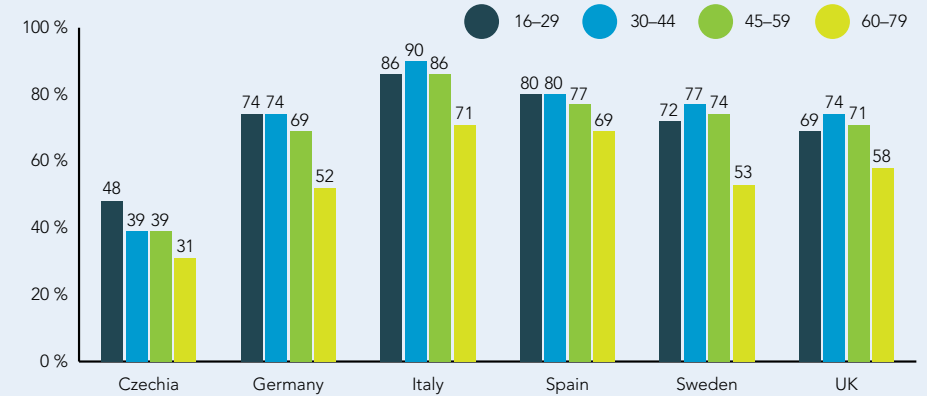
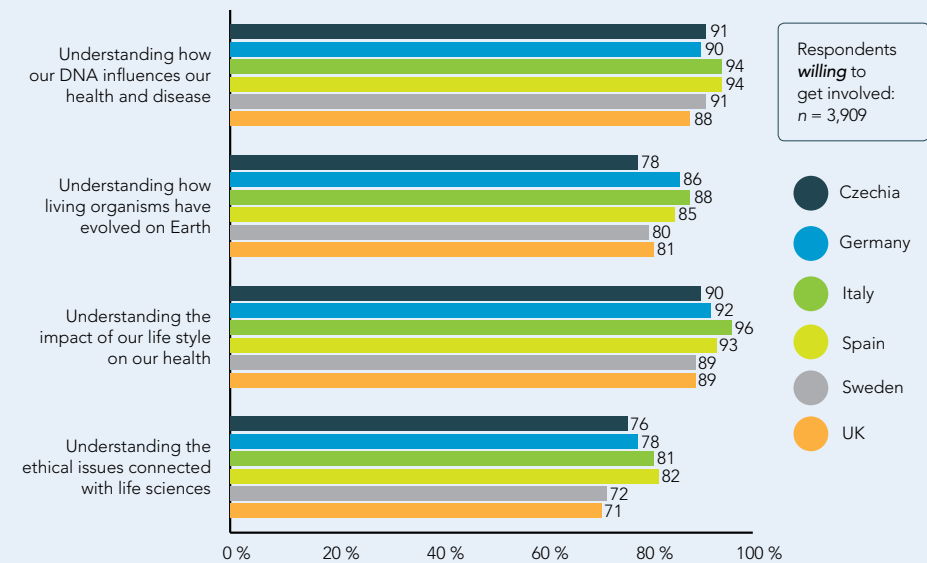


Figure 4: Interest in involvement in different topics of respondents *willing to get involved* across countries (percent of 'yes' answers).



AWARENESS AND CONCERNS ABOUT GENOME EDITING

- ▶ 55 percent of the respondents have previously heard of genome editing. By country, this number ranges from 45 percent (Czechia and Germany) to 74 percent (Sweden).
- ▶ Men have heard of genome editing to a higher extent than women in all of the countries.
- ▶ There is higher awareness of genome editing among higher educated people in all of the countries except Czechia, where no substantial differences among educational groups were found.
- ▶ Respondents with high confidence in life sciences research have higher awareness of genome editing.
- ▶ The three most desired purposes for using genome editing in all of the countries are: prevention or cure of diseases, prevention of disabilities and organ transplantation.
- ▶ Respondents with higher levels of interest and confidence are more supportive of all purposes of genome editing.
- ▶ The largest concerns associated with genome editing are that the technique might be misused or that it might come with unexpected side-effects in humans.
- ▶ Levels of concern are only marginally affected by respondents having a job related to research.
- ▶ All levels of concern decrease with rising age.
- ▶ Higher levels of concern are expressed with increasing interest in life sciences research.

Figure 5: Awareness of genome editing in relation to level of education (percent of 'yes' answers).

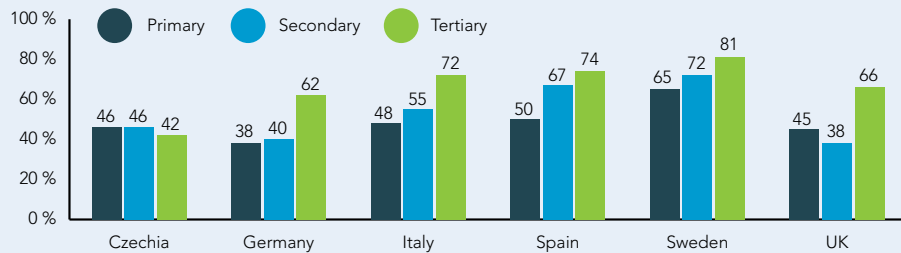


Figure 6: Awareness of genome editing across countries (percent of 'yes' answers).

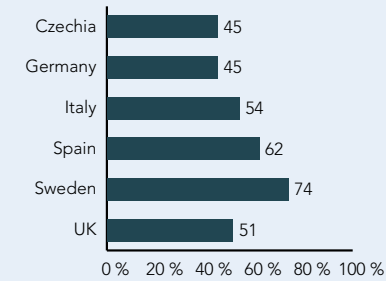


Figure 7: Awareness of genome editing across countries (percent of 'yes' answers).

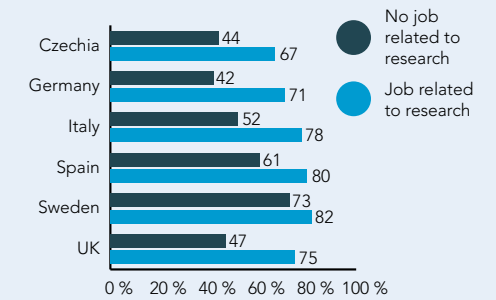
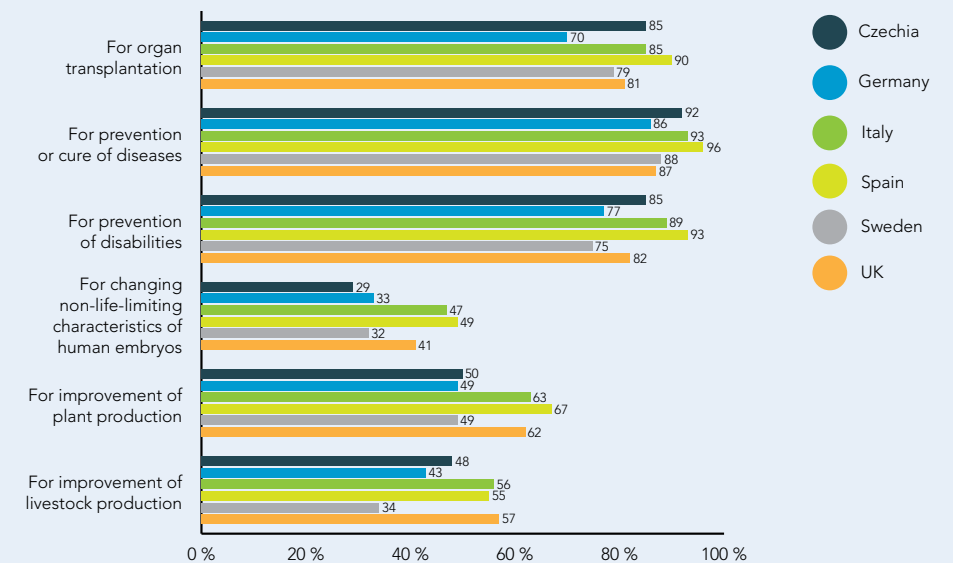


Figure 8: Public support across countries for use of genome editing for different purposes (percent of 'yes' answers).



The ORION project aims to trigger **evidence-based institutional, cultural and behavioural changes** in Research Funding and Performing Organisations (RFPOs), targeting researchers, management staff and high-level leadership. The vision of ORION is to **“embed” Open Science and Responsible Research and Innovation (RRI) principles:**

- ▶ ethics;
- ▶ gender;
- ▶ governance;
- ▶ open access;
- ▶ public engagement; and
- ▶ science education

in Research Funding and Performing organisations, in their policies, practices and processes to organise and do research. The focus is particularly on RFPOs involved in life sciences and biomedicine. Throughout the project the ORION partners will seek to identify drivers and barriers, interests and values, as well as produce “prototypes” in the form of new citizen science projects, new research strategies, new funding frameworks and training material.



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