

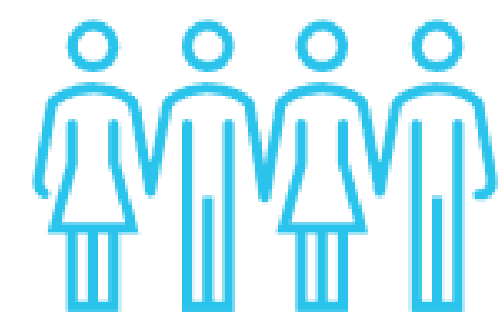
Who's Who: Getting to Know Flemish Citizen Scientists and Project Initiators

Duerinckx, A., Hens, C., Kerckhoffs, S., Van Laer, J., & Verstraelen, K. (2021), Scivil, Leuven, Belgium

The citizen

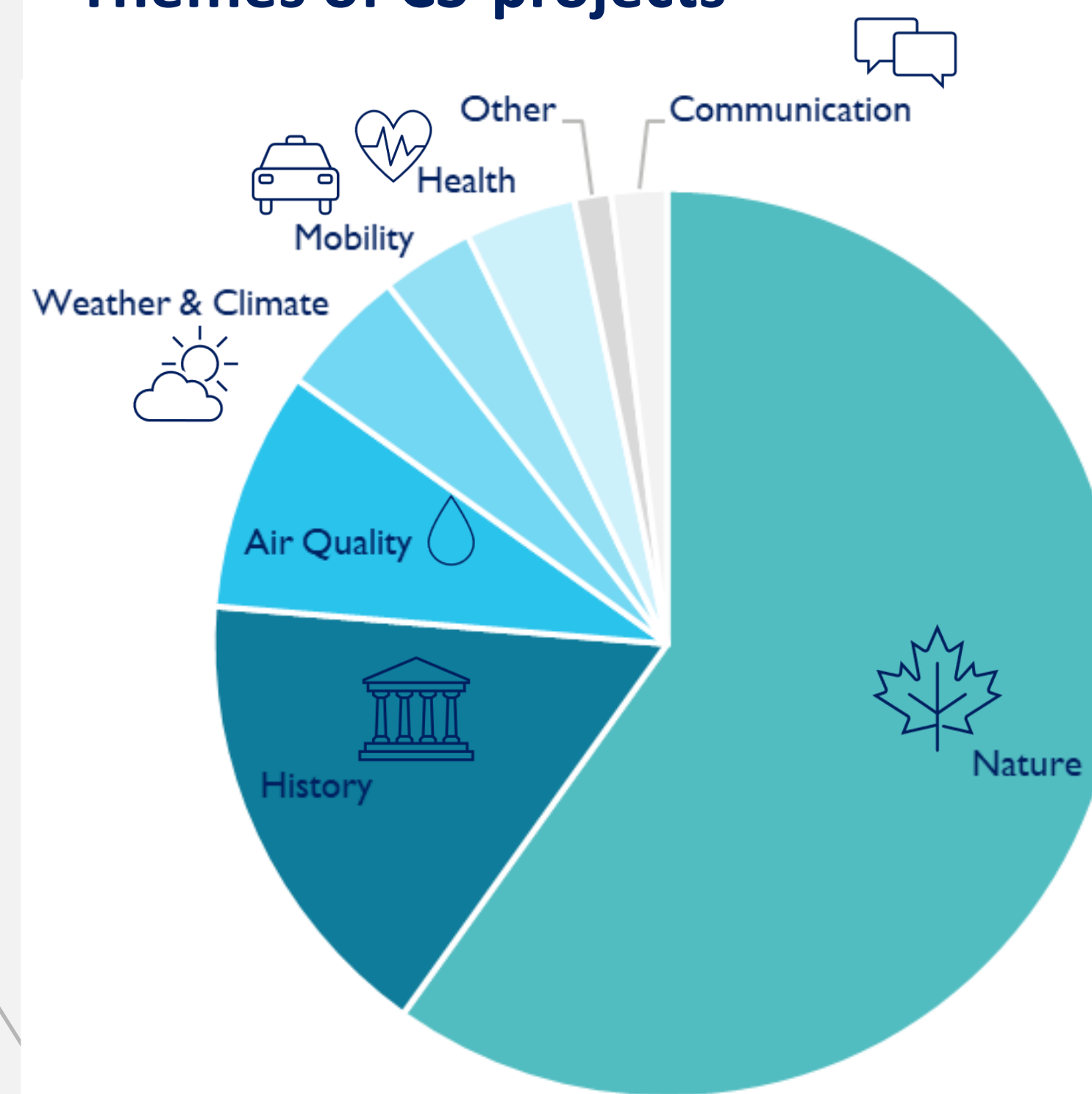
- 195 citizens participated
- Survey was distributed via websites, social media and newsletters of citizen science projects and platforms in Flanders

Demographics



- Older than average citizen: 52% of participants above 56 years
- More men (59%) than women (41%) participated in CS-projects
- Higher educated than the average Flemish population
- Highly project specific!

Themes of CS-projects

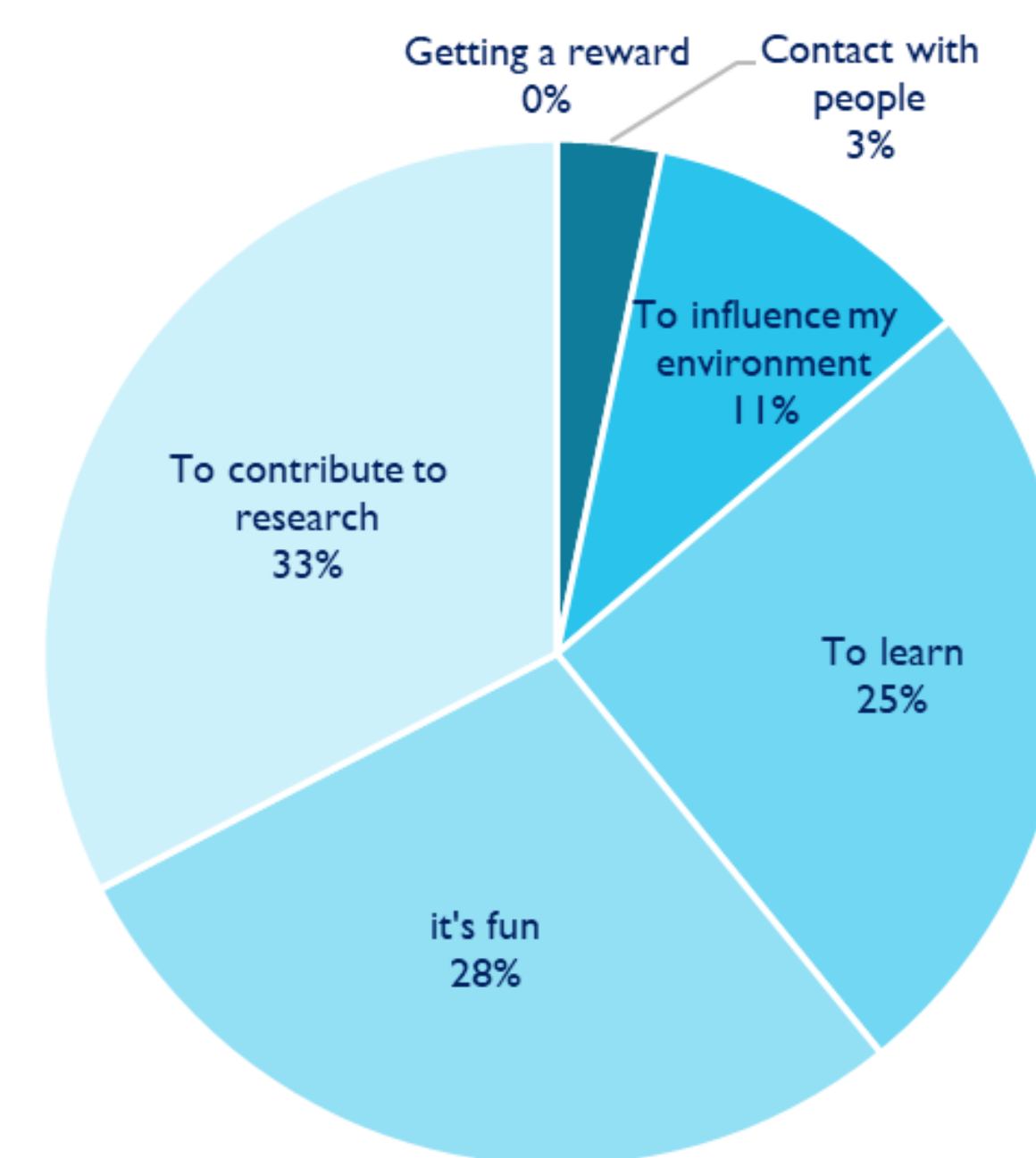


Relatively, men more often opt for a nature or weather and climate themed project, whereas women more often opt for a communication, history or health themed project.

Citizens from lower populated areas participated more often in nature themed projects, whereas citizens from densely populated areas more often took part in mobility or air quality themed projects.

Motivation of citizen scientists

The motivation 'to influence my environment' is relatively less important, but especially matters for citizen participating in mobility projects. Followed by projects about air quality and climate.



Experiences of citizen scientists*

Fun:
Avg of 4,6 out of 5

Learning:
Avg of 4,4 out of 5

Expectations met:
Avg of 3,7 out of 5

75% agree that their contribution has a **positive impact on themselves**

89% agree that their contribution is **valued by the project organisers**

49% agree that their contribution has a **positive impact on their environment**

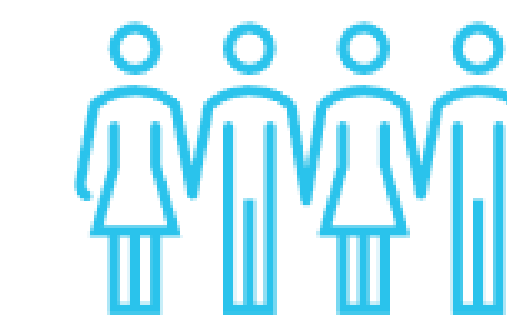
95% agree that their contribution **assists scientific research**

*Scored on a Likert scale

The scientist

- 119 Flemish scientists participated
- This study was a follow-up of a study performed in 2015 by the Flemish Young Academy and EOS
- Survey was distributed via the channels of the Young Academy and Flemish research institutes, deliberately not distributed through Scivils' channels to limit the bias in the data

Demographics

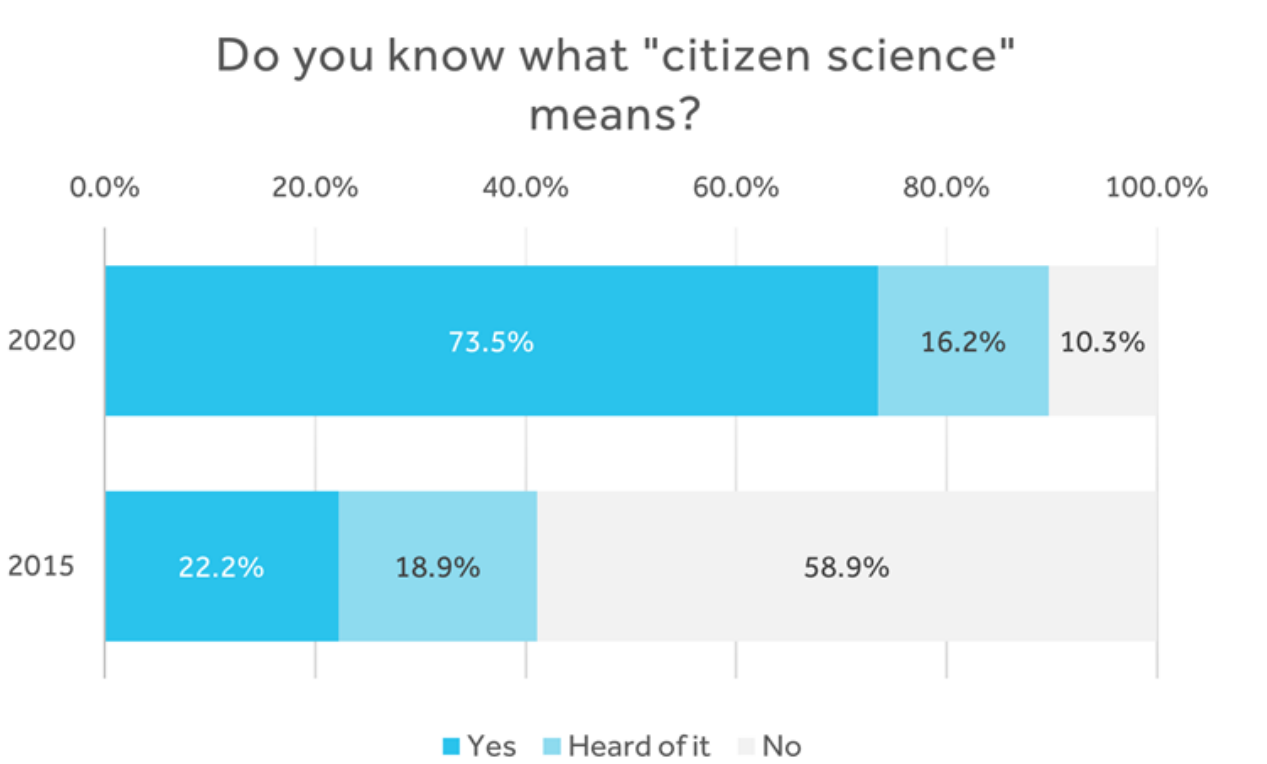


- Age between 21—93
- More men (60,5%) than women (39,5%) participated
- Top 3 Scientific domains where participating scientists are active:
 1. Social sciences and humanities (40%)
 2. Exact sciences (26%)
 3. Biomedical and medical science (17%)

Knowledge about citizen science



- CS is much **better known** than 5 years ago: In 2020 73,5% of the participating scientists knew what the concept meant, and 84% of this group was able to give an example of a CS-project.
- Scientists frame CS mainly as **involving citizens in scientific research and data collection**. Other forms of CS, such as involving citizens in the design of the study, are mentioned less.



Experience of citizen science



- 95% had a positive **general experience**
- 77% positively scored the **collaboration** with the citizens
- 91% positively scored the **contribution** of the citizens

Opportunities and challenges of CS

<p>+</p> <ol style="list-style-type: none"> 1. Opportunity to collect lots of data 2. Conducting socially relevant research 3. Scientific education of participants 	<p>↔</p> <p>Scientists with and scientists without CS-experience indicate the same opportunities of CS</p>	<p>—</p> <p>Scientists with CS-experience</p> <ol style="list-style-type: none"> 1. Additional communication work 2. Engaging citizens on a long term 3. Additional administrative work 	<p>Scientists without experience</p> <ol style="list-style-type: none"> 1. Sufficient funding on long term 2. Finding financing for the project 3. Engaging citizens on a long term
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Future of citizen science



- 87% of the scientists think **CS has a future (>2015)**
- 38% of the scientists consider **starting a CS-project (again) (<2015)**

- In need of guidelines about
 - Funding opportunities for CS
 - Legal, ethical and privacy aspects of citizen science
 - Communication in CS-projects

Takeaways

Typical citizen in CS-projects: older, highly educated men

Participation is highly project dependent!

F.e. MamaMito → lot of women;

Nature Snapp → more young people

→ How to reach **underrepresented groups**? See tips in our communication guide



Challenge for CS-project initiators: **Engaging citizens on a long term**

→ three most frequent motivations of the citizens:

- To contribute to scientific research
- Because it's fun
- To learn

→ By putting extra effort in **responding to these motivations & keeping track of the expectations** of the citizens, you can keep your citizens motivated.

More tips about motivating the citizen scientists in our communication guide.

Only **38%** of the scientists consider **starting a CS-project** (again).

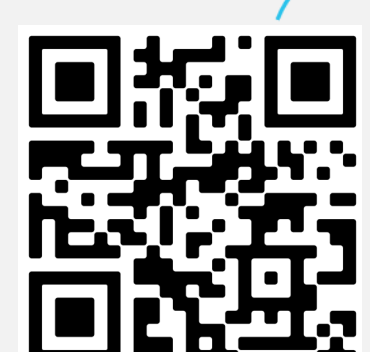
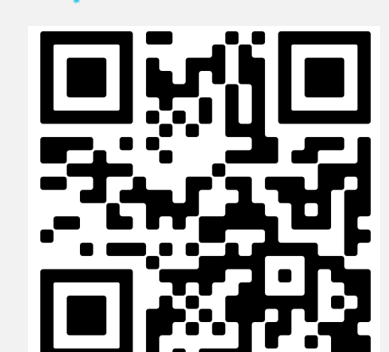
Possible explanations:

- Scientists have **difficulties finding funding** for their CS-project
- Starting a CS-project isn't conducive for their **academic career**

→ Mainstreaming CS

“The citizen in Flemish citizen science”

“Citizen science and Flemish scientists”



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