VIEWS OF PERSONS WITH DISABILITIES ON DIGITAL ASSISTIVE TECHNOLOGIES: WOULD THEY HELP THEM TO BECOME MORE INDEPENDENT?

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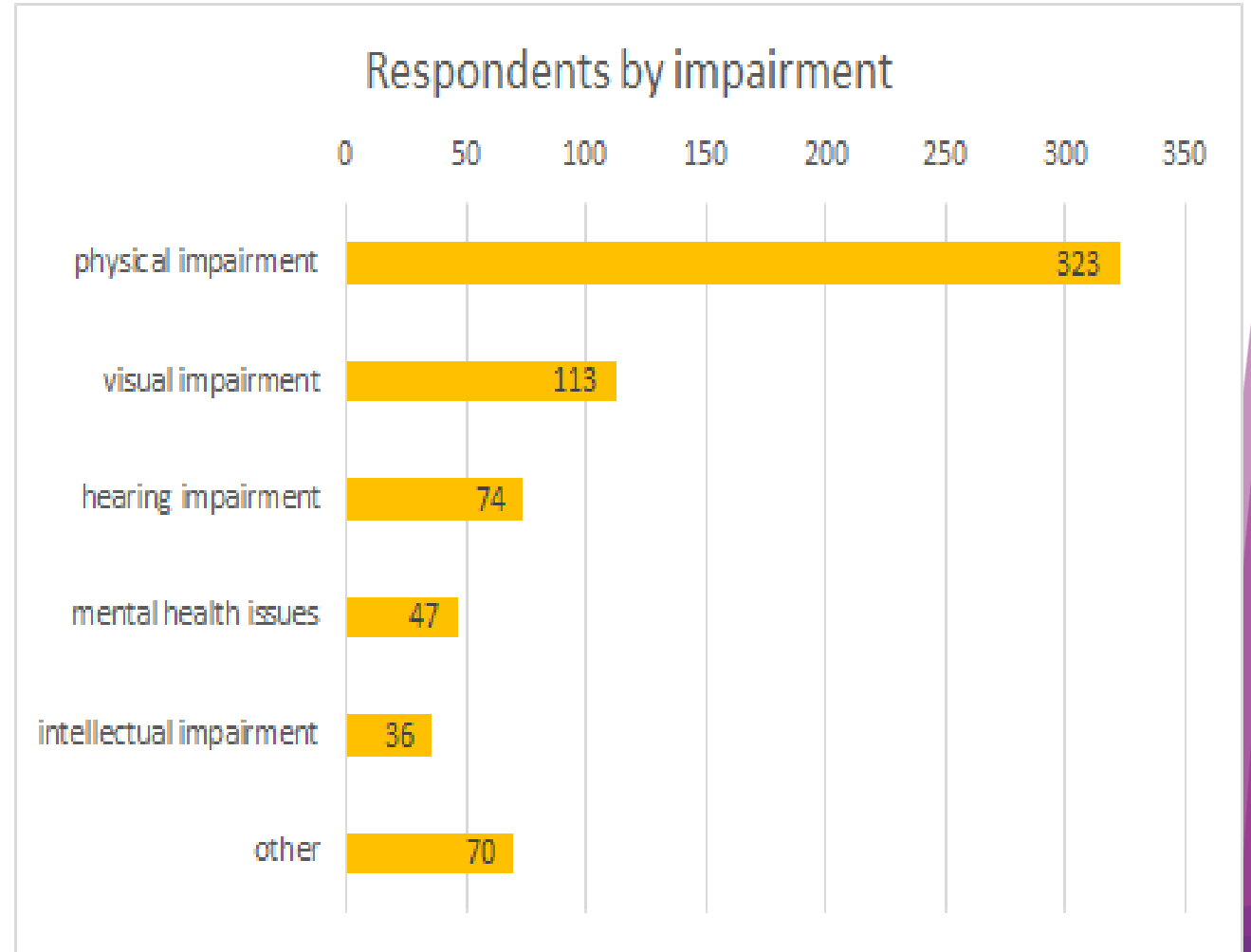European Network on Independent Living

- Digital assistive technologies promote greater access to equal opportunities and increase independence for persons with disabilities.

- While the process of digital innovation keeps proposing new assistive technology solutions, it is very important to determine, if persons with certain disabilities are willing to use **digital assistive technologies**.

Survey findings represent the views of:

- **553** persons with different types disabilities
- From **21** European countries.
- Women = **45.8%**
- Average age = **46.4** years.

Data gathered online between Nov 2020 - Feb 2021
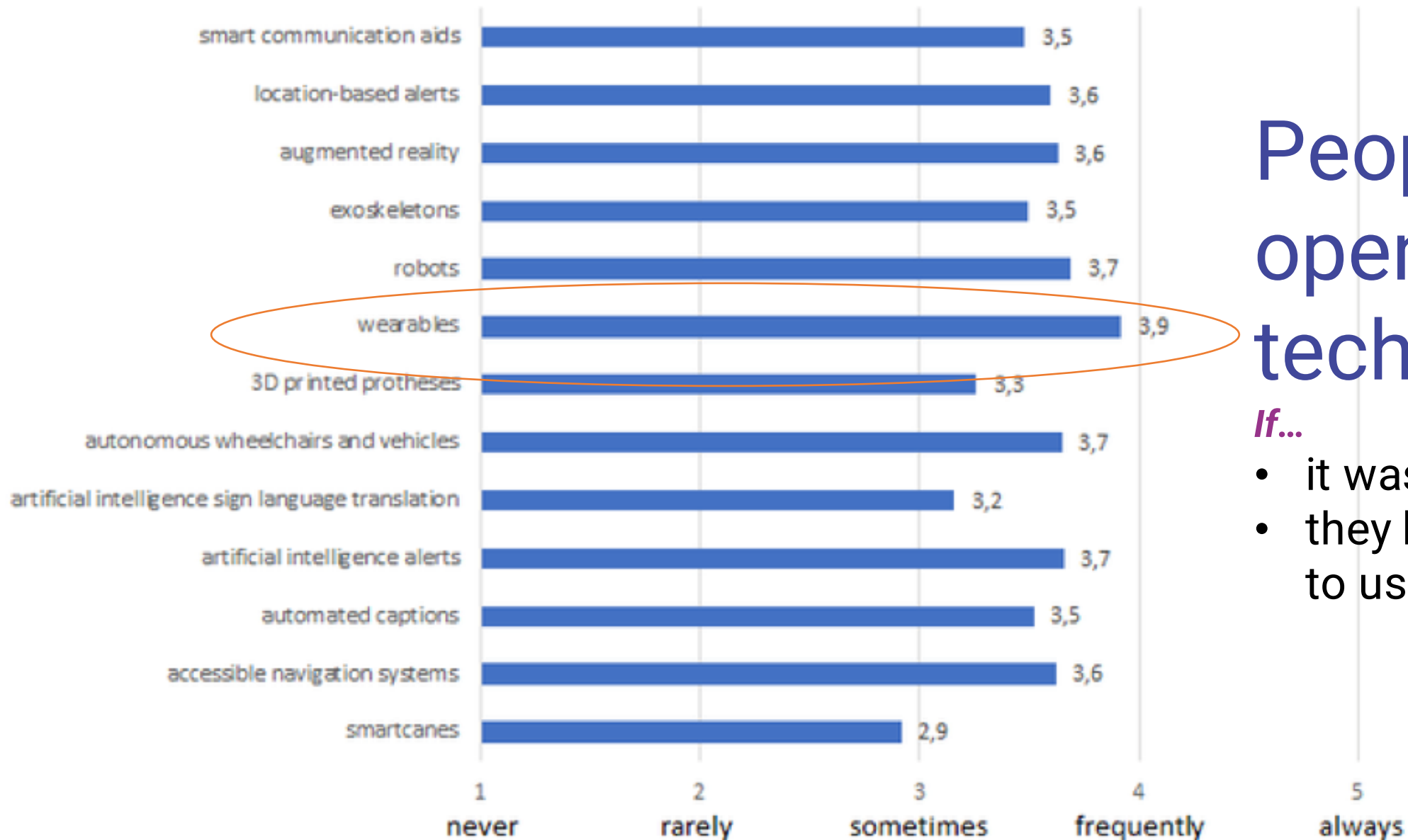
Respondents by impairment

Impairment	Count
physical impairment	323
visual impairment	113
hearing impairment	74
mental health issues	47
intellectual impairment	36
other	70

Respondents were invited to rate these digital assistive technologies:

1. Smart communication aids
2. Location based alerts
3. Augmented reality
4. Exoskeletons
5. Robots
6. Wearables
7. 3D printed prostheses
8. Autonomous wheelchairs and vehicles
9. Artificial intelligence sign language translation
10. Artificial intelligence alerts
11. Automated captions
12. Accessible navigation systems
13. Smartcanes

Use intention of future assistive technologies

Technology	Value
smart communication aids	3,5
location-based alerts	3,6
augmented reality	3,6
exoskeletons	3,5
robots	3,7
wearables	3,9
3D printed protheses	3,3
autonomous wheelchairs and vehicles	3,7
artificial intelligence sign language translation	3,2
artificial intelligence alerts	3,7
automated captions	3,5
accessible navigation systems	3,6
smartcanes	2,9

Scale: 1 never — 2 rarely — 3 sometimes — 4 frequently — 5 always

People are open to tech,

If...
- it was accessible
- they had the skills to use it

Preferences based on the type of disability:

- The most desirable solutions across all types of disabilities are wearables, artificial intelligence alerts, robots and autonomous wheelchairs.

- Autonomous wheelchair was not only preferred by persons with physical, but also with intellectual disabilities.

- Accessible navigation systems were welcome by persons with visual impairments but also by persons with intellectual disabilities.

Preferences based on the type of disability:

- AI alerts were particularly welcome by persons with intellectual disabilities who were also open to other technologies, like location-based alerts, augmented reality, robots, and smart communication aids.

- Automated captions and AI alerts are seen as useful tools by users with hearing impairments.

- Persons with visual impairments would welcome accessible navigation systems, robots and augmented reality solutions.

Recommendations:

Persons with disabilities would welcome and are willing to use digital assistive technologies if:

    a) they feel competent in using these technologies;

    b) these technologies respond to their access needs and support their independence.

Therefore, it is crucial to:

    a) provide persons with disabilities with smart technologies;

    b) raise their confidence in the use of digital technologies;

    c) involve persons with disabilities in the process of creating and developing assistive technologies.

Thank you for your attention!

For further information on the project please visit: https://trips-project.eu/

Any questions? Contact me: laura.alciauskaite@enil.eu