



FACULTY OF ARTS
Charles University

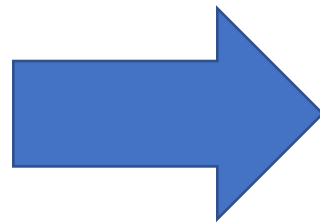
Institute of Information Studies and
Librarianship

Data literacy among Charles University PhD students: are they prepared for their research career?

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Current situation

- Data sharing = an essential component of today's science
- Willingness and ability to share data and archive them correctly is one of the prerequisites for a successful research career
- Need for data literacy training
- Need for data literacy skills assessment
- No study done in the Czech Republic so far



Decision to participate in
Data Literacy Multinational
Study

Charles University (CUNI)

- Largest multidisciplinary, research-oriented higher education institution in the Czech Republic
- 17 faculties
- 50 000 students, 7500 PhD students
- 4 600 academics and researchers
- Humanities, social sciences, medicine, natural sciences
- **No data repository**

Research instrument

- Czech version of the Data Literacy Multinational Study questionnaire
- Advantages
 - Instrument already tested
 - International comparison
- Disadvantages
 - Structure of disciplines different
 - Respondents did not understand some terminology, more space for clarification was needed

Survey sample

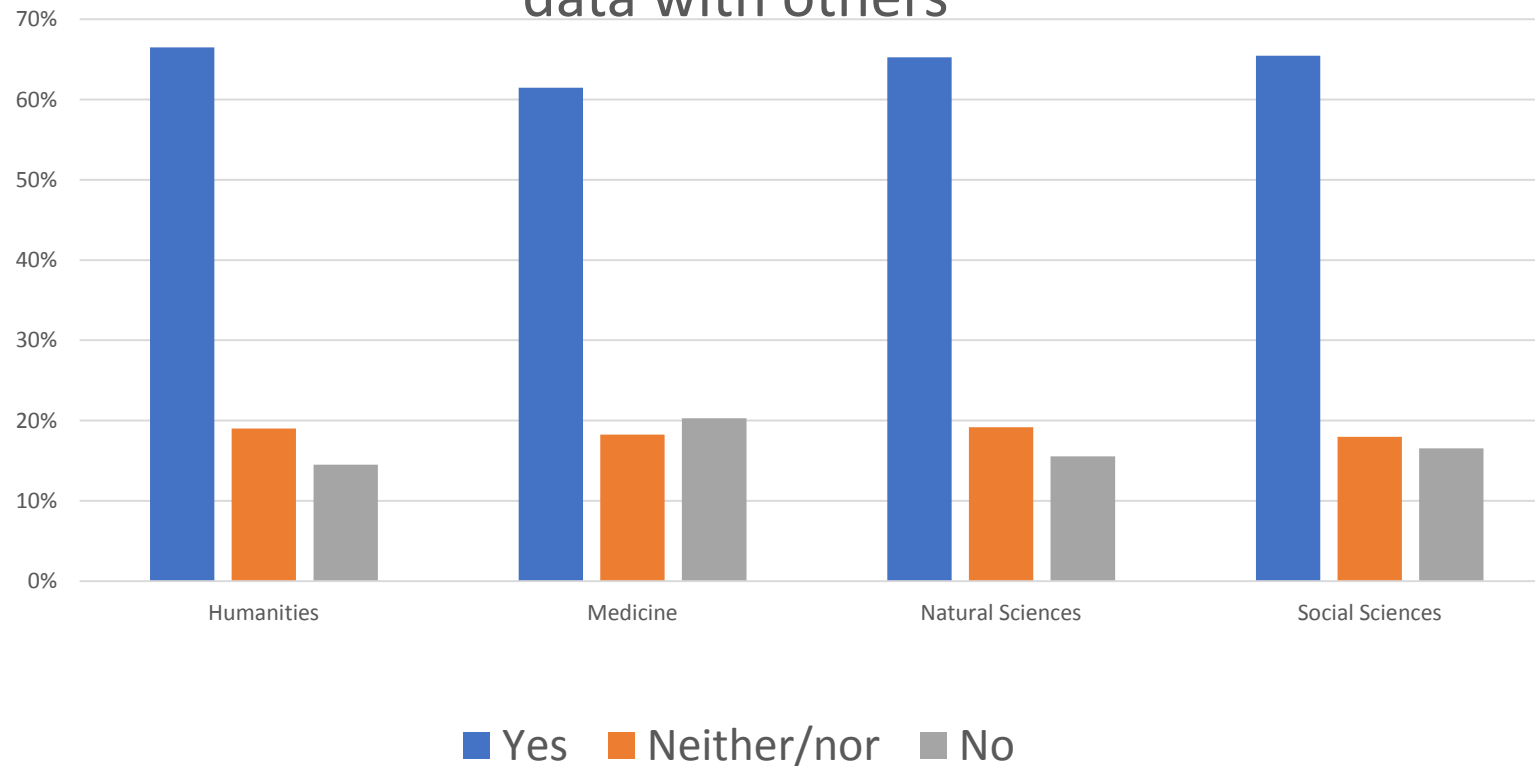
- Heterogeneity of the target group - “census” polling method used
- Questionnaire distributed via CUNI e-mail directory
- 1434 completed questionnaires
 - 826 from doctoral students (11% of all the CUNI doctoral students)
- Basic scientific areas
 - Humanities (incl. history and philology)
 - Medicine
 - Natural sciences (incl. maths, physics and biology)
 - Social sciences

Research questions and hypotheses

- What are the attitudes of CUNI doctoral students to data sharing and storage?
- What are their current practices?
- **Hypotheses**
 - CUNI doctoral students are willing to share research data and support open access to data.
 - Research teams currently share data, but most probably there exist fundamental differences between subjects.
 - Doctoral students view research data archiving as an important prerequisite to further research work.

Willingness to share

I am comfortable and willing to share my research data with others



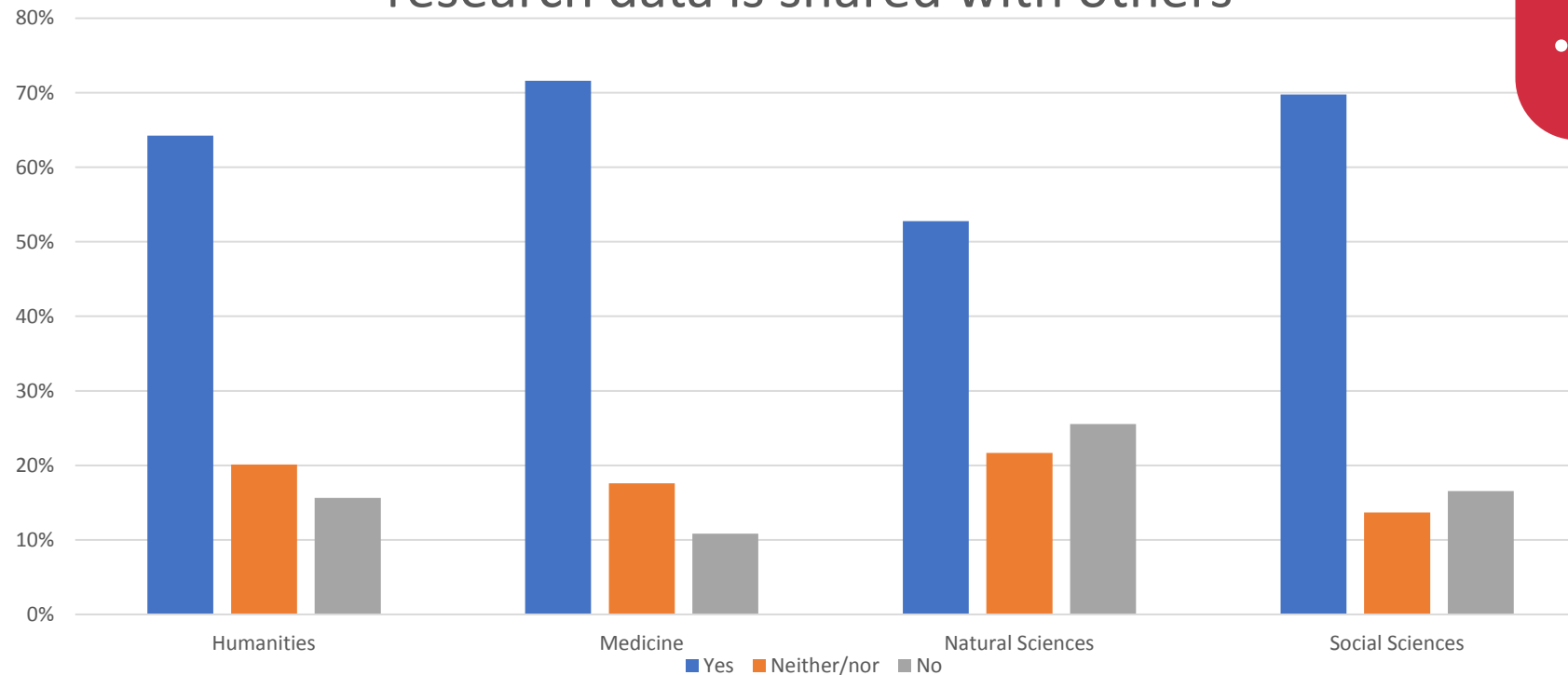
They are willing to share

BUT

64% are not familiar with open access issues

Ethical issues

I perceive data ethics could be an issue when research data is shared with others

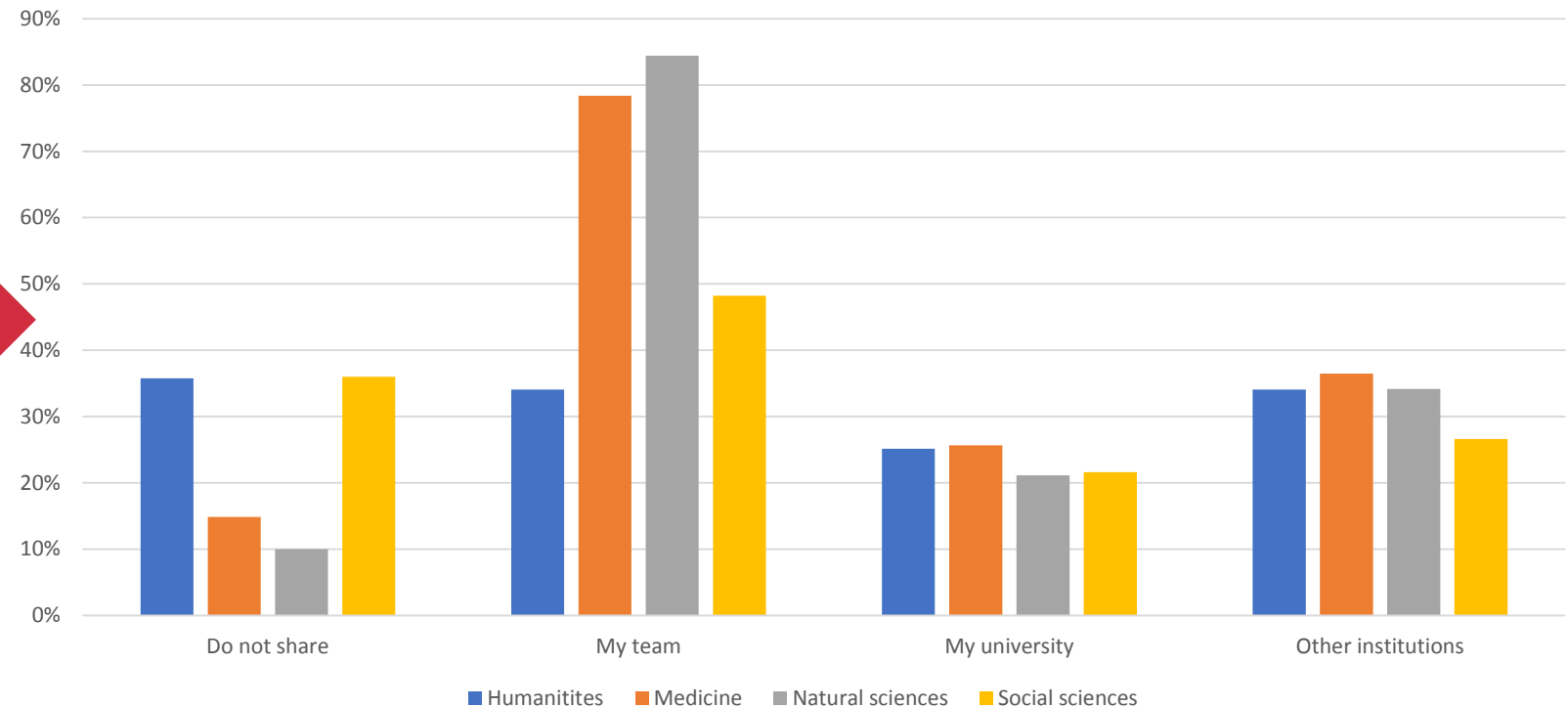


They worry mostly about

- misinterpretation of data (37%)
- misuse of data (33%)

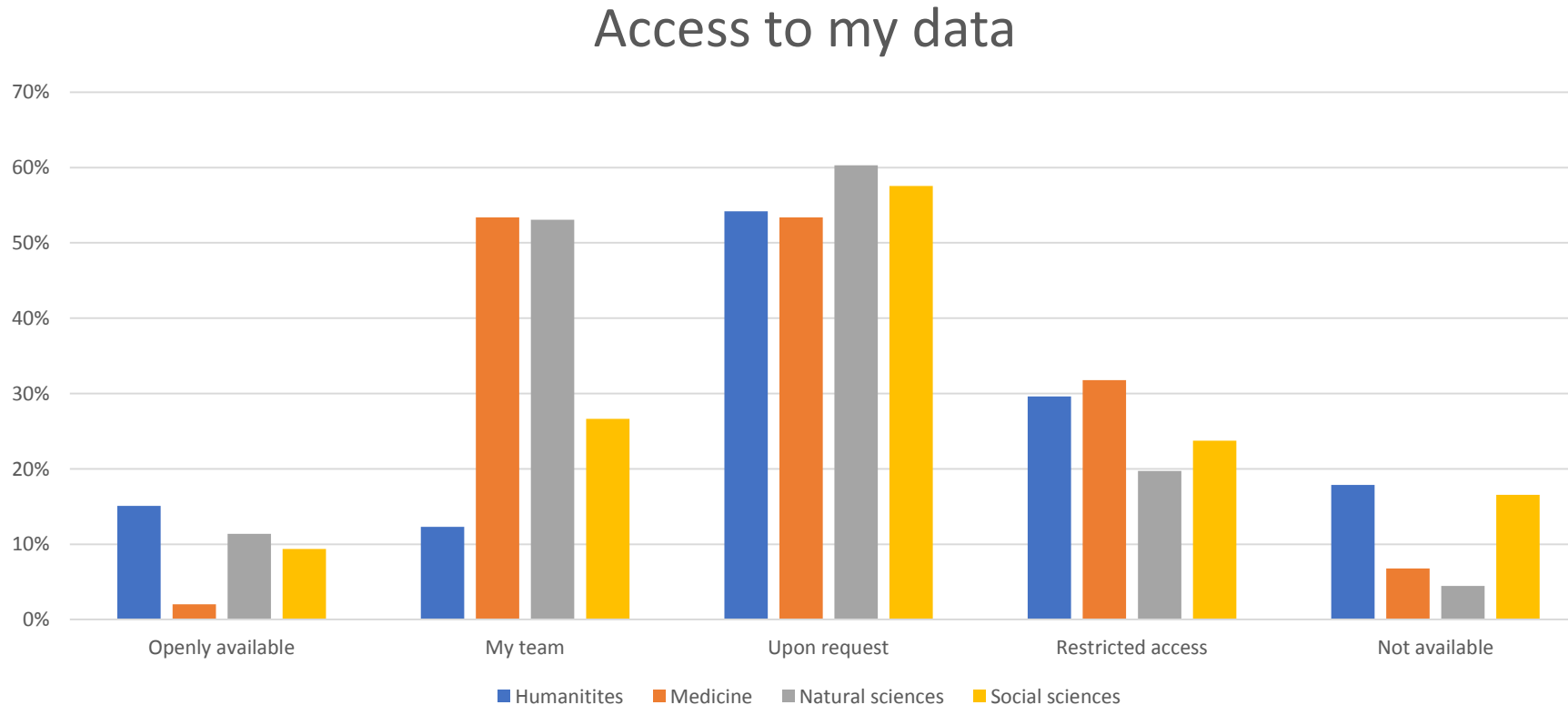
Current data sharing practices

Do you collaborate with other researchers and share data?



Difference between humanities+social sciences and medicine+natural sciences

Availability of data

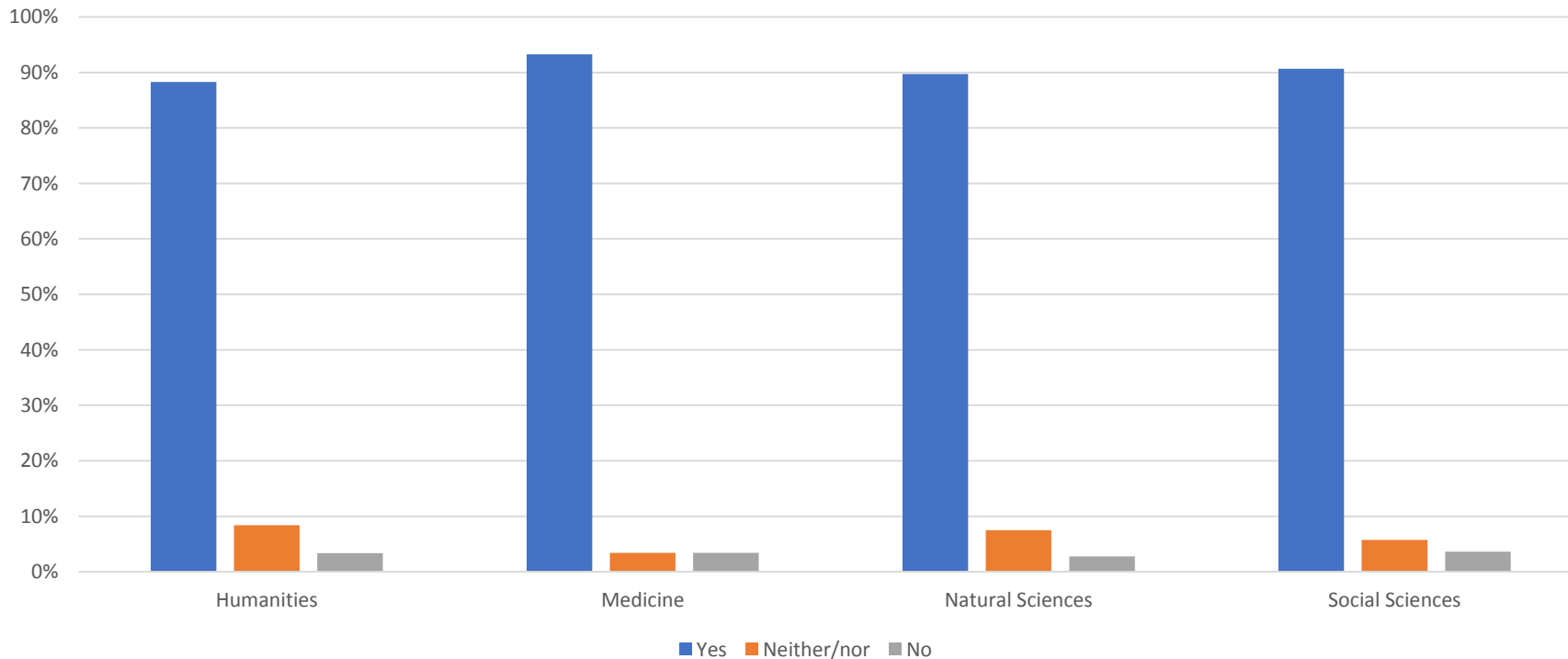


Why aren't data available openly?

- Lack of easy solutions for open access data sharing?
- Ignorance?

Willingness to archive data

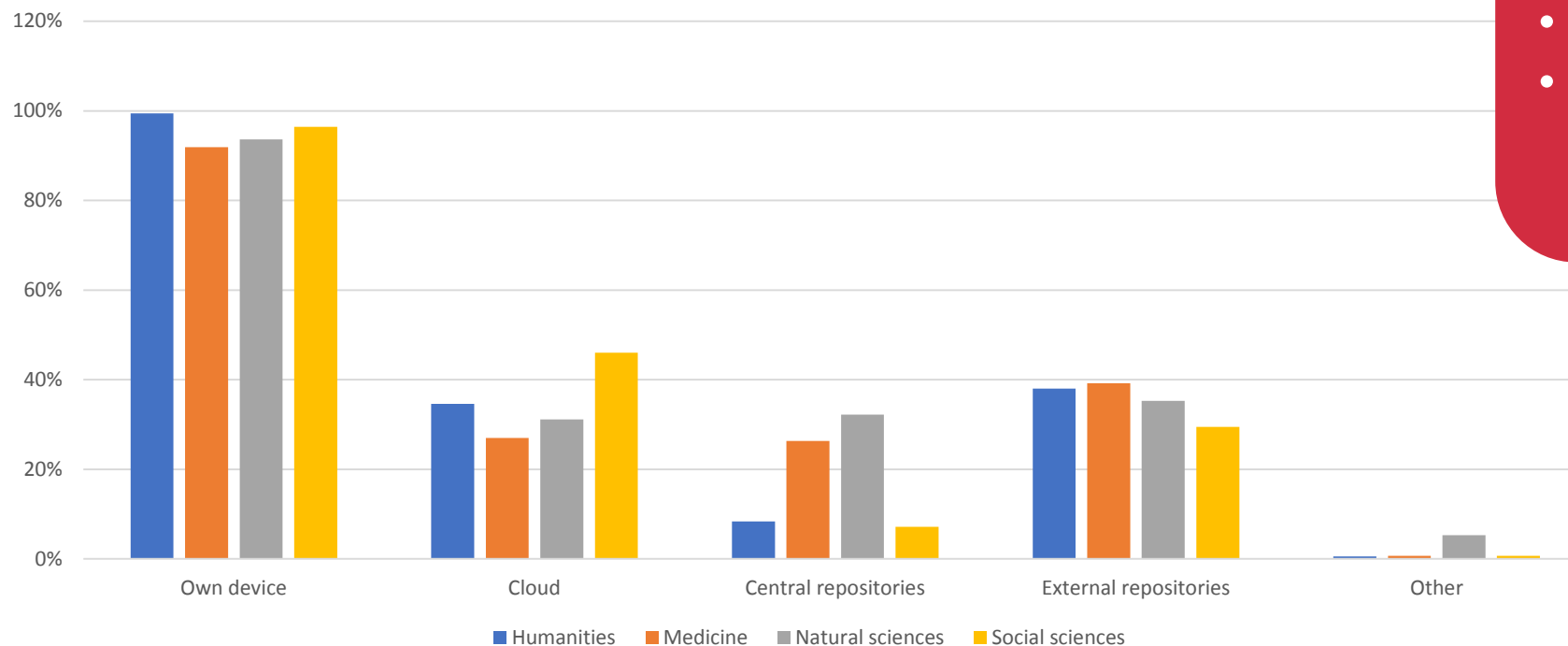
I would like to store my research datasets beyond the lifetime of the project



They definitely need a university data repository

Current data storage practices

Where do you usually store the data you produce from your research?



Metadata?

- They know the term – 60%
- They do not use them at all (39%) or rarely (34%)

Conclusion

CUNI doctoral students

- are willing to share data
- understand this task as an important one in their research careers
- would prefer data preservation for further research to take place in a common university data repository
- are not aware of new trends in data sharing
- are unfamiliar with open access principles and principles concerning data management

So, are our PhD students prepared for their research career?

- Only partially
they **understand the importance of data in their research**
and they **are prepared to share them**
BUT they **lack practical data management skills needed to manage their data effectively**
- For their better preparedness, it will be necessary to introduce data management skills training for doctoral students at the university.

Thank you!

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