

Data Literacy, Collaboration and Sharing of Research Data Among Academics at the University of Iceland

Ágústa Pálsdóttir

Professor of Information Science



UNIVERSITY OF ICELAND

Research data literacy

- A sub-discipline of information literacy (Schneider, 2014)
 - Data literacy: „a specific skill set and knowledge base, which empowers individuals to transform data into information and into actionable knowledge by enabling them to access, interpret, critically assess, manage, and ethically use data“ (Koltay, 2017)
 - Media and Information Literacy: “...access, retrieve, understand, evaluate and use, create, as well as share information and media content in all formats...” (UNESCO, 2014)
- Data literacy should act as an incentive for researchers to share their data with others (Koltay, 2017)

Barriers to data sharing

- Researchers seem to be more interested in using datasets from other researchers than to share their own data (Tenopir et al., 2011)
- Data is mainly being shared with researchers own network of collaborators while interest at making the data openly available to everyone is relatively low (15% to 25%) (PARSE, 2009; RIN, 2010)

Variety of reasons for not sharing data openly:

- Time consuming to manage research data for sharing (Thessen and Patterson, 2011)
- Lack of time - Lack of funding - Not having a place for the data - Lack of standards – Data sharing not required by the sponsor (Tenopir et al., 2011)
- The data may be a vital asset for the researchers (RIN, 2011)
- Worries about legal issues and the misuse of data (PARSE, 2009)
- Ethical challenges (Hatter et al., 2013)
- Need for cultural changes and technical advances to encourage and promote (Thessen and Patterson, 2011)

Study aim and research questions

- The study aim is to investigate the data literacy and research data management among researchers at the University of Iceland
- The focus: Attitude towards the sharing of research data and collaboration and data sharing practices among academics
- Research questions:
 - What characterises the data sharing practices of the academics?
 - What challenges are the academics facing regarding data sharing?

Data collection – Respondents

➤ Data collection

- Online survey conducted in February and March 2017 among a sample of 225 doctoral students and 567 academic researchers
- Response rate for doctoral students was 25% (n=56) and for academic researchers 15% (n=85)

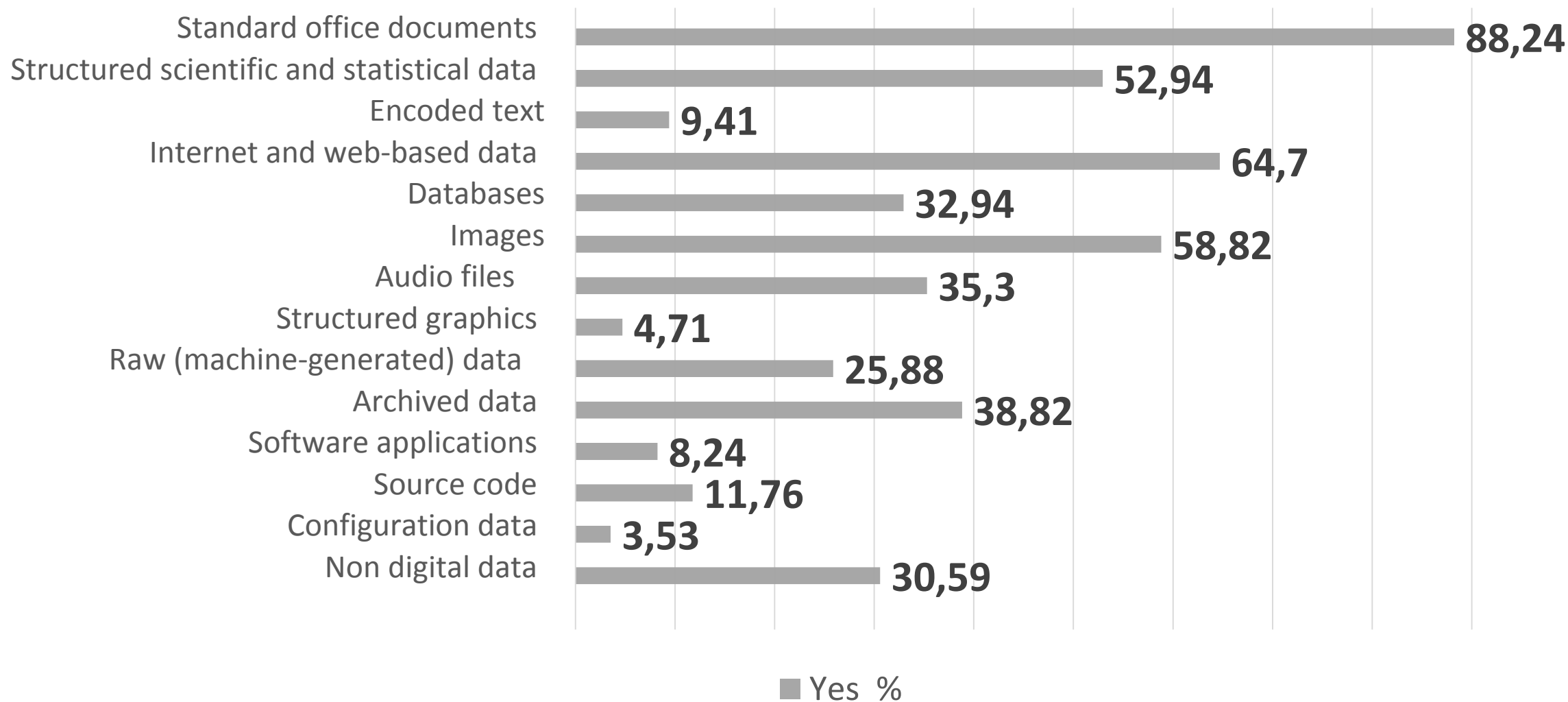
➤ Academic respondents characteristics

- Sex: women = 47.06% - men = 52.94%
- Academic field: 51.76% social science, 35.30% science, 12.94% humanities

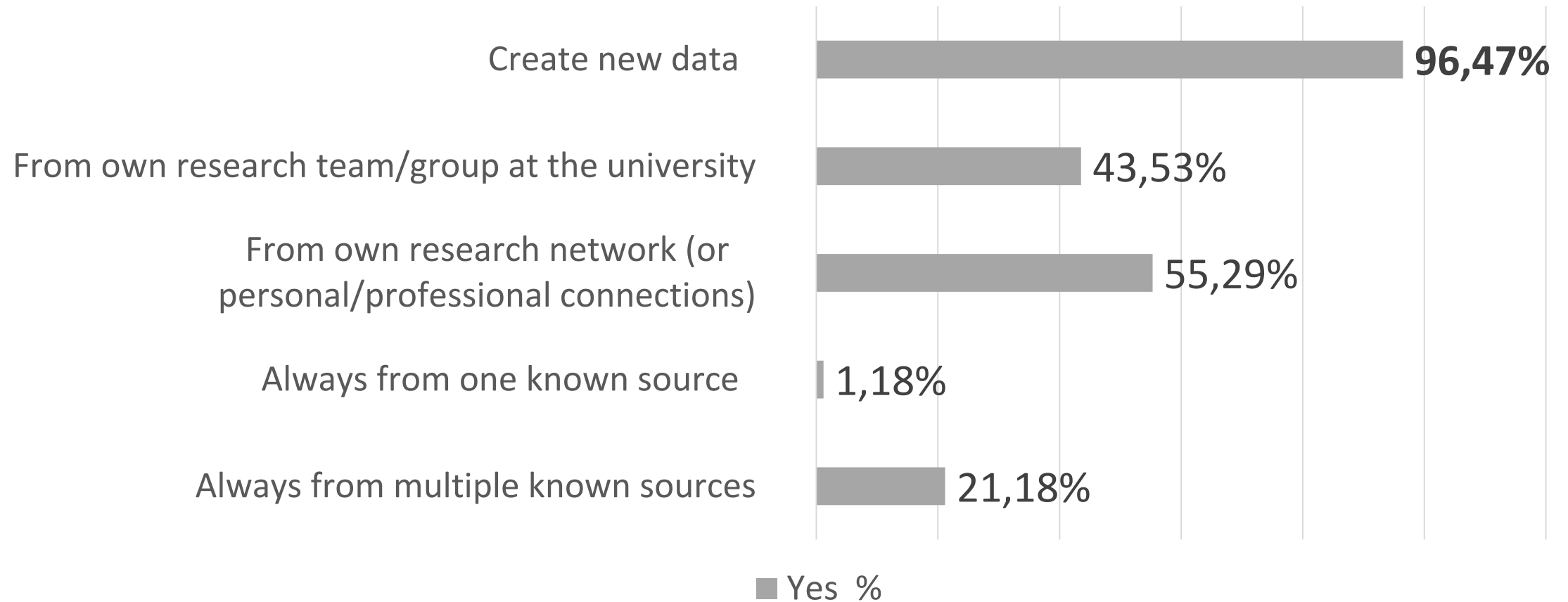
Questionnaire

- The same questionnaire used by all participating countries was translated from English to Icelandic
- Measurement instrument:
 - Seven background questions
 - A total of 18 questions about data literacy, awareness of data management issues, the extent of collaboration and sharing of research data and the researchers' attitude towards this
 - One open question for comments
- **Focus on six questions:** file type of data used – how participants get data – use of data from others – collaboration and sharing of data – access allowed to data – concerns for sharing data
- All the questions allow multiple answers

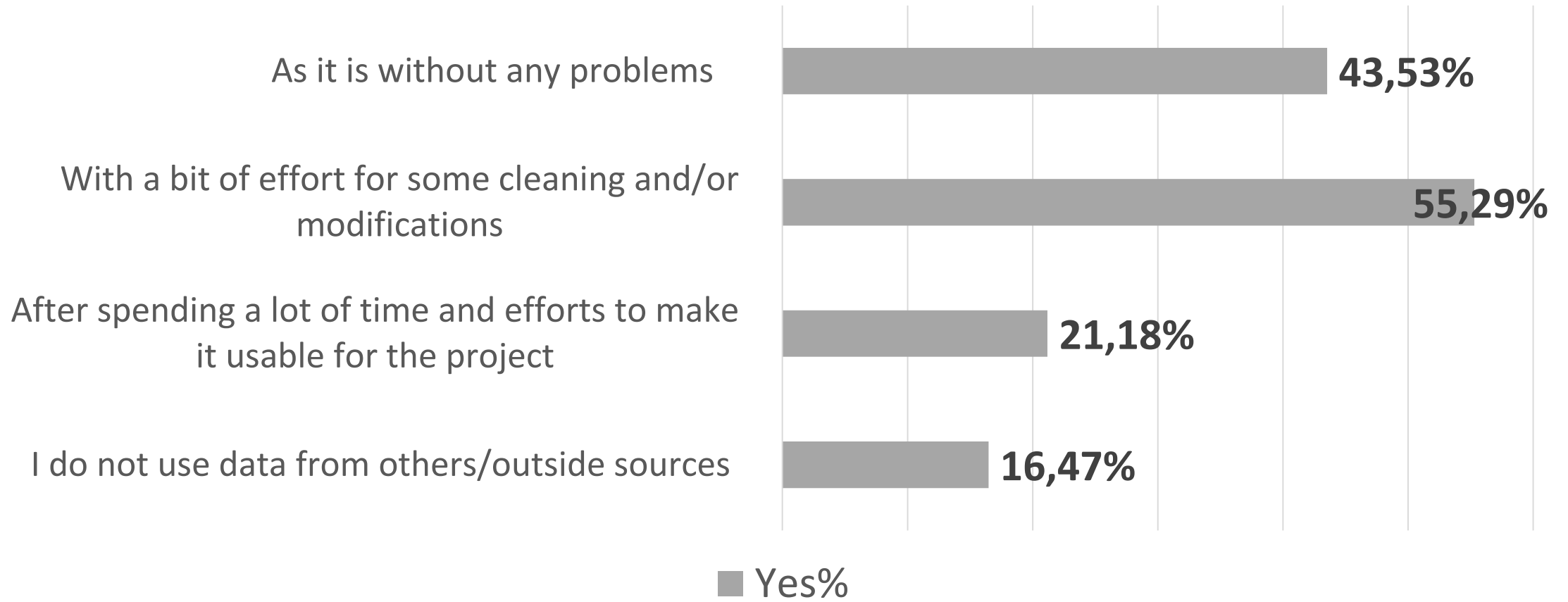
File type of data normally used for research



How do you usually get the data for your research?



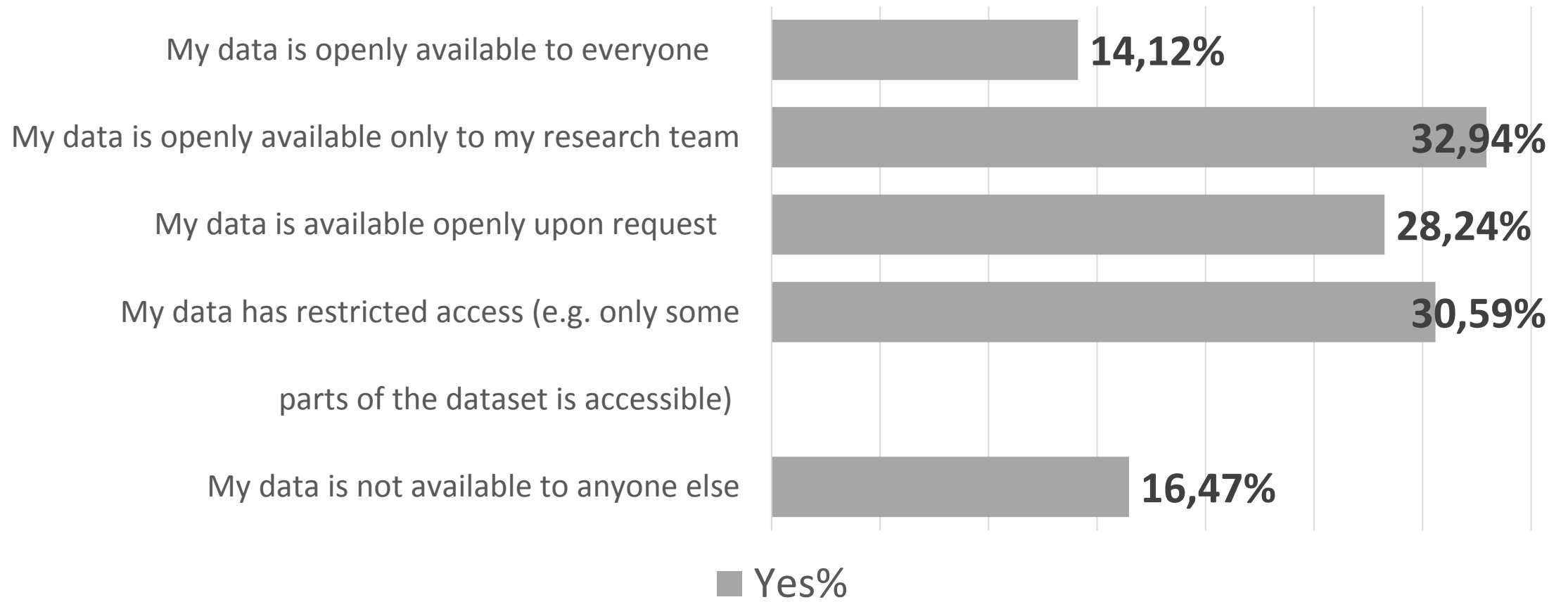
How do you usually use data that you get from others/outside sources?



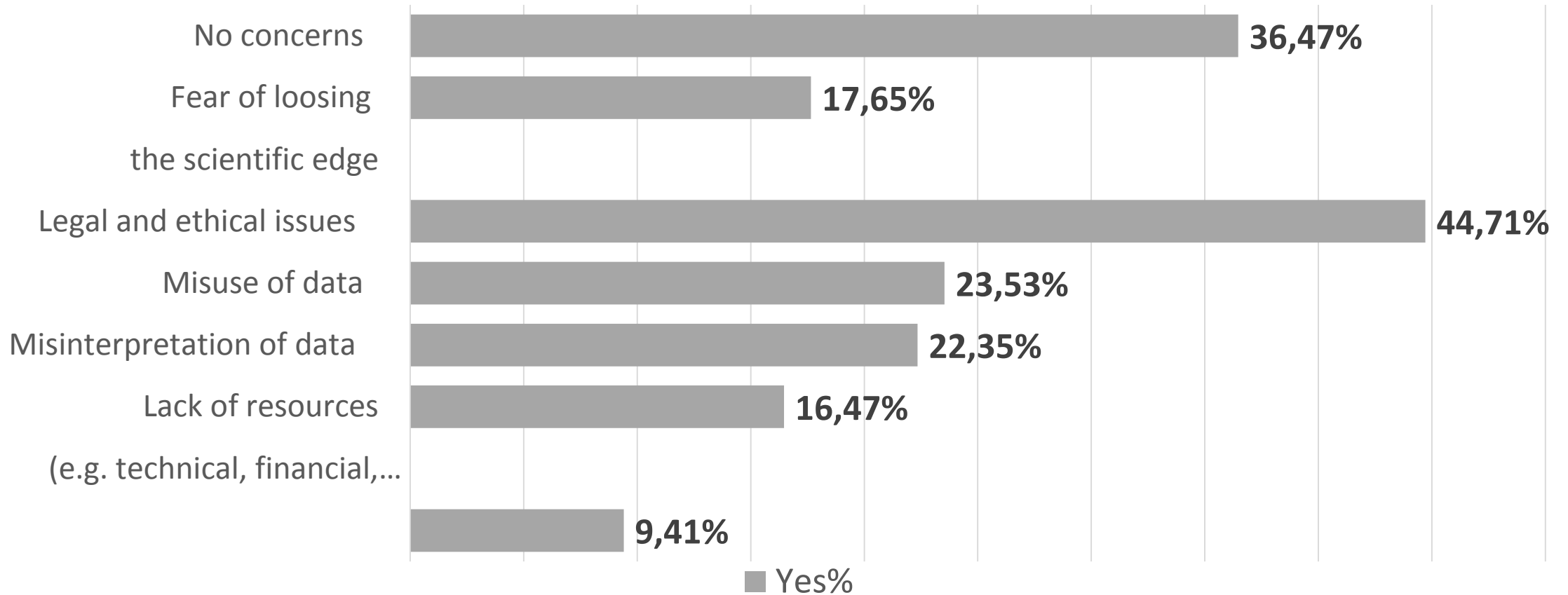
Do you collaborate with other researchers and share data?

- A total of 88.24 percent collaborate with other researchers and share data
 - Collaborate and share data with researchers that belong to the same research team as they do – 61.18%
 - Collaborate and share data with other researchers in the same university - 56.47%
 - Collaborate and share data with researchers in other institutions – 50.59%

What kind of access to research data do the participants provide others with?



Concerns for sharing data with others



To sum up

- Overwhelming majority of the participants creates new data for their research
- Over half of them gets data through personal/professional connections, or own research team/group at their university – However, using it requires some work
- A normal practice to collaborate and share data within a rather closed circle of other researchers whom a relationship of collaboration has been established with

Trust forms the basis for data sharing

- The great majority does not offer open access to everyone
- Main concerns were legal and ethical issues
- However – the combined effect of reasons, rather the individual causes, may influence the data sharing practices



Thank you for the attention!

Questions?