

DMPTuuli user survey report – Tuuli project

13.12.2016

Tuuli Project: <https://wiki.helsinki.fi/x/g5w6Cg>

The Open Science and Research Initiative: <http://openscience.fi/about>

DMPTuuli user survey raw data, Tuuli Project, University of Helsinki, 2016.

Figshare: <https://dx.doi.org/10.6084/m9.figshare.4224353.v3>

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Piloting DMPTuuli with the Academy of Finland and Tekes

Tuuli, a DMP tool for researchers and research organizations was opened for piloting in May 2016 when Tekes (the Finnish Funding Agency for Innovation) opened their funding call on "International growth from health benefits" ¹. During this funding call only a few applicants registered in DMPTuuli.

Piloting with the Academy of Finland began in July 2016 when the Academy of Finland released their funding call for the autumn 2016. In the September 2016 call, applicants must include a data management plan (DMP) as a separate appendix, describing how their research project will manage its research data and how the data will be made available upon project completion. The applicants could create their DMP according to the structure given by the Academy of Finland or by using DMPTuuli tool. ²

By the end of the Academy funding call DMPTuuli had over 2800 registered users and over 2000 DMP's created using the Academy of Finland's DMP template. The total number of applications received in the Academy of Finland's September call was 3054. ³

In September 2016, DMPTuuli performed smoothly most of the time. However, because of the volume of use, the tool was slow and unresponsive on three occasions, on 16th, on 22nd and on 23rd September. DCC fixed the problems in reasonable time. Because of this system overload, the registered users were advised to export their DMP draft in .docx format and finalize their DMPs with Word.

¹ 'International growth from health benefits' call for applications <http://www.tekes.fi/en/whats-going-on/application-schedules-2016/international-growth-from-health-benefits-call-for-applications/>

² Academy of Finland's September call 2016:

<http://www.aka.fi/fi/akatemia/media/Tiedotteet1/2016/akatemia-syyskuun-haun-hakemusten-maara-pieneni-viime-vuodesta/>

³ Akatemian syyskuun haun hakemusten määrä pieneni viime vuodesta:

<http://www.aka.fi/fi/akatemia/media/Tiedotteet1/2016/akatemia-syyskuun-haun-hakemusten-maara-pieneni-viime-vuodesta/>

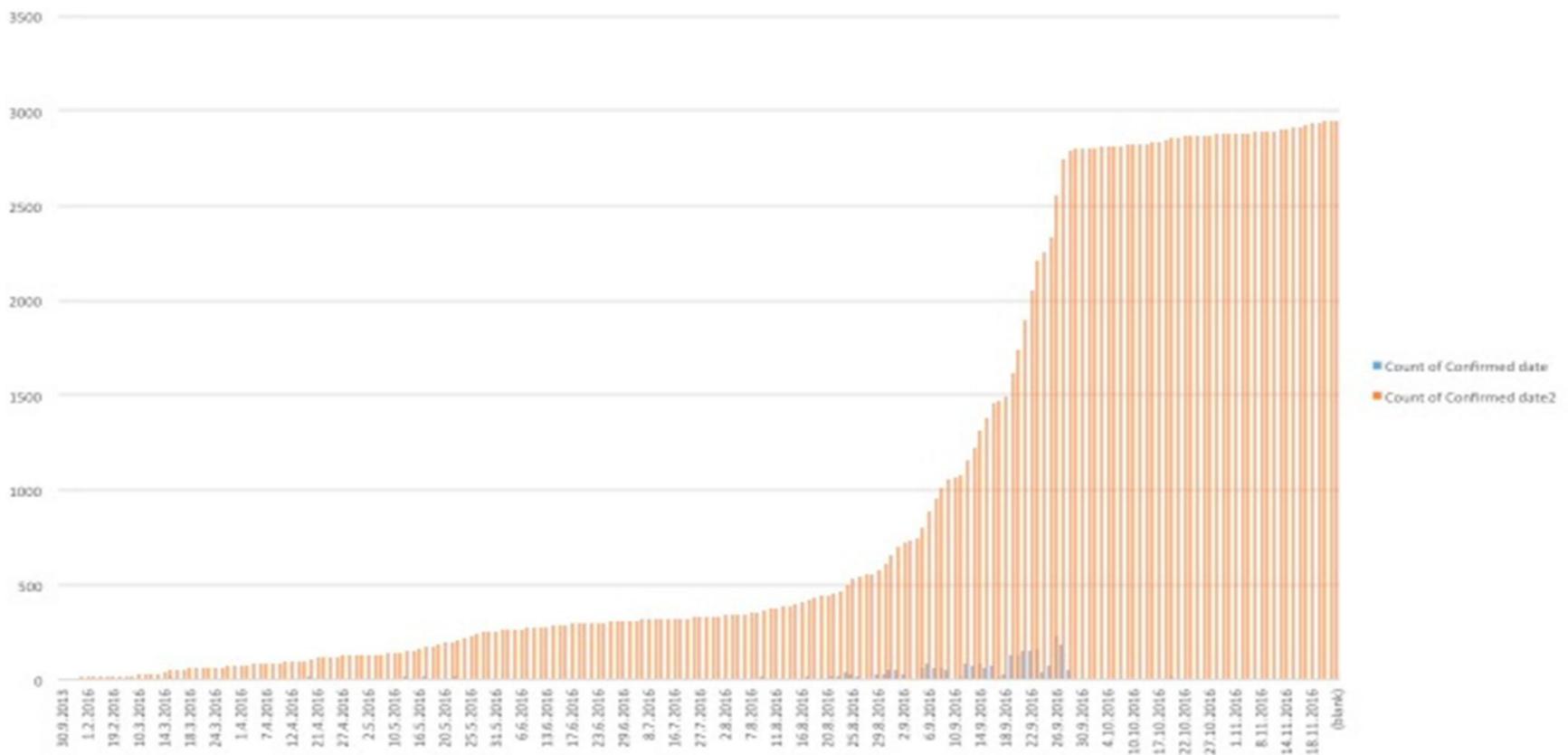


Figure 1. User growth: The amount of registered users 30.9.–18.11.2016.

Method and response rate

The questionnaire was planned and carried out by Tuuli office and Tuuli project's User group. It was agreed that the questionnaire should focus on themes concerning the purpose of using DMPTuuli, usage, usability & technical features and DMP guidance offered in DMPTuuli. The questionnaire was carried out in October 2016 with an online analysis and survey tool Webropol. This software enables sending of electronic questionnaires and conducting both quantitative and qualitative analysis of the data.

Link to the questionnaire (Appendix 1) was sent to all registered users of DMPTuuli. Responses were collected anonymously. The response rate was rather low as it often is in online user surveys. We received 265 responses and the response rate was 10%.

Raw data from the user survey is shared with Figshare.⁴

⁴ Tuuli Project, University of Helsinki (2016): DMPTuuli user survey raw data 2016. Figshare: <https://dx.doi.org/10.6084/m9.figshare.4224353.v3>



Results

Organizations and fields of science

The two most frequently represented organizations were the University of Helsinki (30 %, 80 respondents) and the University of Jyväskylä (10 %, 27 respondents). Table 1 shows the distribution. 32 % (85) of the respondents represented natural sciences, 18 % (47) social sciences, 17 % (44) humanities, 15,5 % (41) medical and health sciences, and 14 % (37) engineering and technology. Seven answers came from other and four from agricultural sciences.

Table 1.

ORGANIZATION OF RESPONDENTS	AMOUNT	%
University of Helsinki	80	30,08
University of Jyväskylä	27	10,15
University of Tampere	26	9,77
University of Turku	24	9,02
Aalto University	20	7,52
University of Oulu	18	6,77
University of Eastern Finland	12	4,51
Lappeenranta University of Technology	9	3,38
Tampere University of Technology	8	3,01
Finnish Geospatial Research Institute (FGI) in the National Land Survey of Finland	4	1,50
Not listed, other	38	9,40
Total	266	100,00

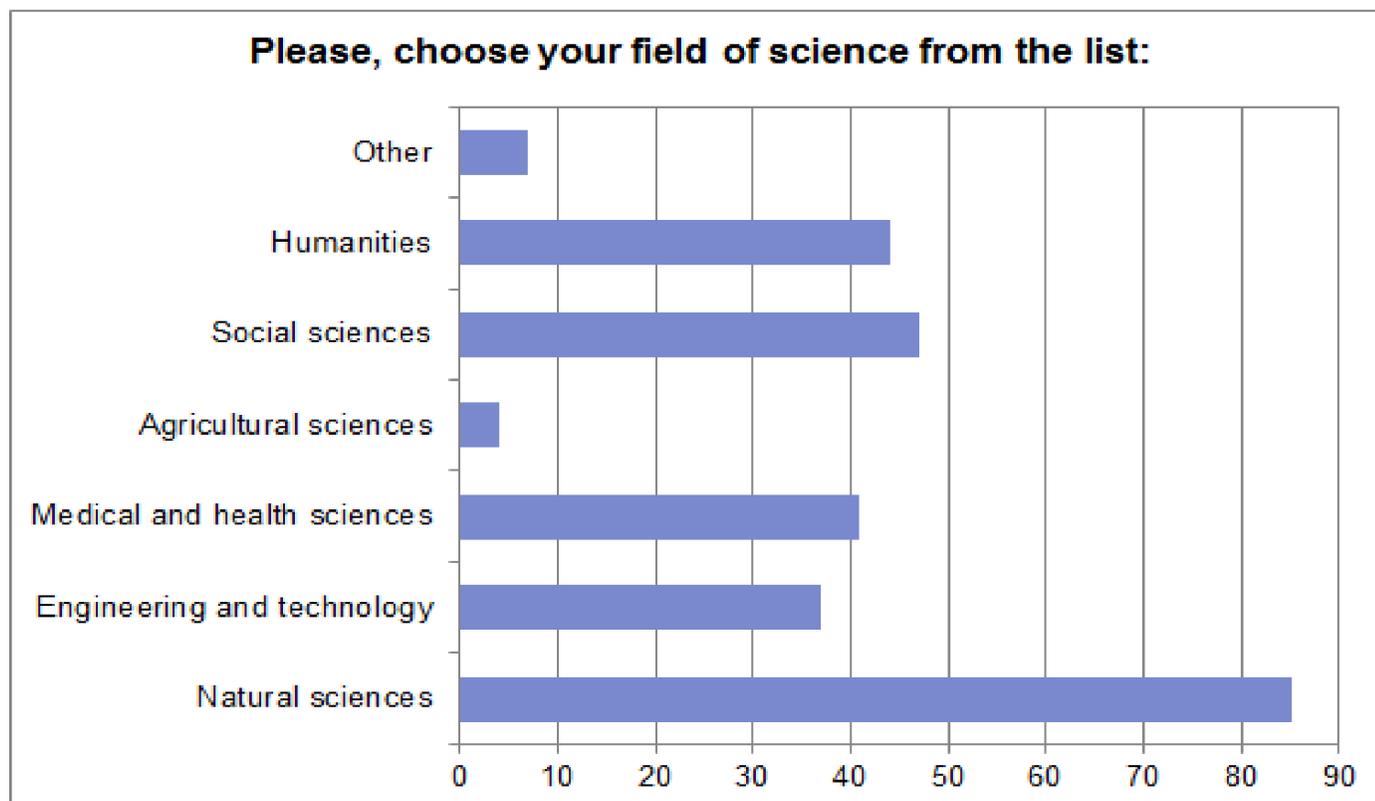


Figure 2. Fields of science (N)

Reasons for using DMPTuuli

89 % (237) of the respondents had used DMPTuuli in order to apply for funding. 22 respondents had used it in order to improve research data management processes. 16 respondents had been in the role of research data management support service provider. Nine respondents had other reason and two had used the tool as a part of their studies.

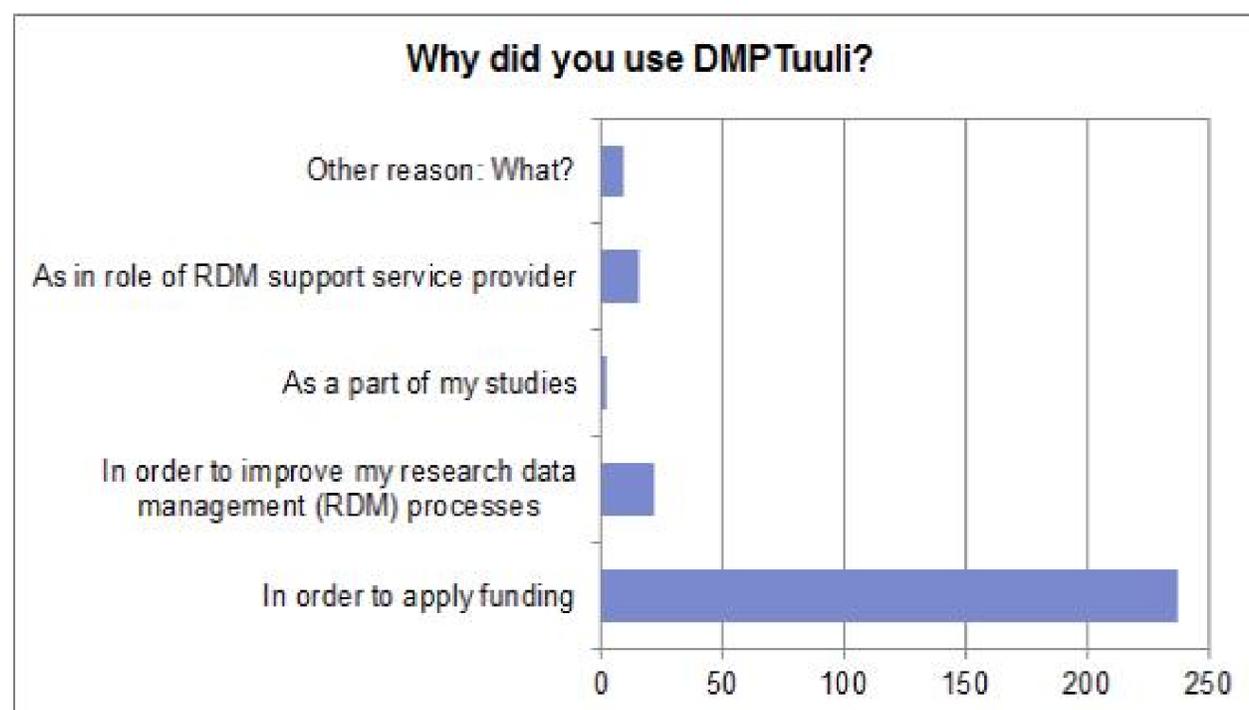


Figure 3. Reasons for using DMPTuuli - multiple options allowed/respondent (N)

Funders

The vast majority of respondents (89 %, 235) had applied for funding from the Academy of Finland. Five respondents had applied funding from the EU and one from Tekes, the Finnish Funding Agency for Innovation.

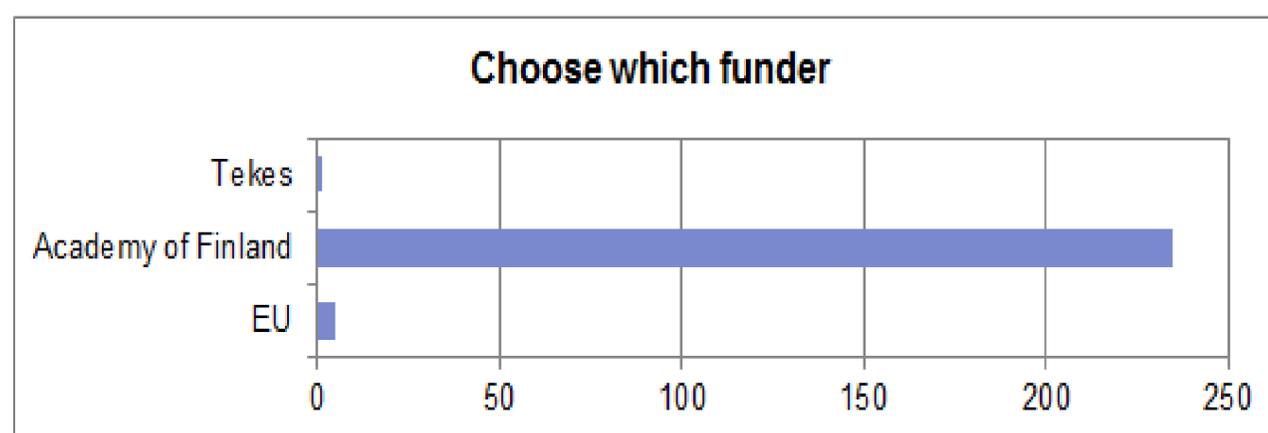


Figure 4. The funders - multiple options allowed/respondent (N)

How DMPTuuli was used

80 % (212) of the respondents had written a DMP alone and 18 % (47) together with colleagues. The question was not applicable in 18 cases.



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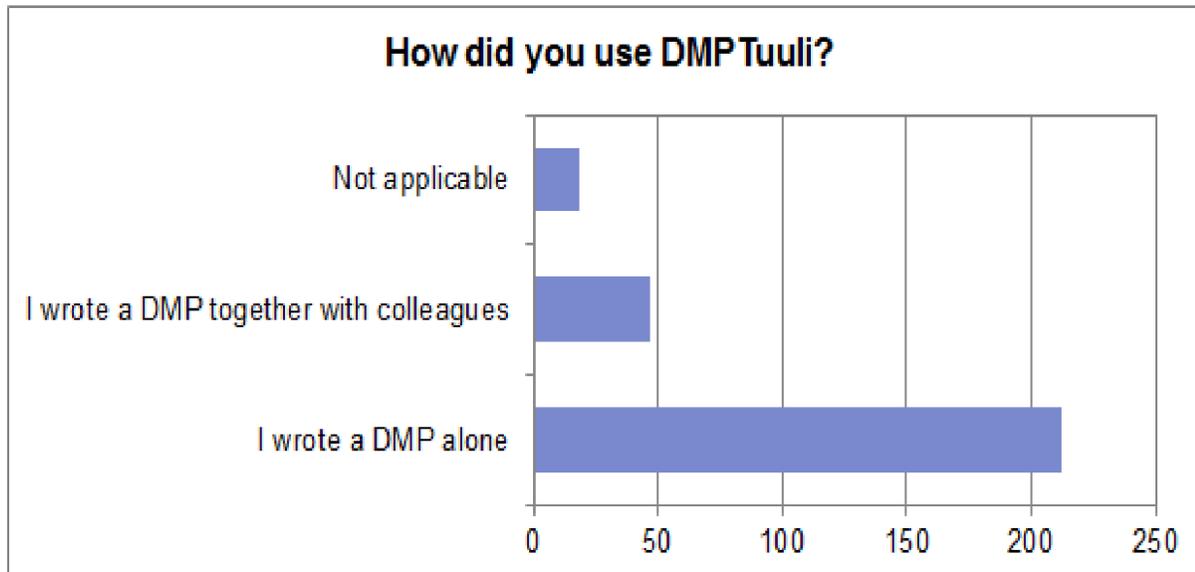
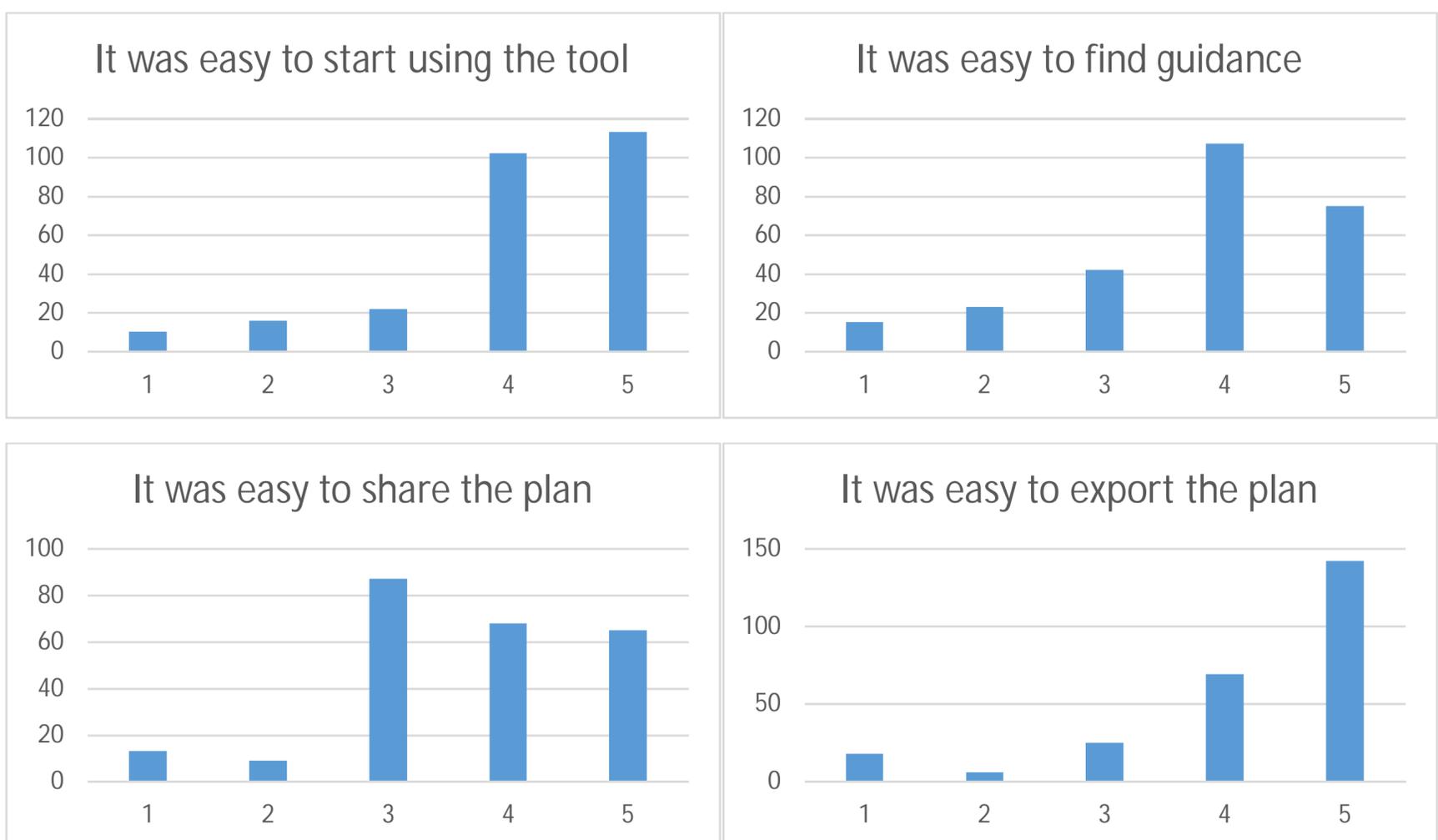


Figure 5. How DMPTuuli was used - multiple options allowed/respondent (N)

Grades of the performance of DMPTuuli and the usefulness of the DMPTuuli guidance

Grades of the performance of DMPTuuli and the usefulness of the DMPTuuli guidance were gathered using multiple choice statements with a scale from 1 to 5 (strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree). The statements concerning the tool were, "It was easy to start using the tool", "It was easy to find guidance", "It was easy to share the plan", "It was easy to export the plan", and "Tool worked smoothly enough". The means for the statements were 4.1, 3.8, 3.7, 4.2, 3.9 and 3.9. Exporting the plan had the highest mean, while sharing the plan had the lowest.



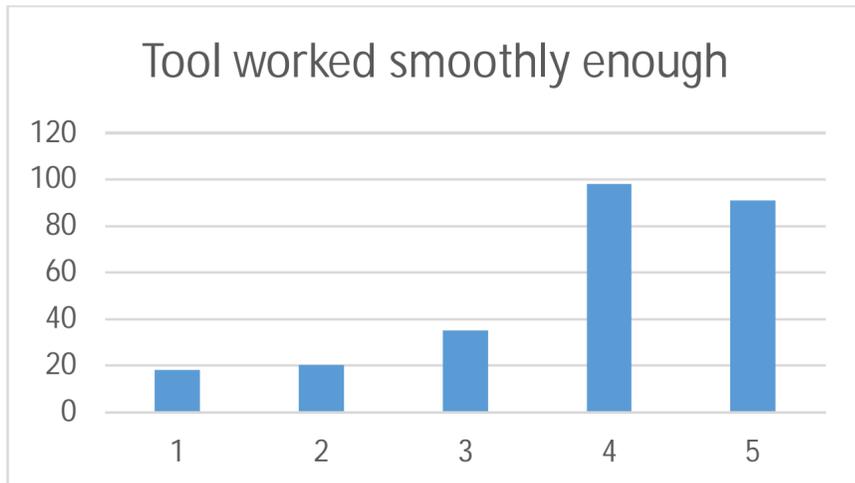


Figure 6. Grades of the performance of DMPTuuli.

The statements concerning the guidance in DMPTuuli were, “The guidance offered in DMPTuuli was sufficient” (mean 3.6) and “The examples of answers were useful” (mean 3.7). The figures show the exact dispersion. 94 % (250) of the respondents stated that they had read the DMPTuuli guidance.

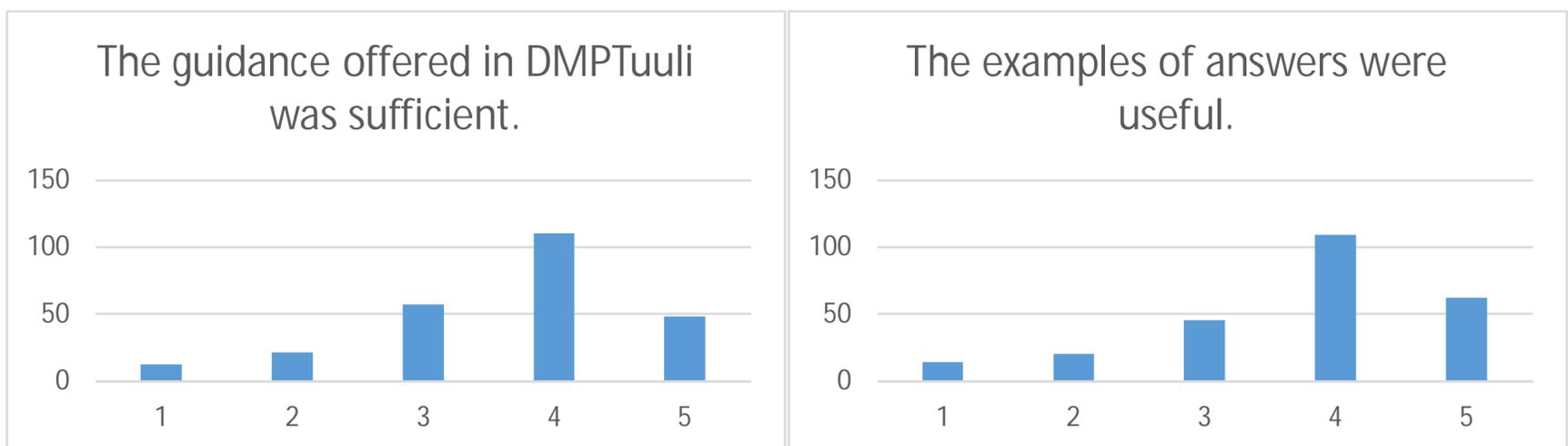


Figure 7. Grades of the usefulness of the DMPTuuli guidance

Feedback, suggestions, and comments

56 % of the respondents gave feedback, suggestions, and comments based on the questions, “What kind of guidance would you like to have in DMPTuuli?” and “Are there any other comments or feedback on DMPTuuli or data management planning that you would like to add?”

The feedback and suggestions fall under the following themes: 1) the DMPTuuli guidance; 2) DMPTuuli as a tool; and 3) more general comments about data management planning. The answers also included some unspecified thanks and criticism. Most feedback commented the overall usefulness and functioning of the tool. The guidance and the examples of answers in DMPTuuli received 72 and 45 mentions respectively.

Feedback about the DMPTuuli guidance: questions, examples of answers, and other guidance material

The respondents explicitly stating that the guidance was useful came from natural sciences in six cases and from the humanities in three cases.



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57 respondents from different fields of research, e.g. 20 from natural sciences and 13 from the humanities, stated that the guidance and the examples asked for more variation and coverage from different disciplines. The examples of answers were generally considered useful, and more were asked for by 30 respondents. All institutional funder templates offered by DMPTuuli did not contain any examples of answers by September 2016, and this received criticism from some respondents who had used those templates. The need for full example DMPs was expressed in several suggestions. These users had missed the links to available online example plans from different fields in the DMPTuuli 'Help' section.

The questions received criticism from 14 respondents for being vague or ambiguous; these users had been uncertain about what to state in each section. Four respondents commented on the terminology used in the guidance as difficult to understand without, e.g. a glossary.

Some respondents from different fields (engineering and technology; social sciences) had asked for assistance from the research support staff at their organization because they considered the guidance unclear. Some respondents commented on the usefulness of the DMP workshops organized by Helsinki University Library before the September call of the Academy of Finland. Need for orientation before using DMPTuuli, especially for newcomers in data management planning, was expressed in some comments.

10 of the respondents stressed a need for guidance for second-hand and ready data use statements, as the guidance was considered to be limited to newly generated data.

Various guidance-related features were asked for; e.g. examples of data, and links to best practice tips about choosing formats and metadata standards. Several respondents also asked for information about data evaluation and the evaluation criteria for the researchers' statements in their DMPs. A wish was also expressed for detailed and linked guidance on depositing data in existing data storage and repository services.

Organization-specific guidelines were considered important, and they were also asked for. For one respondent, DMPTuuli served as an information source about the user's home organization's current data management services development.

Feedback about DMPTuuli as a tool

The form and functioning of DMPTuuli received thanks and positive feedback, although 23 of the respondents were skeptical about its usefulness for a researcher, considering the DMP documentation as a burdening task within the application process. The template format received thanks for offering a structured way to write a DMP, but also negative feedback for proving time-consuming due to e.g. the need to open each template section separately. Several respondents suggested that a headlined Word template would have served the purpose more efficiently.

The functioning of the tool shortly before the end of the Academy of Finland funding call in September received 13 comments about collapses and slowness, and 12 comments about unsatisfactory export outcome. 12 respondents were disappointed about the export function of the tool, some stating that the graphic outcome was still raw enough to cause extra editing work after the export. Several suggestions were also expressed about a figure count or a preview possibility instead of a percent count for the processed document length. A proofreading tool was an asked-for feature for some respondents.

More general comments about data management planning

The increasing amount of data management services and open science-related services raised two comments about the need for guidance and a service map concerning links between them and their use as a part of the data management process.

More information was also asked for regarding the funders' rationale and criteria in evaluating the plan.

In some comments, there was skepticism about the data management planning task as a single researcher's or group's responsibility, stating that information about data management services could or should be delivered to the funders by the research organizations rather than by individual researchers. This implies a very different understanding of data management planning than underlies DMPTuuli.



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DMPTuuli user survey

Background

1. Please, choose your organization from the list: *

Not listed, other

2. Please, choose your field of science from the list: *

Other

Purpose

3. Why did you use DMPTuuli? *

- In order to apply funding
- In order to improve my research data management (RDM) processes
- As a part of my studies
- As in role of RDM support service provider
- Other reason: What?

4. Choose which funder

- EU
 - Academy of Finland
 - Tekes
 - NIH
 - Wellcome Trust
-

€ Other: what? |

Usage

5. How did you use DMPTuuli?

- I wrote a DMP alone
- I wrote a DMP together with colleagues
- Not applicable

Usability & Technical Features

6. How did the tool work/perform?

1 = strongly disagree 2 = somewhat disagree 3 = neither agree nor disagree 4 = somewhat agree 5 = strongly agree

	1	2	3	4	5
It was easy to start using the tool	<input type="radio"/>				
It was easy to find guidance	<input type="radio"/>				
It was easy to share the plan	<input type="radio"/>				
It was easy to export the plan	<input type="radio"/>				
Tool worked smoothly enough	<input type="radio"/>				

Guidance

7. Did you use or read any of the guidance available? *

Yes No

8. Offered guidance and examples of answers:

1 = strongly disagree 2 = somewhat disagree 3 = neither agree nor disagree 4 = somewhat agree 5 = strongly agree

	1	2	3	4	5
The guidance offered in DMPTuuli was sufficient.	<input type="radio"/>				
The examples of answers were useful.	<input type="radio"/>				

9. What kind of guidance would you like to have in DMPTuuli?

1000 characters remaining

Feedback

10. Are there any other comments or feedback on DMPTuuli or data management planning that you would like to add?

900 characters remaining