Data Literacy and Research Data Management in two top universities in Poland. Raising Awareness



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- The results of the Polish part of a study conducted in frame of the international research project named ReDaM coordinated by the Information Literacy Association (InLitAs)
- It was a quantitative study; a questionnaire consisted of 25 open-ended and multiple choice questions
- Translated from English into Polish
- Data were collected from February to the end of April 2017





- At this session we present only a part of the study, thus we analyze responses to selected questions
- The purpose of the study was to explore the ways of research data management (RDM) by academic staff and research students and to assess the RDM awareness level of both target groups

- Particularly, we wanted to check:
- What are the Research Data Management practices?
- ✓ Are there **differences in** Research Data Management **practices** between academic staff and research students?
- ✓ Are there differences in Research Data Management practices between two types of higher education institutions, general university vs. university of technology?



FIELD



The target groups were doctoral students and academic staff employed at the Wrocław University of Science and Technology (WUST) and the University of Warsaw (UW)

These sites were chosen for this research to cover the largest possible number of fields to be represented in the study



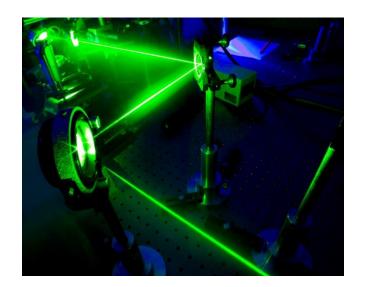
RESPONDENTS' CHARACTERISTICS (1/3)

- At WUST, the questionnaire was sent to 5266 respondents and was disseminated via library webpage
- At UW, library authorities denied to use library mailing list to disseminate the questionnaire; the link to the survey was disseminated by library webpage and social media platforms
- Description and main goals of the study were precisely described as a short memo in every distribution channel



RESPONDENTS' CHARACTERISTICS (2/3)

- It was filled by 128 respondents what is a significant limitation in generalization of results
- That is why the results presented in this paper should be treated as the primary ones and refer to the sample only rather than to the whole population. There were more respondents from WUST: 83 (64.8%) than from UW: 45 (35.2%)





RESPONDENTS' CHARACTERISTICS (3/3)

- Among the respondents there were: academic staff (n = 65, 50.8%), and research students (n = 58, 45.3%) and people who indicated other current primary roles (n = 7, 3.9%). The number of academic staff and research students did not differ significantly
- The biggest number of respondents represented engineering and technology (n = 52, 40.6%), natural sciences (n = 28, 21.9%), social sciences (n = 26, 20.3%), and humanities (n = 20, 15.6%) and the smallest medical and health sciences (n = 2, 1.6%)



DATA ANALYSIS



- We reported descriptive statistics including characteristics of the practices of research data use
- The χ² test was used to examine differences between two samples
- The χ^2 test was used to examine relationships between:
- some practices and current primary roles
- some practices and types of higher education institutions



Research Data Management – METADATA

- The majority of respondents knew the term 'metadata' (71.9%)
- A significant number (59.4%) of respondents used a particular standard style for citing research data
- They were significantly more often aware what DOI is (64.1%) than they were not (31.3%)
- The respondents significantly more often did not have (60.2%) rather than had (28.9%) a unique research identification (for ex. ORCID)



Research Data Management – PLAN [RDMP] (1/2)

- The majority of respondents answered 'No' or 'Uncertain' to various questions related to Research Data Management Plan. This indicates that respondents have not applied RDMP in their research projects
- They also did not know institutional RDMP policies that might be useful in planning individual solutions (only 3 respondents knew institutional RDMP)
- However, more respondents recognized (19.5%) rather than did not recognize (13.3%) the importance of RDMP as a supporting tool for researchers in their work with raw data. They noticed the usefulness of formal training for managing research data (57%) rather than did not notice (10.2%)

Research Data Management – PLAN [RDMP] (2/2)

- Academic staff were considerably more often convinced that RDMP supports researchers in use of raw data (24.6%) than research students (12.1%)
- However research students (65.5%) were considerably more often convinced—compared to academic staff (46.2%)—about the usefulness of formal training on metadata
- The explanation of this results may be correlated in general, quite specific attitude of Polish researchers towards institutional information literacy



DISCUSSION (1/2)



- The study revealed that significant part of respondents knew the basic concepts related to Research Data Management
- At the same time, they have not used institutional solutions, Research Data Management Plan in particular, elaborated in their parent institutions. Most frequently the respondents were not aware of existence of such solutions
- We have not noticed any differences in Research Data Management practices and knowledge of Research Data Management Plan between the two universities being fields of our study



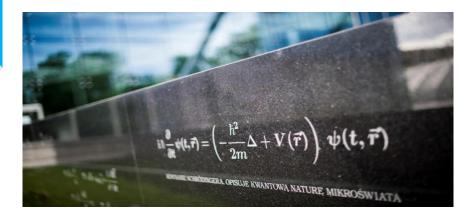
DISCUSSION (2/2)

- However, we did notice significant differences between academic staff and research students in their opinion on the usefulness of RDMP and on the usefulness of formal training on metadata
- Academic staff significantly more often than research students
 had unique identifiers, what might be linked to bigger
 experience in scholarly publishing





CONCLUSION (1/3)



- Establishing Research Data Managament Plan helps from the beginning in proper and active thinking about management of research data and its application in the project(s)
- Research Data Managament Plan helps save time at the stage of data (or—more generally—research results) publishing



CONCLUSION (2/3)

- That is why formal, institutional training on RDMP seems to be the initial phase of data literacy education to be tackled in Poland
- Since June 2015, approximately twice a year regular workshops on RDM are organized in Poland by the Open Science Platform (Pl. Platforma Otwartej Nauki http://pon.edu.pl)
- Still, they are not popular and promoted enough to get to the public awareness of Polish academic community
- That is why some other means of Research Data Management awareness and promotion should be implemented



CONCLUSION (3/3)

- According to Polish Law on Higher Education, universities have a statutory obligation to introduce regulations on intellectual property rights management
- Both Wrocław and Warsaw universities have this kind of regulations
- Thus, we can risk a statement that there is a lack of coherence between introduced—at least at general level—regulations on RDM and everyday practice of academic community
- We can also with high probability indicate this lack of coherence as an argument for the need of intensification of trainings on RDM for academic staff



