

European Student Scientific Literature Access Study

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Barriers to accessing published scientific research have serious economic, scientific and societal consequences. The traditional publishing model of academic journals is heavily criticised by governments, academia, and mainstream media for limiting access to scientific literature. However, the extent to which lack of literature access is a problem and what contributes to differences in access has rarely been examined. Even less is known about how much students are affected in their education by limited access to scientific literature. We aim to fill this gap in knowledge by providing data on the difficulties students face with accessing the literature they need for their studies.

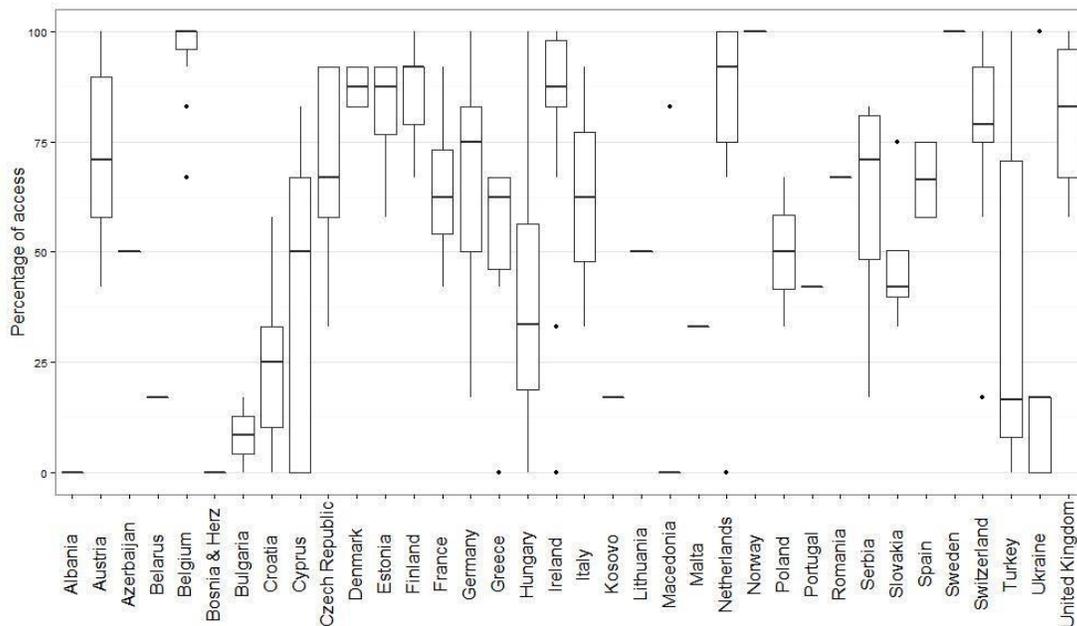
It is crucial for students to stay up to date with the ongoing research in their field-to-be. For a student, journals represent the premier in the discipline they are trying to become a part of since they lack the personal networks, frequent conference attendance, and other institutional benefits university staff enjoy. Seen like this, access to journal articles represents a crucial component of high-quality and up-to-date education in any discipline - as a source of factual and methodological information, but also as an element of induction of future experts *into* their disciplines. A lack of access to this knowledge puts the education of students at risk.

Considering the above, we have devised a study aimed at providing first empirical insight into the following questions: **How much difficulty with access to scientific journals do students actually experience, and are the problems in access different depending on where the students study?**

Expanding on the question above, the differences in access may also limit the opportunities of some students more than others - the have and have-nots of access to scientific literature differ dramatically between different countries in Europe and worldwide, and this has educational consequences. The line demarcating them can be drawn geographically and institutionally. Unfortunately, there is very little data about this, just speculation. With this study, we hope to spur more research on the effects of inequalities in access to research and what contributes to them.

Methodology and pilot study¹

The study we have devised invites students from all of Europe to participate in an online survey that asks them to use their university library services to try and access eleven articles from peer-reviewed scientific journals. The survey asks them to indicate whether they have access to the full PDF of the article or not. In Figure 1 you can see the results from our pilot- study (N=294): The boxplots show the access level within each country.



We observed that students do experience a lack of access and that there is large variation both within and between countries. Importantly, the subjective judgment of access to literature (measured by the question: “Did you encounter difficulties in accessing papers you need for your studies in the last 6 month?”) correlated highly ($r=.78$) with the objective measure of access (number of articles accessed out of the eleven listed in the survey). This shows that our selection of papers is roughly representative for the papers students try to access in general.

It is also important to note that **100% students in our sample said they experienced problems with accessing the literature they need.**

However, the pilot results have to be interpreted with caution, as we do not have a representative sample from each country. In fact, while we managed to gather a lot of data from some countries (e.g. Croatia, Netherlands), we have only one data point from others (e.g. Lithuania) or no data at all (e.g. Armenia).

Due to the limitations of this pilot-study it is not yet possible to draw any strong conclusions. However, we established a well-suited methodology to assess the level of access to articles in journals. In the main study we have just launched, we will use this methodology largely unchanged, aiming for a larger sample from which we can draw stronger conclusions

You can find the study here: <http://tinyurl.com/litaccess>.

Implications and Call for Support

For the main study, we aim to gather at least 100 participants from each European country. Our pilot-data is a direct argument for two points: The journal paywall is a real problem for students, and it has negative implications for their education and research opportunities.

We need your support in generating interest among students to participate in the study – every student that we get to participate adds their voice to making the problem of literature access evident. If you are a student, an official or representative of a student or professional organisation, a librarian – please support our study by actively promoting it. Share it through social networks, organisation and university mailing lists, promote it on your personal/institutional/university websites, and invite your colleagues and friends to participate.

Studies like this provide arguments for advocating more access to research for students in Europe and worldwide – help us make that possible!

Please do not hesitate to contact us, in case you have any questions!

Thank you in advance and best wishes,

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