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Exercise: Barriers to open research

What are the difficulties of fostering openness in your research context?

What may help to overcome these?

For a more detailed discussion and answers to the most common misconceptions about sharing research data, see the LSE impact blog post by Carly Strasser. This points to several community resources: http://blogs.lse.ac.uk/impactofsocialsciences/2013/05/06/answers-to-common-misconceptions-about-data-sharing

Competitive advantage	
I'm afraid I'll be scooped - other researchers will use my data to publish ahead of me.	Sharing data and being open is admittedly something of an act of faith. Although there are an increasing number of funder requirements, the recognition and rewards are less advanced. Developing rewards systems is one of the 8 priorities in the European Open Science agenda and recognition of open research in research excellence frameworks and promotion criteria is emerging. Studies already show that data sharing increases citation rates, and publishing asserts your ownership to data, methods and ideas. Sites like Taverna and MyExperiment let you get credit feedback for sharing methods too, building your credibility and professional network. Building a successful academic career is dependent on the profile of research, which can only be improved by increased visibility of research outputs.
I can't share my methods – that's my intellectual capital. This is what gives us an edge on other research groups when competing for grants.	
I intend to mine my dataset for a long time to produce several papers. It's not done yet.	
I need my data to get ahead in my career.	
My funder does not require me to share data and there's no reward for all that effort.	

Issues with publication	
My dataset is dynamic (e.g. longitudinal dataset)	As the data creator, you have the right of first use and can apply reasonable embargoes in line with normal practice in your field. This gives you time to analyse and publish, but not for an indefinite period. You can still continue to publish on your data while others have access to it, and their publications will also reference your data so you'll get additional credit and citations. It's likely others will think of different uses to you and this could open up new research collaborations. Even if you don't produce any digital materials during the course of your research, the outputs you do create will benefit from the publication of a visible, digital record. Large and complex data can be more challenging to share, but data services are available to help. It's worth using these and getting credit for all your research outputs, whether you are required to or not.
My data is too large to share	
My data is not in digital form	
I can't afford to share my data	
I have no data	

Issues with reuse

Others might misuse my data	Often, researchers fear that their data might be misused or misinterpreted. This is why proper documentation is so important. If it is clear how the data were created and for what purpose, others will understand the context and know how they can be used. It's impossible to anticipate what uses your data could be put to by others. For example, the weather recordings in old naval logs are being used to model climate change now. Other communities may see value in your data regardless of how niche it may seem to you.
Others might misinterpret it and damage my reputation	
My data is impossible to understand without my input	
My data is not in English	
My data is too niche to be of interest	

Sensitive data and confidentiality

My research is highly sensitive	When working with human subjects and investigating sensitive topics, sharing data can be more challenging. It is however still possible! You may need to anonymise or aggregate your data beforehand to protect identities, or if you fear there is still a risk of disclosure, you may opt to use secure data services or data sharing agreements to enforce stricter controls on who can use the data and for what purpose. You may also decide to choose data in certain forms e.g. an anonymised transcript of an interview rather than the associated video recording. Consent agreements should cover options to archive and share data rather than agreeing to destroy data at the end of the project if this is not necessary. Don't assume that participants won't want to participate in open research, many are happy to consent to wider use of their data.
There is personally identifiable information	
I combine datasets which, taken together, contain enough information to disclose participant identities	
My dataset contains audio-visual data which reveals identity	
My dataset must be destroyed at the end of the project	
Research participants have been given complete assurances of confidentiality	
My data might be the basis of a police prosecution	

Legal issues and IPR protection

My data is subject to IPR	If you are using secondary data in your research, identify who owns the copyright so that you can ask for permission to publish. Any derived dataset you create may include data belonging to others, and you don't want to be unable to publish your work as you didn't seek full reuse permissions. If legal issues prevent the publication of your dataset, identify whether parts of the dataset are free of restrictions and consider publishing those. If you discover a commercial application for your research, then you don't want to jeopardise this by publishing. That is not a justification not to publish anything though – it should only affect the data needed to support your application.
I have reused other datasets in my research which I don't have permission to publish	
My data might have a commercial application	