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Data Management
Expert Guide

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Contents

Introduction.....	5
Seven chapters.....	6
Chapter 1	7
Main take-aways	8
1.1 Benefits of Data management.....	9
1.2 Research data	13
1.3 Data in the social sciences.....	15
1.4 FAIR data	18
1.5 European diversity.....	20
1.6 Adapt your DMP: Part 1	28
Sources and further reading	31
Chapter 2	32
Main take-aways	33
2.1 Designing a data file structure.....	34
2.1.1 Organisation of variables	39
2.2 File naming and folder structure	43
2.3 Documentation and metadata	47
2.4 Adapt your DMP: part 2	57
Sources and further reading	58
Chapter 3	59
Main take-aways	60
3.1 Data entry and integrity.....	61
3.2 Quantitative coding.....	66
3.3 Qualitative coding.....	70
3.4 Weights of survey data	72
3.5 File formats and data conversion.....	76
3.6 Data authenticity	79
3.7 Wrap up: Data quality	82
3.8 Adapt your DMP: part 3	84
Sources and further reading	85

Chapter 4	86
Main take-aways	87
4.1 Storage.....	88
4.2 Backup	93
4.3 Security	97
4.4 Adapt your DMP: part 4	100
Sources and further reading	102
Chapter 5	103
Main take-aways	104
5.1 Ethics and data protection	105
5.2 Ethical review process.....	107
5.3 Processing personal data	113
5.3.1 Diversity in data protection.....	120
5.4 Informed consent.....	125
5.5 Anonymisation	133
5.6 Copyright	140
5.6.1 Diversity in copyright	143
5.7 Adapt your DMP: part 5	153
Sources and further reading	154
Chapter 6	155
Main take-aways	156
6.1 Towards archiving & publication	157
6.2 Selecting data for publication	159
6.3 Data publishing routes	160
6.4 Publishing with CESSDA archives	164
6.4.1 Citing your data	165
6.4.2 Licensing your data	167
6.4.3 Access categories	169
6.5 Promoting your data	172
6.6 Adapt your DMP: part 6	174
Sources and further reading	175

Chapter 7	176
Main take-aways	177
7.1 The process of data discovery	178
7.2 Data repositories as data resources	193
7.3 Resources for social media data.....	198
7.4 Access, use and cite data.....	200
7.5 Adapt your DMP: part 7	206
Sources and further reading	207
Contributors	208

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Introduction

This guide is designed by European experts to help social science researchers make their research data Findable, Accessible, Interoperable and Reusable (FAIR).

You will be guided by different European experts who are - on a daily basis - busy ensuring long-term access to valuable social science datasets, available for discovery and reuse at one of the CESSDA social science data archives.

Target audience and mission

This guide is written for social science researchers who are in an early stage of practising research data management. With this guide, CESSDA wants to contribute to professionalism in data management and increase the value of research data.

Overview

If you follow the guide, you will travel through the research data lifecycle from planning, organising, documenting, processing, storing and protecting your data to sharing and publishing them. Taking the whole roundtrip will take you approximately 15 hours, however you can also hop on and off at any time.

During your travels, you will come across the following recurring topics:

Adapt your DMP

As the data management plan (DMP) is an important tool to structure the research data management of your project, it plays a central role in this guide. Each chapter ends with a section with questions that are generally to be answered in a DMP. In the chapter's paragraphs you will be presented with the information you need to answer the proposed questions.

We have designed a list of DMP-questions especially for this Data Management Expert Guide. You can view and download the checklist as pdf (CESSDA, 2018a) or editable form (CESSDA, 2018b), and keep them as a reference while you are studying the contents of this guide.

European diversity

Here you will learn about European diversity in data management. E.g., think of diversity in:

- » Funder requirements in making your Data Management Plan
- » Data protection law
- » Informed consent
- » Ethical review
- » The requirements of local data repositories

Expert tips



In each chapter, you will find advice from our experts. These expert tips aim to provide you with food for thought and practical how-to information.

Examples for quantitative and qualitative data

To give you in-depth tips on how to deal with your own specific type of data, chapters may contain examples of how to handle quantitative or qualitative data.

Seven chapters

The following seven chapters are currently available.

Plan

In this introductory tour, you will become aware of what data management and a data management plan (DMP) are and why they are important. General concepts such as social science data and FAIR data will be explained. Based on our recommendations and good practice examples, you will be able to start writing your DMP.

Organise & Document

If you are looking for good practices in designing an appropriate data file structure, naming, documenting and organising your data files within suitable folder structures, this chapter is for you.

Process

You will get acquainted with the topics of data entry and coding as the first steps of proper data management. To maintain the integrity of your data we will guide you in choosing the appropriate file format. You will also find out about version and edition management.

Store

To be able to plan a storage and backup strategy, you will learn about different storage and backup solutions and their advantages and disadvantages. Also, measures to protect your data from unauthorised access with strong passwords and encryption will be explained.

Protect

This chapter highlights your legal and ethical obligations and shows how a combination of gaining consent, anonymising data, gaining clarity over who owns the copyright to your data and controlling access can enable the ethical and legal sharing of data.

Archive & Publish

When you arrive at this chapter you will have learnt to differentiate between currently available data publication services. You will also find a number of stepping stones on how to promote your data.

Discover

How can you discover and reuse existing or previously collected datasets?