

# Data Discovery Training Needs Assessment

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## Summary

This report describes the results of a CESSDA project to explore training needs in data discovery. Work was conducted by the UK Data Service and overseen by the CESSDA Training Group. Training for data discovery is a new area of work for CESSDA. The aim is to help users locate and navigate data collections relevant to their own research and teaching interests, data collections that may be stored in different locations and subject to different access conditions. To inform the development of training, the training needs assessment sought to establish the training topics that are important to users, current training provision and unmet needs for training.

## Data and Methods

Data was collected via a survey of national data services (with a response rate of 19/22), a consultation with representatives of national data services and from information available via the websites of CESSDA and national data services.

## Results

Data services indicate training in data discovery topics is important for service users but with some differences in views about the importance of training in specific topics. Non-CESSDA services typically perceive a wider range of training topics to be important than CESSDA members.

Some national data services provide data discovery training, most commonly in how to find and access data using their service. Other common topics include finding data from other sources, data citation and quantitative data analysis. Current provision includes events and workshops, guides, video tutorials and online guidance. The CESSDA website also includes some data discovery content.

Considering training already available to users (from the data service and elsewhere), data services identify need for more user training in data discovery topics to further the reuse of archived data. Non-CESSDA members typically report more unmet need for training than CESSDA members, partly because of current training provision and wider social science training. A key difference relates to quantitative data analysis, where some data services perceive unmet need and others suggest university training covers these topics.

The survey and consultation indicate the data discovery topics to prioritize in CESSDA training plans. A clear priority topic is finding and accessing data from various sources; the survey and consultation session indicate value in also including issues relating to understanding and evaluating the suitability of data such as missing data, complex datasets, metadata and documentation. Data citation is another important topic with user need and the CESSDA Training Group is developing training content on this topic as part of the Research Data Management training modules. Other topics identified as important to users and with unmet training needs are under-taking cross-national analyses, data visualisation and teaching with data. The CESSDA Training Group discussion identified these areas as lower priority because they are beyond the main remit of many data services. Training in some of these topics can be provided easily by sharing and repurposing existing content and can follow-on from the delivery of other CESSDA work (such as the Products and Services catalogue).

When planning training, suggested issues to consider include the potential for 'local training' through webinars and the provision of materials that can be adapted by individual services. Also, when

statistical software is required, SPSS is the more widely used.

### **Conclusions**

The training needs assessment shows that data discovery training is important for end-users and that there are unmet needs for training. Training needs, however, appear to vary across countries and by training topic, partly reflecting current training provision. A clear priority topic for CESSDA training should be finding and accessing data including issues about how to understand and evaluate the suitability of data. Data citation is another important training topic with user need and the CESSDA Training Group is currently developing materials on the topic.

The CESSDA Training Group needs to consider what is within the remit of a data service and also the diversity of training needs. For instance, other topics commonly identified as important and needed may take lower priority (at least initially) because they fall outside the core remit of national data services. These topics are cross-national analyses, data visualisation and teaching with data. Additionally, training in data analysis skills, which may also be beyond the remit of a national data service, is possibly essential in some contexts in order to increase use of existing data resources. Acknowledging these issues, the CESSDA Training Group recognizes opportunities available to share and repurpose existing materials and to use the CESSDA website to signpost users to relevant content.

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## 1 Introduction

Training for data discovery is a new area of work for CESSDA. The overall aim is to help users locate and navigate data collections relevant to their own research and teaching and which may be stored in different locations and subject to different access conditions. Each nation has different training needs and existing training capacity. Therefore, a first and vital step is to assess end-user training needs.

This report describes the results of a CESSDA project to explore end-user training needs in data discovery. The UK Data Service conducted the work with oversight from the CESSDA Training Group. Information came from national data services, through a survey and consultation. The data and methods used in the assessment are described in more detail in Section 2. The results of the assessment are in section 3 and section 4 presents the conclusions.

## 2 Data and Methods

To collect timely information, the needs assessment consulted staff at national data services, as opposed to end-users directly. The main data collection method was a survey of national data services. Further insight into training provision and needs came from a consultation with representatives of national data services at the CESSDA Training Group meeting in November 2016 and from information available via the websites of CESSDA and national data services.

The survey included national data services who are CESSDA members, observers and other service providers in Europe. In total, we invited individuals within 22 organisations to participate.<sup>1</sup> The survey used a CAWI system, with participants invited through personalised e-mail. Names and e-mail addresses came through the CESSDA Training Group and CESSDA main office. The full questionnaire was developed in partnership with the CESSDA Training Group and is included in Appendix 1. Table 1 summarises the response rates from the survey. The survey achieved 19 responses in total, which included 14 out of 15 CESSDA members/observers and 5 out of 7 of the other service providers. The countries with no response are France, Spain and Estonia.

**Table 1 Responses to survey for CESSDA members (and observers) and other service providers**

		<b>Cessda member or observer</b>	<b>Other Service Provider</b>	<b>Total</b>
Completed survey	Yes	14	5	19
	No	1	2	3
Total		15	7	22

<sup>1</sup> Austria and Luxemborg excluded as no service was active

### 3 Results

#### 3.1 Important topics for user training

The survey asked participants to rate 13 topics of training. The topics ranged from finding and accessing data using a national data service to include finding and accessing data from other providers and topics relating to understanding and using data (See Table 2 for a full a list). Participants were asked how important training in each topic is for users of their service. Table 2 reports the percentage of services indicating that training is important for each topic. Percentages are listed for 1) all service providers, 2) CESSDA members (and observers) and 3) other service providers.

**Table 2 Training in these topics is important for service users (% indicating important)**

Training topics	All (%)	CESSDA Members (%)	Other services (%)
(j) Undertaking cross-national analyses	89	85	100
(k) Data citation	89	85	100
(l) Data visualisation	84	86	80
(c) Evaluating data for secondary data analysis	83	85	80
(f) Survey weights	78	69	100
(m) Teaching with data	78	77	80
(i) Analysing data about geographical units	76	77	75
(a) Finding and accessing data in your service	74	71	80
(b) Finding and accessing data from other data sources	74	64	100
(d) Exploring quantitative microdata	68	64	80
(e) Basic quantitative data manipulation	68	64	80
(g) Complex samples	61	46	100
(h) Analysing qualitative data	47	54	25

Note: Training topics ordered by percentage of all services. The question asked for scores on a 0-5 scale with 0 not at all and 5 Essential. The table shows percentages of service providers selecting 3-5.

The results underline that, in general, training in data discovery topics is important for service users. Views differ, however, across services and by training topic. The only training topic with fewer than 50 percent of respondents indicating that it is important for users is (h) analysing qualitative data. This result is likely to reflect the smaller volumes of qualitative data archived and lower levels of secondary data analysis that uses qualitative data. Fewer services also agree with the importance of user training in relation to (g) complex samples, (d) exploring quantitative data and (e) basic quantitative data manipulation. For these training topics, there is however, a notable difference between CESSDA members and the other services, with other service providers tending to indicate training is important for users.

### 3.2 Current training provision

Training in data discovery topics is being provided by some services. Table 3 summarises current provision of training events and training materials in data discovery. It shows that training in some form is occurring across all the training topics considered but typically by only a small number of services. Most commonly, services train their users in how to find and access data from their service (e.g. search tools, locating documentation, registration). Other common topics include finding data from other sources, data citation and quantitative data analysis.

**Table 3 Number of services that provide training events or materials for self-learning by topic**

	Training events	Self-learning materials	Training events or self-learning
(a) Finding and accessing data in your service	11	10	12
(b) Finding and accessing data from other data sources	2	7	9
(k) Data citation	5	4	7
(d) Exploring quantitative microdata	4	5	6
(e) Basic quantitative data manipulation	3	5	5
(c) Evaluating data for secondary data analysis	3	4	4
(m) Teaching with data	2	3	4
(f) Survey weights	1	3	3
(h) Analysing qualitative data	2	2	3
(j) Undertaking cross-national analyses	3	1	3
(l) Data visualisation	1	1	2
(g) Complex samples	0	1	1
(i) Analysing data about geographical units	1	1	1
n=18			

#### Examples of current provision

Most data services provide information to users about how to find data using their service. Approaches used include online content (for example, see Czech <http://archiv.soc.cas.cz/en/finding-data-csda>), help pages (e.g. Ireland, [Help pages](#)) and written guides (UK: 'Ways to get data from the UK Data Service'). Themes and theme pages are also used to facilitate data discovery. For example, ISSDA (Ireland) highlights data relating to [sport](#) and [health](#). Some services include theme pages on their website (e.g. [Swedish National Data Service \(SND\)](#) and [UK Data Service](#)). Services also highlight key studies in their collection e.g.: [SND](#), [UKDS](#) and [ISSDA](#).

A few services provide training materials on secondary data analysis topics such as how to operationalise research questions and how to evaluate the suitability of dataset to a research question. For example, the UK Data Service provides [related online content](#) and a student focused guide to Using Survey data and has delivered a [webinar](#) on reusing data and workshop on [Using large-scale survey data for research](#). For research into politics, ČSDA has published a comprehensive volume: Lyons, P. (2012) [Theory, Data and Analysis. Data Resources for the Study of Politics in the Czech Republic](#), which focuses on the Czech Republic but includes studies relevant beyond the Czech

context alongside extensive theoretical and methodological discussion.

Some services provide training materials in data analysis. For example, the Finnish Social Data Service (FSD) maintains a Research Methods Web Resource for teaching and learning quantitative and qualitative research methods:

<http://www.fsd.uta.fi/menetelmaopetus/englex.html> (in Finnish). These types of training generally include examples and exercises using data available from the specific service provider. For example, the UK Data Service's [Data Analysis Workbook](#) uses the Crime Survey for England and Wales. Many services also develop training content on using Nesstar, for example SODA in Greece have training content on [Searching, Discovering and Analyzing European Social Survey \(ESS\) Data through Nesstar](#) (in Greek).

The UK Data Service has also produced guides to the main statistical software with worked examples based on data collections from the archive ([The R guide to UK Data Service key UK surveys](#); [What is SPSS 20 for Windows?](#) And [What is Stata?](#)). There are also guides to [survey weights](#) and [complex samples](#). Services also sign-post users to external resources, for example, [ISSDA](#).

### Data discovery content on CESSDA website

The CESSDA website also includes data discovery content including:

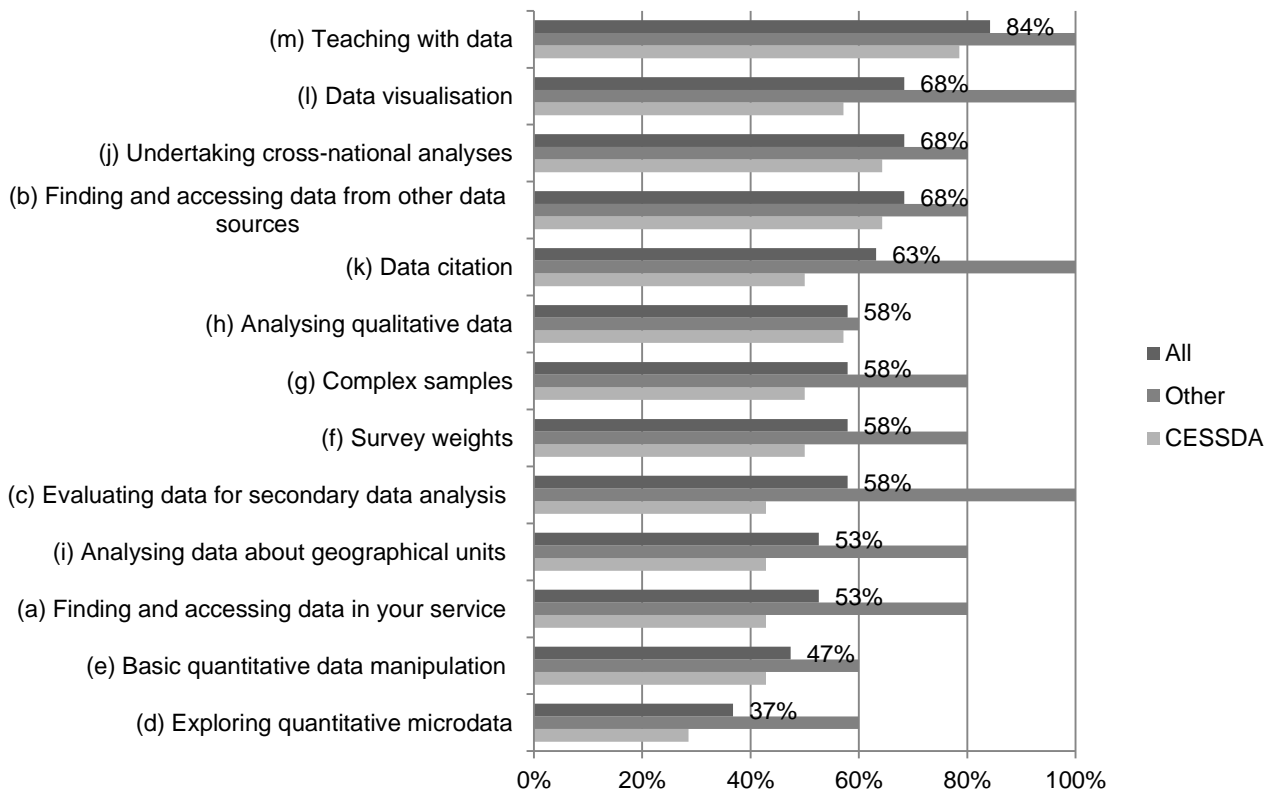
- Links to national data services <http://cessda.net/National-Data-Services>
- Information about multinational surveys <http://cessda.net/CESSDA-Services/Resources/Multinational-Surveys>
- Information about networks and data services <http://cessda.net/CESSDA-Services/Resources/Networks-and-Archives>
- Link to information about the European Language Social Science Thesaurus (ELSST) <https://elsst.ukdataservice.ac.uk/>.



### 3.3 Unmet training needs

The survey asked participants for their views about unmet need for training across the different topics. The question wording asked them to consider training available elsewhere. For each training topic, Figure 1 shows the percentage agreeing that there is unmet need overall and the percentage for CESSDA members and other services separately. The results point to a need for further training in data discovery topics. In relation to 11 out of the 13 topics, over 50 percent agree that there is unmet need for training; this includes core training topics such as (a) finding and accessing data in your service.

Figure 1 Agree there is unmet need for training across 13 different areas of data discovery training



Comments made in the survey confirm that some services perceive a clear need for further training to support data discovery and the re-use of data. Comments in the survey included:

*Factors supporting competence in re-use of data – Finding data, evaluating data for secondary data analysis and data citation (“A, c and K are important to increase the competence level for enabling re-use of data”).*

*We recognized a lack of knowledge related to data analysis and use of appropriate tools. Therefore data is used less than it could be.*

*While data archiving and data sharing is required more and more often by funders, the reuse of data is still rare (beside huge (inter-)national surveys). Researchers justify this lack of reuse mainly due to not having the relevant data for reuse, which must thus be (newly) collected. This argument is in conflict with the increasing amount of archived and available data for reuse. Providing more training of data discovery would enable researcher to find data they might use in their research projects without collecting data on their own.*

Views about unmet need vary across the training topics. Teaching with data is the topic for which the highest percentage of services agree there is unmet need (16/19). Finding and accessing data from other sources, data visualisation and undertaking cross-national data analysis are also topics where many services perceive unmet need.

In general, there is less perceived unmet need for training in quantitative data analysis skills (exploring quantitative microdata and basic quantitative data manipulation). However, unmet need is more commonly reported by the non-CESSDA services; for example, in relation to evaluating data for secondary data analysis all the non-CESSDA services identify unmet need compared to less than half of CESSDA services.

### 3.4 Training needs in context

The observed variation across countries partly relates to current service provision within each country. For example, Table 4 shows that in many instances services that do not perceive a need for training in a topic already provide training in the topic. However, some services, in addition to the training they provide, perceive unmet need for training while others report no unmet need even though they do not provide training themselves.

**Table 4 How perception of need relates to current training provision (number of services)**

Service provides training in this area Do they perceive unmet need	Yes		No	
	No	Yes	No	Yes
(a) Finding and accessing data in your service	10	3	0	7
(b) Finding and accessing data from other data sources	3	6	3	7
(c) Evaluating data for secondary data analysis	2	2	5	9
(d) Exploring quantitative microdata	6	1	6	6
(e) Basic quantitative data manipulation	4	2	5	7
(f) Survey weights	3	1	5	10
(g) Complex samples	2	0	7	10
(h) Analysing qualitative data	2	2	6	9
(i) Analysing data about geographical units	2	0	7	10
(j) Undertaking cross-national analyses	2	2	4	11
(k) Data citation	4	3	3	9
(l) Data visualisation	2	1	4	12
(m) Teaching with data	2	2	1	14

Some comments made in the survey refer to wider social science training. For instance, the following comments offer contrasting opinions:

*Most of [this] training is given by universities and we do not know if there is a need for more training*

*Almost [everything] is missing. There are of course various university courses that cover some of these topics, but nothing apart of that. We have some ideas of organising a summer school, for quite some years, but never materialised.*

These comments suggest that university training (including both degree programs and short training courses) could be meeting researcher needs in some countries and not in others. Responses also suggest that some services perceive some of the training topics as within the remit of universities rather than data services. However, there also comments to suggest that universities can meet training needs in relation to data analysis but not necessarily knowledge and skills for secondary data analysis:

*It seems to us, according to our experience, that training in data evaluation for secondary analysis is important area still not met by courses and materials offered*

*...we are unsure if these training needs are being met externally, for example during university courses. It is difficult to know what external supports are available to researchers. The most important need we would see is re-using existing data, understanding the context in which this data was collected, what variables are available, why some variables may not be available, data protection issues and how this fits with a research question*

### 3.5 Priority topics for training

The previous sections indicate the benefit of and need for training in data discovery topics. A next step in the training needs assessment was to evaluate which training topics the CESSDA Training Group should prioritize in initial workplans. A first stage in this process was to identify which training topics most services see as a) important to users and b) where further training is needed. Subsequently, following a presentation of the preliminary results from the survey, representatives from national data services discussed the topics of training to prioritize at a meeting of the CESSDA Training Group. The session included a small group exercise to rate the training topics (as 1 = Priority, 2 = If time and resources are available and 3=not priority) followed by a full group discussion.

For each topic, Table 5 shows the percentage of services indicating the training topic is important to users and agreeing that there is unmet need.<sup>2</sup> Looking at all services, this measure places the following topics as top priority: (k) data citation, (b) finding data from other sources, (j) under-taking cross-national analyses, (l) data visualisation and (m) teaching with data. Results are similar for

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<sup>2</sup> The figures in this table vary slightly from those presented at the Training Group. The question on whether a training activity is important used a 0-5 scale with 5 Essential and 0 not at all. In this table, responses between 3-5 are classed as important while the table presented at the Training Group included only those selecting 4-5. The patterns do not change substantially.

CESSDA members and the other services in relation to these topics. Non-CESSDA service, however, tend to identify additional topics as both important (including (c) evaluating data for secondary data analysis, (f) survey weights and (g) complex samples).

**Table 5 Training in the topic is important for users and there is unmet need (% of services)**

	All (%)	Cessda (%)	Other (%)
(k) Data citation	63	50	100
(b) Finding and accessing data from other data sources	58	50	80
(j) Undertaking cross-national analyses	58	50	80
(l) Data visualisation	58	50	80
(m) Teaching with data	58	50	80
(c) Evaluating data for secondary data analysis	47	36	80
(f) Survey weights	47	36	80
(a) Finding and accessing data in your service	37	29	60
(e) Basic quantitative data manipulation	32	29	40
(g) Complex samples	32	14	80
(h) Analysing qualitative data	32	36	20
(i) Analysing data about geographical units	32	29	40
(d) Exploring quantitative microdata	26	21	40

Table 6 summarises the discussion at the meeting. In line with the survey results, the CESSDA Training Group discussion identified ‘Finding and accessing data’ as a top priority for CESSDA training in data discovery. The Training Group also recognized that data citation is not widespread and supported training on data citation for data users; however, the group noted that the CESSDA Training Group is already developing training content on this topic as part of the Research Data Management training modules. With regard to training in basic data skills, the Training Group concluded that, while university training covers basic data analysis skills, there remains a need for training on issues important to the use of archived quantitative data such as missing data and understanding complex datasets (such as the EU-LFS). The Training Group also agreed that part of the process of finding data is understanding metadata and navigating documentation.

The Training Group perceives training on undertaking cross-national analyses as important; however, the topic is potentially beyond the remit of a data service. Also, materials are available from other sources. Therefore, the Training Group agreed that, at least initially, users should be signposted to existing materials via the CESSDA website. The Training Group also concluded that elements of ‘cross-national analyses’ could be incorporated into training linked to the CESSDA catalogue when fully operational. Similarly, it was agreed that data visualization and teaching with data are important topics with much user need, but training in these topics extend the remit of most data services.

The Training Group also identified the potential to meet lower priority training needs by sharing and repurposing existing content. Where training needs can be met easily in this way, it could be beneficial to include lower priority activities in early work plans.

**Table 6 CESSDA Training Group priority ratings for topics of data discovery training (1=priority, 2=if time and resources allow and 3=not priority)**

Training Topic	Group			Comments/Suggestions
	1	2	3	
Finding and accessing data (a) in your service & (b) from other data sources	1	1	1	Videos to highlight studies/raise awareness of available data – show headline results/outcomes Raising awareness of data goes before finding data Utilise the Training Group as a platform and share information across services Share resources/expertise across SPs Consider web content - users supported through website browsing – is this training Training includes online material and events (webinar and f-to-f) Share information on CESSDA website Create a list of important studies Consider non-academic user groups
(c) Evaluating data for secondary data analysis	1	1	2	Review how countries document data Metadata gap Show through case studies - Consider a template
(d) Exploring quantitative microdata	1	1	1	Issues such as missing data especially important Complex data files such as the LFS * covered by 2017 workshops Link to other providers such as ESS Collaborate with survey providers Where is the boundary with university courses?
(e) Basic quantitative data manipulation	3	3	3	Training from other places
(f) Survey weights & (g) Complex samples	2	2	3	Potential to link to existing material Link to UKDS materials
(h) Analysing qualitative data	3	3	3	
(i) Analysing data about geographical units	3	3	2	Linking different geographical sources to each other Need to consider that geographical information is not available in many countries
(j) Undertaking cross-national analyses	1	1	3	Depends on CESSDA catalogue, until then can focus on topic specific lists of studies/thematic guides that are user friendly Not a priority as other content/training is available, link to materials on website? see - list of multinational studies on <a href="#">CESSDA website</a> Seems like a logical topic for CESSDA training and a platform for data archives to work together
(k) Data citation	1	2	3	Clarify the problem, no agreed standards for citation and most users do not cite data Part of the RDM training modules, therefore pick up once developed by other group
(l) Data visualisation	3	3	3	
(m) Teaching with data	1	3	3	

Note: summary of group exercise to rate the training topics (as 1 = Priority, 2 = If time and resources are available and 3=not priority). Shading indicated consensus across the groups.

### 3.6 Issues when planning training

The survey results, especially responses to open questions, highlighted a number of issues to consider when planning training activities. The main issues are listed below with the relevant comments.

#### Format of training events: webinars and local training

One comment raised attention to the format and location of potential training events. In particular, the comment advocated the need for local events and webinars.

*Since researchers are busy and money is always an issue there is a need for local events and webinars*

#### Adaptable training materials

Related to the emphasis on training local to the user, two respondents referred to the adaptability of training materials, for example, proposing the use of PowerPoint templates that can be populated with local examples.

*If training modules were to be created it would be useful to have powerpoint templates where local examples could be populated. Any templates would need to be adaptable and this should be considered from the beginning.*

*We propose to prepare training materials in a way, that country specific issues are covered as well. Or in a way, that a service provider can later on extend the content accordingly.*

#### Sharing ideas between archives

A further comment refers to the potential for information sharing between archives in how they plan and deliver training to users.

*It would be interesting to see how archives in small countries (such as Ireland) with limited budgets and fewer resources have delivered training to users. For example collaborations with the central statistics office or partnering with depositors etc.*

#### Statistics software

As statistical software is an important component to training in the use of quantitative data, the survey asked specifically for views about the software used by users and supported by the data service. The results (Table 7) show that SPSS is the most widely used software and therefore SPSS would be a good choice of software to use in CESSDA training materials or events. One respondent did, however, argue for the use of R in CESSDA training materials because it is open source (and therefore accessible to all users) and its user base is increasing.

**Table 7 End-user use of and service support for different statistical software**

	Is used by users		service provides data for
	Widely used	Used a little	
<b>R</b>	4	11	6
<b>SPSS</b>	16	0	16
<b>Stata</b>	10	4	11
<b>Nesstar</b>	4	7	9

## 4 Conclusion

The training needs assessment improves understanding of end-user training needs in relation to data discovery and gives insight into current training provision and capacity of national social science data services in Europe. A key finding from the survey of all national data services and the subsequent consultation with representatives of national data services is that data discovery training is important for end-users and that there are unmet needs for training. Training needs, however, appear to vary across countries and by training topic, partly reflecting current training provision.

A clear priority topic for CESSDA training should be finding and accessing data. Whilst many services provide some training in how to find and access data using their service, nearly all identify the need for more training in finding and access data from other sources. Comments made in the survey and consultation session propose integrating issues about how to understand and evaluate the suitability of data such as missing data, complex datasets, metadata and documentation. Another important training topic with user need is data citation and the CESSDA Training Group is currently developing materials on the topic. Other topics commonly identified as important and needed include undertaking cross-national analyses, data visualisation and teaching with data. However, since training in these topics is not necessarily within the remit of most national data services, it should not be prioritised, at least initially.

In addition to what is within the remit of a data service, the CESSDA Training Group needs to consider the diversity of training needs. In particular, training in topics relating to data analysis are less commonly identified as important and needed, especially among CESSDA members. These topics include basic quantitative data manipulation, complex samples, analysing qualitative data, analysing data about geographical units and exploring quantitative microdata. Comments in the survey and discussion link this assessment to other training provision, especially university training with many perceiving training in these topics as beyond the remit of data services. However, in some countries, especially those outside of CESSDA, training in data analysis skills is clearly needed to increase use of existing data resources.

Many national data services engage in data discovery training activities already and the CESSDA Training Group recognizes that valuable streams of work include signposting users to existing content via the CESSDA website and sharing and repurposing materials. Signposting users to external resources can also be a useful strategy for meeting user training needs in topics beyond the remit of data services. Suggestions for developing training include using webinars and devising materials that can be adapted for local events. The widespread use of SPSS suggests it should be the first choice when statistical software is required.

## 5 Appendix

### CESSDA Training Audit

Thank you for agreeing to take part in this short survey about training for the CESSDA Training Group. In this survey, we focus on training for users of data held by data services within the CESSDA community (as opposed to support for data producers). We want to hear about the training areas important to your users, areas you currently provide training in and areas in which you perceive a training gap. The survey should only take around 10 minutes to complete.

#### Your service

1. Which service do you work for?

#### Training needs

2. How important are each of the following areas of training for users of your service?

For each area, please select a score between 0-5. 0 means training in this area is not at all important for your users, and 5 means training in this area is essential.

- a) Finding and accessing data in your service (e.g. search tools, locating documentation, registration)
- b) Finding and accessing data from other data sources (in your country or abroad)
- c) Evaluating data for secondary data analysis (e.g. how to operationalise a research question and assess the suitability of datasets)
- d) Exploring quantitative microdata (e.g. frequencies, missing data)
- e) Basic quantitative data manipulation (e.g. creating derived variables)
- f) Survey weights
- g) Complex samples (e.g. clustering, stratification)
- h) Analysing qualitative data
- i) Analysing data about geographical units (e.g. census count data, eurostat new cronos)
- j) Undertaking cross-national analyses
- k) Data citation
- l) Data visualisation
- m) Teaching with data
- n) Other (please indicate)
- o) Other (please indicate)
- p) Other (please indicate)



### Met training needs

3. Do you provide training events or materials for self-learning (e.g. guides, worksheets or videos) for the following topics?

Topic	Training events	Self-learning support
a) Finding and accessing data in your service (e.g. search tools, locating documentation, registration)		
b) Finding and accessing data from other data sources (in your country or abroad)		
c) Evaluating data for secondary data analysis (e.g. how to operationalise a research question and assess the suitability of datasets)		
d) Exploring quantitative microdata (e.g. frequencies, missing data)		
e) Basic quantitative data manipulation (e.g. creating derived variables)		
f) Survey weights		
g) Complex samples (e.g. clustering, stratification)		
h) Analysing qualitative data		
i) Analysing data about geographical units (e.g. census count data, eurostat new cronos)		
j) Undertaking cross-national analyses		
k) Data citation		
l) Data visualisation		
m) Teaching with data		

4. If yes to any of the above, please describe.

Write title of the event or material (presentation, document, guides, blog post, and articles), a short description (1 or 2 sentences) and any relevant web links. Events and materials in all languages apply.

5. Do you provide training events or self-learning support materials in any other areas?

Please describe. Write title of the event or material (presentation, document, guides, blog post, and articles), a short description (1 or 2 sentences) and any relevant web links. Events and materials in all languages apply.

## Unmet training needs

6. In your view, is there unmet need for training in each of the following topics (please consider training available elsewhere)?

Topic	Strongly Agree	Agree	Disagree	Strongly Disagree
a) Finding and accessing data in your service (e.g. search tools, locating documentation, registration)				
b) Finding and accessing data from other data sources (in your country or abroad)				
c) Evaluating data for secondary data analysis (e.g. how to operationalise a research question and assess the suitability of datasets)				
d) Exploring quantitative microdata (e.g. frequencies, missing data)				
e) Basic quantitative data manipulation (e.g. creating derived variables)				
f) Survey weights				
g) Complex samples (e.g. clustering, stratification)				
h) Analysing qualitative data				
i) Analysing data about geographical units (e.g. census count data, eurostat new cronos)				
j) Undertaking cross-national analyses				
k) Data citation				
l) Data visualisation				
m) Teaching with data				

7. If yes to any of the above, please tell us more. For example, are there urgent needs? What specific topics need addressing?

8. Are there any other areas with unmet training needs?

9. If yes above, please tell us more. For example, are there urgent needs? What specific topics need addressing?

## Knowledge of training needs and materials

10. Has there been a training needs consultation/survey in your country that you are aware of? (If so, please provide a link to any relevant web content which describes the survey)

11. Are you aware of any training materials in the listed areas that you think all organisations should know about?

- a) Finding and accessing data in your service (e.g. search tools, locating documentation, registration)
- b) Finding and accessing data from other data sources (in your country or abroad)
- c) Evaluating data for secondary data analysis (e.g. how to operationalise a research question and assess the suitability of datasets)
- d) Exploring quantitative microdata (e.g. frequencies, missing data)
- e) Basic quantitative data manipulation (e.g. creating derived variables)
- f) Survey weights
- g) Complex samples (e.g. clustering, stratification)
- h) Analysing qualitative data
- i) Analysing data about geographical units (e.g. census count data, eurostat new cronos)
- j) Undertaking cross-national analyses
- k) Data citation
- l) Data visualisation
- m) Teaching with data

If so: please list these below with a link (or description if not online)

### Statistics software

12. Do users of your service use the following statistical packages? (select all that apply)

	Widely used	Used a little
R	<input type="checkbox"/>	<input type="checkbox"/>
SPSS	<input type="checkbox"/>	<input type="checkbox"/>
Stata	<input type="checkbox"/>	<input type="checkbox"/>
Nesstar	<input type="checkbox"/>	<input type="checkbox"/>

13. Does your service provide data for the following packages?

- R
- SPSS
- Stata
- Nesstar

If you have further comments about the use of different statistical packages and data formats please use the space below.

### Further contact

14. We would like to call you if we need to clarify any issues. If this is OK please give us a name and phone number we can call you on, include your national code.

### Any other comments?

15. Use the space below if you would like to make any other comments about training for data users.