Research Data

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Anonymization Procedures

NEPS Starting Cohort 1 — Newborns
Education From the Very Beginning

Scientific Use File Version 12.0.0

LIfBi

**LEIBNIZ INSTITUTE FOR
EDUCATIONAL TRAJECTORIES**

Research Data Documentation

The NEPS *Research Data Documentation Series* presents resources prepared to support the work with data from the National Educational Panel Study (NEPS).

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1 Preamble

This documentation gives an exhaustive explanation of all disclosure risk minimization techniques applied before dissemination to the Scientific Use File (SUF) of Starting Cohort (SC) 1, version 12.0.0 (doi:10.5157/NEPS:SC1:12.0.0). For a quick reference to all variables and datafiles which are affected in detail and on which level you will find the full information, please skip forward to appendix section A.1. If you have inquiries or need further information not covered in this document please feel free to contact the research data center at fdz@lifbi.de. Please note the following general remarks:

- in all tables, the anonymization suffix (_O, _R, _D) was removed from the variable name to enhance readability and remove duplicates. To find a specific variable in the data file, add the corresponding suffix or use a wildcard.

- to ensure a data-consistent documentation, all tables in this document have been produced on basis of the SUF data. Variable labels in the data have been cut off at 80 characters, which inherits to this documentation.

- as additional documentation, a *Semantic Data Structure File* is available. This is the complete SUF where all cases have been removed. Feel free to use this as a first overview to the data in cases you do not have access to the real data (e.g. you are interested in data files which are available OnSite only). You are well advised to use this preparing your syntax *before* initiating your travel to our OnSite facility. You find it freely available on the documentation page to this SUF:

  ```
  www.neps-data.de > Data Center > Data and Documentation > Starting Cohort
  Newborns > Documentation
  ```

1.1 Specifications

To ensure the best possible confidentiality protection of individuals and individual micro data, the National Educational Panel Study complies with strict international standards. To achieve this, a *portfolio approach*, based on the ideas of Lane et al., 2008, has been established. This approach interlocks data security mechanism on five different levels, while the actual data modification (i.e. anonymization) is one of them. For further information, see the article by Koberg, 2016. Operationalizing this modification procedure, it can be abstracted to the following two criteria:

- the disseminated data was transferred to so called *de facto anonymous data*. Identifiable information is coarsened or cut off and kept securely to minimize the risk of statistical disclosure.

- the use of data is strictly confidential and for statistical purposes only. The closed contract only grants access to members of the scientific community. This contract has a vast amount of legal stipulations, one of them being a large fine which applies for the realization of re-identification on purpose. Therefore, the disseminated data is highly protected by law and allows a more flexible range of available data.

To pick up the latter, the NEPS has made a huge effort regarding legal regulations to offer as much analysis power of data as possible. This *paradigm of information esteem* reveals the fact that conducted measures of statistical disclosure control are few. Also, if there really was a need for modification, only non-perturbative methods were used.

1.2 Onion-shaped model

The NEPS grants the user three different modes of data access: (1) *OnSite*, which stands for the opportunity to use the secured infrastructure made available at the LIfBi in Bamberg, (2) *RemoteNEPS*, which is a progressive remote access technology providing a virtual desktop, and finally (3) *Download*, indicating the possibility to fetch data via a secure web portal.

These given access modes have been originated to allow anonymization routines for a subtle differentiation of information. The three resulting levels of anonymization define as follows:

- data provided OnSite is generally not further anonymized. However, even those data was rendered *de facto anonymous*, for no disclosure risk to persist. All information contained remains completely sane. Although users have to deal with limited possibilities of data access (i.e. supervised import and export of their results), they are free to work with all data available in a secure environment.

- access via RemoteNEPS is considered equivalent to OnSite, hence most of the data stays complete.

- as Download is assumed to be the most hazardous access mode[1], some more anonymization techniques are done to the dataset.

Obviously this approach results in three different versions of all involved datasets. To enable a consistent structure, these data files always contain the entire set of variables; it is their content which differs through the three levels.

As normally there is no need to resign aggregated variables in the higher levels (i.e. OnSite or RemoteNEPS), those are already defined as a surplus to the original variable in the OnSite-version. Stepping down to RemoteNEPS, the content of related variables too sensitive for this level is overwritten with an exclusive missing code – an operation which we define as *purging*. Note that system missing values are not affected, allowing the user to differ between value existence and nonexistence. This still is a valuable additional information. The same logic applies to the transition from RemoteNEPS to Download.

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1 'hazardous' in terms of: the downloaded content is no longer under physical control of the LIfBi

While there is no explicit documentation to this fact, it should remain clear that this procedure accumulates, i.e. purged content under RemoteNEPS is therefore neither included in RemoteNEPS nor in Download.

This *onion-shaped model* provides both ease of (1) use of different sensitivity models (e.g. preparing an analysis using the Download dataset and conducting it afterwards using the OnSite-data) and (2) documentation, for the subject of documentation is the most sensitive level (OnSite), with RemoteNEPS and Download levels being a subset of these data.

The fourth layer *master* depicted below contains every material which is needed during data processing by the NEPS, but is not meant for the scientific community to be usable.
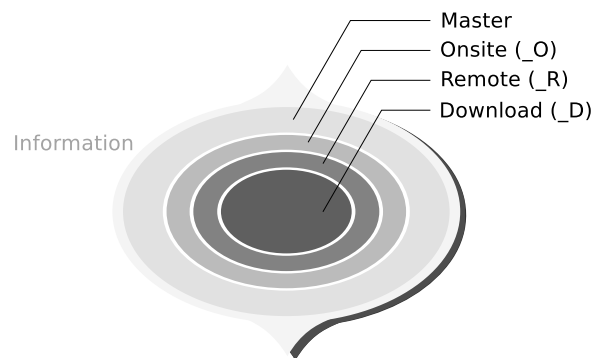
Figure 1: Onion-shaped model defining the different anonymization levels

Technically, this model realizes in a single letter suffixed to dataset and variable names. All datasets available OnSite only are marked with an additional **_O**, those available via RemoteNEPS with **_R** and Download files with **_D**. The same procedure applies when it comes to variable differentiation. A variable which is available unaltered OnSite only is suffixed with **_O**. In RemoteNEPS-access or Download, this variable is still present but purged. If there is an alternate version (e.g. with coarsened content) for RemoteNEPS (suffix **_R**) or Download (suffix **_D**), those can be used. As said before, these are already integrated in the OnSite version. See section 3 for some examples (especially for a practical explanation what is meant by *purging* here).

2 Conducted measures

Keeping the usability and the paradigm of information esteem in mind, only very few alterations are actually done to the dataset. Please note that all information is still available somewhere and that only RemoteNEPS and (mainly) the Download version are constraint in this matter. In fact, in this SUF, only 241 out of 6849 variables are modified in some way.

The following table gives an explanatory overview of all measures conducted. The remainder of this section gives a more detailed description of those topics.

Table 1: Availability of sensitive data

Topic	OnSite	RemoteNEPS	Download
String variables	anonymized	n/a	n/a
International[1]	full data	full data	collapsed
Regional (National)	restricted	restricted	restricted
Institutional context	full data	anonymized	n/a
Macro indicators	accessible	n/a	n/a
Others	full data	full data	aggregated

[1] international geographical information (e.g., nation states, national languages)

2.1 String variables

All variables containing actual text and whose type is therefore string are purged in the RemoteNEPS version. The information remains accessible OnSite. However, you should be aware that in the majority of cases, text entries have been recoded into derived variables (usually suffixed with _g1, _g2, etc.), which contain the information collected. Those variables are available in all three levels, only the actual text entry is available OnSite only. The text entries have been reviewed by staff to ensure that absolutely no reidentificational material is included. To indicate the availability of those variables OnSite only, the variable names have been suffixed with an additional _0.

Table 2: All string variables; those are only available onsite

file	variable	label
MethodsCAPI	px80218	Interview: other reason for interview with father (open)
MethodsCAPI	px80367	Interviewer: country of origin

(...)

Table 2: (continued)

file	variable	label
MethodsCAPI	px80420	Comment on technical malfunctions and problems
MethodsCAPI	px80421	Comment on malfunctions and problems in general
MethodsCAPI	px80422	Comment on malfunctions and problems Reading Speed
MethodsCAPI	px80423	Comment on malfunctions and problems ELFE Text comprehension
MethodsCAPI	px80424	Comment on malfunctions and problems Number puzzle
MethodsCAPI	px80425	Comment on disturbances and problems picture puzzle
MethodsCAPI	px80426	Comment on disturbances and problems science and technology game
MethodsCAPI	px80427	Comment on disturbances and problems signs puzzle
MethodsCAPI	px80428	Comment on disturbances and problems child survey
MethodsCAPI	px80429	Comment on malfunctions and problems Interview
MethodsCAPI	px80430	Comment on malfunctions and problems Signs puzzle (fast)
MethodsDirectMeasures	px01007	Video recording not available Habituation cause open
MethodsDirectMeasures	px02007	Video recording not available Parent-Child-Interaction – cause open
MethodsDirectMeasures	px03005	Performance did not work Sensomotoric development cause open
MethodsDirectMeasures	px04016	other reasons for refusing the video recording
MethodsDirectMeasures	px04028	No performance of direct measures: other reason
MethodsDirectMeasures	px04042	No consent to direct measures: other reasons for refusal
MethodsDirectMeasures	px04056	Video recording not available (cause open)
MethodsDirectMeasures	tx80637	Habituation: Task 1 - comments
pEducator	e20110t	Daycare: frequency: other things [open]
pEducator	e209103	Educator: vocational degree: other text
pEducator	e209125	Daycare: scope working time: other, text
pEducator	e209150	Daycare: opening hours Opening time
pEducator	e209151	Daycare: opening hours Closing time
pEducator	e209160	Daycare: opening hours Opening time
pEducator	e209161	Daycare: opening hours Closing time
pEducator	e209170	Daycare: opening hours Opening time
pEducator	e209171	Daycare: opening hours Closing time
pEducator	e209180	Daycare: opening hours Opening time
pEducator	e209181	Daycare: opening hours Closing time
pEducator	e212819	Daycare: further training, other, text
pEducator	e212821	Daycare: further education, professional qualification, text
pEducator	e212823	Daycare: further education, certified additional qualification, text
pEducator	e219817	Daycare: scope working time: other, text
pEducator	e21984t	Daycare educator: vocational qualification: other text
pEducator	e53902t	Admission criteria: other criteria text
pEducator	ea01040	Daycare: acclimatization period: other
pEducator	ea0104b	Daycare: acclimatization period: presence of parents, other
pEducator	ea0201g	Daycare: talks with parents: other issues, including
pEducator	ea0301b	Daycare: sponsor, text

(...)

Table 2: (continued)

file	variable	label
pEducator	ea0401f	Daycare: fees: other text
pEducator	ea0502b	Daycare: language support measure: other, text
pEducator	ea0505e	Daycare: conduct of support: other qualification, other
pEducator	ea1301g	Daycare: financial source: other text
pEducatorChildminder	e20110t	Tageseinrichtung: Frequency of activity: Other [open]
pEducatorChildminder	e209118	Daycare: vocational qualification, other qualification, text
pEducatorChildminder	e20912t	Daycare: scope working hours: other, text
pEducatorChildminder	e209144	Daycare: duration occupation other, text
pEducatorChildminder	e20915a	Daycare: opening hours Opening time
pEducatorChildminder	e20915b	Daycare: opening hours Closing time
pEducatorChildminder	e20916a	Daycare: opening hours Opening time
pEducatorChildminder	e20916b	Daycare: opening hours Closing time
pEducatorChildminder	e20917a	Daycare: opening hours Opening time
pEducatorChildminder	e20917b	Daycare: opening hours Closing time
pEducatorChildminder	e20918a	Daycare: opening hours Opening time
pEducatorChildminder	e20918b	Daycare: opening hours Closing time
pEducatorChildminder	e53902t	Daycare: Admission criteria: Other criteria text
pEducatorChildminder	e540000t	Daycare: employment: type text
pEducatorChildminder	ea21040	Daycare: acclimatization period: other
pEducatorChildminder	ea2104b	Daycare: acclimatization period: presence of parents, other
pEducatorChildminder	ea2201g	Daycare: talks with parents: other topics, text
pEducatorChildminder	ea2401f	Daycare: fees: other, text
pEducatorChildminder	ea2715c	Daycare: further training, other, text
pInstitution	h21905t	Institution: problems in the surrounding area: other: text
pInstitution	h53902t	Admission criteria: other criteria text
pInstitution	hb1006t	Institution: implementation language support: other qualifications, other
pParent	p19020j	Special needs OPEN
pParent	p201454	favorite show or movie
pParent	p201455	favorite show or movie
pParent	p201456	favorite show or movie
pParent	p202401	Use of digital media Favorite content 1
pParent	p202404	Use of digital media Favorite content 2
pParent	p202407	Use of digital media Favorite content 3
pParent	p26260f	Domestic learning env. - regular activities outside the home: use other, what
pParent	p271603	Parent child groups offer: open 1
pParent	p271604	Parent child groups offer: open 2
pParent	p271605	Parent child groups offer: open 3
pParent	p271606	Parent child groups offer: open 4
pParent	p271607	Parent child groups offer: open 5
pParent	p401001	Immigration status respondent: other
pParent	p403041	Zuwanderungsstatus Partner sonstiges
pParent	p410000	First language/mother tongue Child (open)
pParent	p410002	Further first language/mother tongue Child (open)

(…)

Table 2: (continued)

file	variable	label
pParent	p410060	Language of origin Child (auto variable)
pParent	p413000	First language/mother tongue Respondent (open)
pParent	p413002	Further first language/mother tongue Respondent (open)
pParent	p413060	Language of origin Interviewed parent (auto variable)
pParent	p414000	First language/mother tongue Partner (open)
pParent	p414002	Further first language/mother tongue Partner (open)
pParent	p414060	Language of origin Partner (auto variable)
pParent	p41935a	Grammar (Russian): made-up words, open specification
pParent	p41937a	Grammar (Russian): distortion of subject-matter, open specification
pParent	p41999a	Grammar (Russian): comment adverb item 1, open specification
pParent	p41999b	Grammar (Russian): comment adverb item 2, open specification
pParent	p41999c	Grammar (Russian): comment adverb item 3, open specification
pParent	p41999d	Grammar (Russian): item 1, open specification
pParent	p41999e	Grammar (Russian): item 2, open specification
pParent	p41999f	Grammar (Russian): item 3, open specification
pParent	p41999g	Grammar (Russian): item 4, open specification
pParent	p41999h	Grammar (Russian): item 5, open specification
pParent	p41999i	Grammar (Russian): item 6, open specification
pParent	p41999j	Grammar (Russian): item 7, open specification
pParent	p435030	”Religion & Religiousness: other religious community”
pParent	p524410	Medically diagnosed health restriction: other
pParent	p524428	Type of health impairment: other
pParent	p524430	Type health impairment, developmental or behavioral disorder
pParent	p524501	Chronic illness - open
pParent	p524601	Medications - open
pParent	p524702	Anesthesia - type procedure
pParent	p524801	Type of developmental and behavioral disorder (open)
pParent	p731803	Type of highest school-leaving qualification in Germany respondent: open
pParent	p731805	Highest school-leaving qualification abroad respondent: open
pParent	p731814	Type professional qualification in Germany respondent: open
pParent	p731815	Educational institution professional qualification in Germany respondent: open
pParent	p731817	Type tertiary qualification in Germany respondent: open
pParent	p731819	Educational institution tertiary qualification in Germany respondent: open
pParent	p731853	Type of highest school-leaving qualification in Germany partner: open
pParent	p731855	Highest school-leaving qualification abroad partner: open
pParent	p731865	Professional qualification Partner, open, educational institution

(...)

Table 2: (continued)

file	variable	label
pParent	p731867	Type tertiary qualification in Germany partner: open
pParent	p731869	Educational institution tertiary qualification in Germany partner: open
pParent	pa01700	Other types of childcare: open
pParent	pa10002	ELFRA2: syntax item 2
pParent	pa10048	ELFRA2: syntax item 48
pParent	pc13140	Postponement: attendance current institution
pParent	pm00040	Other care situation: open
pParent	pm00056	Other learning material: open
pParent	pm00056_v1	Other learning material: open
pParent	pm00071	Changed learning opportunities during school closure: other open
pParent	pm00071_v1	Changed learning opportunities during school closure - other
pParent	pm00140	Chances Future
pParent	px80411	Preparation Training – problems during contacting
pParent	px80413	Preparation Training – problems during conducting the interview
pPartner	c731803	Type of highest school-leaving qualification in Germany Respondent: open
pPartner	c731805	Country highest school-leaving qualification abroad Respondent: open
pPartner	c731814	Type professional qualification respondent: open
pPartner	c731815	Educational institution vocational qualification respondent: open
pPartner	c731819	Institution tertiary degree
spParentGap	ps29102	other activity
spParentSchool	p723090	Type of school (open)
spSibling	p732317	Attended type of higher education institution Sibling (open)
spSibling	p732321	Higher education qualification Sibling (open)
spSibling	p732323	Educational institution Sibling (open)

2.2   International: countries, languages, and nationalities

All information corresponding to international localization, nationality or languages is completely available only OnSite or via RemoteNEPS. Variables comprised in the Download SUF are aggregated into larger categories – mainly allocating continents and, in detail, states in Europe. For a complete recoding map of all countries/languages/nationalities, see appendix section A.2. This recoding rule was initially based on the methods used for the IAB ALWA study (Antoni et al., 2011) and the recommendations given by Müller et al., 1991. It has been updated and adjusted to better serve the data user's needs. Please note that this aggregated version is generated not during the anonymization process, but as an additional derived variable. Therefore, you do not

find a variable suffixed _D, but two derived variables (suffixed _g1 and _g2), where only the first has an anonymization suffix (i.e. _g1R), indicating that the full information is available in RemoteNEPS only.

Table 3: All variables which are affected by country/language/nationality aggregation

file	variable	label
pParent	p32601a	Position generator: country nurse or male nurse
pParent	p32601b	Position generator: country engineer
pParent	p32601c	Position generator: country warehouse/transport worker
pParent	p32601d	Position generator: country social worker
pParent	p32601e	Position generator: country sales clerk
pParent	p32601f	Position generator: country police officer
pParent	p32601g	Position generator: country physician
pParent	p32601h	Position generator: country banker
pParent	p32601k	Position generator: country motor mechanic
pParent	p32601l	Position generator: country legal practitioner
pParent	p32601m	Position generator: country optician
pParent	p32601n	Position generator: country translator
pParent	p32601o	Position generator: country teacher elem. school/Hauptschule/Realschule
pParent	p400010_g1	Country of birth abroad respondent
pParent	p400070_g1	Country of birth mother respondent
pParent	p400090_g1	Country of birth father respondent
pParent	p403010_g1	Country of birth partner abroad
pParent	p403070_g1	Country of birth mother partner
pParent	p403090_g1	Country of birth father partner
pParent	p406010_g1	Country of birth of target child
pParent	p731804_g1	Country highest school-leaving qualification abroad respondent
pParent	p731854_g1	Country highest school-leaving qualification abroad partner
pPartner	c731804_g1	Country highest school-leaving qualification abroad respondent
pPartner	c731804_g2	Country highest school-leaving qualification abroad respondent (categorized)
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
pParent	p410000_g1	First language/mother tongue child (ISO 639.2)
pParent	p410000_g2	First language/mother tongue child (aggregated)
pParent	p410002_g1	Further first language/mother tongue Child (ISO 639.2)
pParent	p410002_g2	Further first language/mother tongue Child (aggregated)
pParent	p412001_g1	Interaction language Household, detailed (ISO 639.2)

(...)

Table 3: (continued)

file	variable	label
pParent	p412071_g1	Interaction language Interviewed parent - child (ISO 639.2)
pParent	p412081_g1	Interaction language partner - child detailed (ISO 639.2)
pParent	p413000_g1	First language/mother tongue Respondent (ISO 639.2)
pParent	p413002_g1	Further first language/mother tongue Respondent (ISO 639.2)
pParent	p414000_g1	First language/mother tongue Partner (ISO 639.2)
pParent	p414002_g1	Further first language/mother tongue Partner (ISO 639.2)
pParent	p401150_g1	Other citizenship respondent
pParent	p404050_g1	Other citizenship Partner
pParent	p407050_g1	Citizenship - target child
pParent	p407060_g1	Second citizenship, target child

2.3   Regional localization

For all variables which register a regional position – such as places of birth, work, school, or residence – the following variables have been generated (if possible):

- an indicator for West Germany and East Germany (including Berlin)

- the federal state for this location,

- the administrative region, and

- the administrative district,

the latter two only available OnSite.

Regional localization more detailed is not directly available. If you have need to merge data using a regional key below the available level, please check out the corresponding website at:

→ www.neps-data.de › Data Center › Overview and Assistance › Regional Data

or contact the LIfBi RDC (fdz@lifbi.de), which may deal with this matter for you.

Table 4: All regional variables which are only available in RemoteNEPS or OnSite.

file	variable	label
pParent	p751001_g3	Place of residence (administrative district)
pParent	p751001_g4	Place of residence (district)

(...)

Table 4: (continued)

file	variable	label
spParentSchool	p723030_g3	Municipality of school (administrative district)
spParentSchool	p723030_g4	Municipality of school (district)

2.4   Institutional characteristics

In this Starting Cohort, also information about institutions is available. A special focus of anonymization was directed to protection of institutional data, i.e. information about kindergarten, schools, and universities, but also educators and teachers. To minimize the risk of re-identification, this data is only available in RemoteNEPS. This includes the complete datafile(s)

                pEducator pInstitution pEducatorChildminder,

but may also affect basic structural details about the group or class (e.g. size of class) in other datafiles. Furthermore, personal information about educators and teachers is treated more securely. You will find detailed information about these subjects from RemoteNEPS onward. Refer to section 2.6 to see the affected variables.

2.5   Macro indicators

Additional information including structural topography and macroeconomic measures was collected. You find those available OnSite only. The following data is available:

- Microm data, describing the surrounding of the targets residence

2.6   Other variables

All other variables affected by anonymization and not classifiable in the previous groups are listed below. In the first table (table 5), you find all variables which were aggregated in the Download-SUF. An additional table below each entry displays the values of the variable, both as found in RemoteNEPS (if table column is empty, the variable is numeric and does not have a value label scheme) and in Download.

The second table (table 6) contains all variables which are not aggregated, but purged completely in the Download-version, that is, there is no aggregated version.

2 Conducted measures

Table 5: Other variables which were aggregated in the Download-SUF (aggregation is also stated)

[file] `variable: label`

[pParent] p529000: Weight at birth (aggregated)

RemoteNEPS		Download
	1	under 2000g
	2	2000g to under 2500g
	3	2500g to under 3000g
	4	3000g to under 3500g
	5	3500g to under 4000g
	6	4000g to under 4500g
	7	4500g and more

[pParent] p529001: height at birth (aggregated)

RemoteNEPS		Download
	1	under 44cm
	2	44cm to under 46cm
	3	46cm to under 48cm
	4	48cm to under 50cm
	5	50cm to under 52cm
	6	52cm to under 54cm
	7	54cm to under 56cm
	8	56cm and more

[pParent] p731911: Number of employees respondent (aggregated)

RemoteNEPS		Download
1 to less than 5	**1**	1 to less than 5
5 to less than 10	**2**	5 to less than 10
10 to less than 20	**3**	10 to less than 20
20 to less than 50	**4**	20 and more
50 to less than 100	**5**	
100 to less than 200	**6**	
200 to less than 250	**7**	
250 to less than 500	**8**	
500 to less than 1,000	**9**	
1,000 to less than 2,000	**10**	
2,000 and more	**11**	

[pParent] p731961: Number of employees Partner (aggregated)

RemoteNEPS		Download
1 to less than 5	**1**	1 to less than 5
5 to less than 10	**2**	5 to less than 10
10 to less than 20	**3**	10 to less than 20
20 to less than 50	**4**	20 and more
50 to less than 100	**5**	
100 to less than 200	**6**	
200 to less than 250	**7**	
250 to less than 500	**8**	
500 to less than 1,000	**9**	
1,000 to less than 2,000	**10**	
2,000 and more	**11**	

(...)

Table 5: (continued)

[pParent] pa01150: Daycare fee: euros (aggregated)

RemoteNEPS		Download
	1	under 100 euros
	2	100 to less than 200 euros
	3	200 to less than 300 euros
	4	300 to under 400 euros
	5	400 to less than 500 euros
	6	500 euros and more

[pParent] pa01250: Childminder fees: euros (aggregated)

RemoteNEPS		Download
	1	under 100 euros
	2	100 to less than 200 euros
	3	200 to less than 300 euros
	4	300 to under 400 euros
	5	400 to less than 500 euros
	6	500 euros and more

[pPartner] c731911: Number of employees respondent (aggregated)

RemoteNEPS		Download	
1 to less than 5	**1**	1 to less than 5	
5 to less than 10	**2**	5 to less than 10	
10 to less than 20	**3**	10 to less than 20	
20 to less than 50	**4**	20 and more	
50 to less than 100	**5**		
100 to less than 200	**6**		
200 to less than 250	**7**		
250 to less than 500	**8**		
500 to less than 1,000	**9**		
1,000 to less than 2,000	**10**		
2,000 and more	**11**		

Table 6: Other variables which were purged in the Download-SUF

file	variable	label
pEducator	e209105	Daycare: duration of occupation: current institution
pEducator	e209111	Daycare institution Core group: room use: size of rooms
pEducator	e451000	Daycare: number of students with migrant background
pEducator	e76112m	Educator: month of birth

(...)

Table 6: (continued)

file	variable	label
pEducatorChildminder	e76712m	Daycare: birthday month
pParent	p435030_g1	"Religion & Religiousness: other religious community"
pParent	pa01151	Daycare fee: cents
pParent	pa01251	Childminder fees: cents
pParent	pm00002	Impact: Coronavirus infection - myself
pParent	pm00003	Impact: Coronavirus infection - household
pParent	pm00004	Impact: Coronavirus infection - relative
pParent	pm00005	Impact: Coronavirus infection - friend/acquaintance
pParent	pm00006	Impact: Coronavirus infection - colleague
pParent	pm00008	Impact: Quarantine - myself
pParent	pm00009	Impact: Quarantine - household
pParent	pm00010	Impact: Quarantine - relative
pParent	pm00011	Impact: Quarantine - friend/acquaintance
pParent	pm00012	Impact: Quarantine - colleague

3 Examples

The following examples compare variables from some selected topics. On the left side, you see these variables as they can be found in the RemoteNEPS-SUF (i.e., this is the variant of the variable which contains the full information). On the right side, you find the same variables, but from the Download-version of the SUF, that is, the aggregated or purged variant of the variable. This illustrates the anonymization applied.

3 Examples

3.1 Number of employees

The first example is a variable collected during the interview of Starting Cohort 6 (Adults). The question further investigates the occupational periphery of employers, while here, this employer is the mother of the respondent. On the left, you see the complete information as found in the RemoteNEPS-SUF. This variable is collected using seven classes, where the last four are sparsely filled (variable t731406_R, table on the lower left). Because of this, those four codes have been recoded into one category (»*20 and more*«) and a new variable is generated (t731406_D, upper left). In the Download-SUF, you find this aggregated variable unaltered (upper right). The variable t731406_R rich in content was purged, though. You see that all meaningful codes have been recoded to »*-53 Anonymized*«. Note that the missing code »*-54 Missing by design*« is transported to the Download-SUF unmodified, so you already can derive the actual *statistical power* of this variable.

RemoteNEPS	Download

```
SC6_pTarget_R_5-1-0.dta
(NEPS SUF, SC6 5.1.0 (remote); doi:10.5157/NEPS:SC6:5.1.0)

t731406_D -- Number of mother's employees (categorized)
-------------------------------------------
                          |     Freq.
--------------------------+------------
Valid  -98 Don't know     |        7
       -97 Refused        |        1
       -54 Missing by design |    36700
       0   none           |      423
       1   1 to 4         |      330
       2   5 to 9         |       64
       3   10 to 19       |       22
       4   20 and more    |       28
       Total              |    37575
Missing .                 |    15982
Total                     |    53557
-------------------------------------------


t731406_R -- Number of mother's employees
-------------------------------------------
                          |     Freq.
--------------------------+------------
Valid  -98 Don't know     |        7
       -97 Refused        |        1
       -54 Missing by design |    36700
       0   None           |      423
       1   1 to 4         |      330
       2   5 to 9         |       64
       3   10 to 19       |       22
       4   20 to 49       |       21
       5   50 to 99       |        3
       6   100 to 199     |        3
       7   200 to 249     |        1
       Total              |    37575
Missing .                 |    15982
Total                     |    53557
-------------------------------------------
```

```
SC6_pTarget_D_5-1-0.dta
(NEPS SUF, SC6 5.1.0 (download); doi:10.5157/NEPS:SC6:5.1.0)

t731406_D -- Number of mother's employees (categorized)
-------------------------------------------
                          |     Freq.
--------------------------+------------
Valid  -98 Don't know     |        7
       -97 Refused        |        1
       -54 Missing by design |    36700
       0   none           |      423
       1   1 to 4         |      330
       2   5 to 9         |       64
       3   10 to 19       |       22
       4   20 and more    |       28
       Total              |    37575
Missing .                 |    15982
Total                     |    53557
-------------------------------------------


t731406_R -- Number of mother's employees
-------------------------------------------
                          |     Freq.
--------------------------+------------
Valid  -54 Missing by design |    36700
       -53 Anonymized     |      875
       Total              |    37575
Missing .                 |    15982
Total                     |    53557
-------------------------------------------
```

3 Examples

3.2 Countries (aggregated list)

To illustrate the anonymization of countries, first have a look at this variable from Starting Cohort 6 (Adults). The information (»*respondent's country of birth*«) was surveyed during the interview. The collected information was recoded during data processing to different derived variables. The first of those is variable `t405010_g1R`, which contains the complete list of countries (lower left, output is shortened to enhance readability). Also, a second variable `t405010_g2` was generated, using a more coarse list. This is helpful if some information was collected, but it is too inaccurate to identify the country (e.g., if someone states he was born in North America, you do not know if he meant U.S. or Canada). This second variable is transported to the Download-SUF unaltered (upper right), which means it in some way represents the anonymized version. The first variable `t405010_g1R` with the full information is purged in the Download-SUF.

RemoteNEPS	Download

```
SC6_pTarget_R_5-1-0.dta
(NEPS SUF, SC6 5.1.0 (remote); doi:10.5157/NEPS:SC6:5.1.0)

t405010_g2 -- Country of birthplace (categorized)
-------------------------------------------------------
-
                                        |     Freq.
-------------------------------------------------+----------
-
Valid  -97 Refused                      |         2
       -54 Missing by design            |     36417
       -20 Foreign, but not codeable    |         5
       1   Germany                       |     15388
       2   Italy                         |        52
       3   Poland                        |       244
       4   Romania                       |        98
       5   Turkey                        |       182
       6   Former Yugoslavia             |       113
       7   Former Soviet Union           |       522
       8   Central and South America, Caribbean |   42
       9   Northern and Western Europe   |       154
       10  North America                 |        33
       12  Other Middle East and North Africa |   73
       13  Other Africa                  |        30
       14  Other Asia                    |        74
       15  Other Central and Eastern Europe |    84
       16  Other Southern Europe         |        44
       Total                             |     53557
-------------------------------------------------------
-

t405010_g1R -- Country of place of birth
-------------------------------------------------------
                                        |     Freq.
------------------------------------------------+----------
Valid  -97 Refused                      |         2
       -54 Missing by design            |     36417
       -20 Foreign, but not codeable    |         5
       0   germany                       |     15388
       120 yugoslavia                    |        30
       121 albania                       |         4
       122 bosnia and herzegovina        |        22
       124 belgium                       |         5
       :                                 |         :
       477 uzbekistan                    |         6
       479 china                         |         7
       482 malaysia                      |         2
       499 other asia                    |         1
       Total                             |     53557
-------------------------------------------------------
```

```
SC6_pTarget_D_5-1-0.dta
(NEPS SUF, SC6 5.1.0 (download); doi:10.5157/NEPS:SC6:5.1.0)

t405010_g2 -- Country of birthplace (categorized)
-------------------------------------------------------
-
                                        |     Freq.
-------------------------------------------------+----------
-
Valid  -97 Refused                      |         2
       -54 Missing by design            |     36417
       -20 Foreign, but not codeable    |         5
       1   Germany                       |     15388
       2   Italy                         |        52
       3   Poland                        |       244
       4   Romania                       |        98
       5   Turkey                        |       182
       6   Former Yugoslavia             |       113
       7   Former Soviet Union           |       522
       8   Central and South America, Caribbean |   42
       9   Northern and Western Europe   |       154
       10  North America                 |        33
       12  Other Middle East and North Africa |   73
       13  Other Africa                  |        30
       14  Other Asia                    |        74
       15  Other Central and Eastern Europe |    84
       16  Other Southern Europe         |        44
       Total                             |     53557
-------------------------------------------------------
-

t405010_g1R -- Country of place of birth
-------------------------------------------------------
                                        |     Freq.
------------------------------------------------+----------
Valid  -54 Missing by design            |     36417
       -53 Anonymized                   |     17140
       Total                            |     53557
-------------------------------------------------------
```

3.3 Countries (binary variable)

In school cohorts, an aggregation of countries is coarsened to the binary information German/ Non-German. To illustrate this, have a look at variables from Starting Cohort 2 (Kindergarten). The information (»*country of birth target child*«) was surveyed during the interview using a two-step procedure: first, the respondent is asked if the child was born in Germany or abroad (variable p406000, top left). This variable is not subject to anonymization and therefore does not have a suffix and is equally existent in both SUF-versions. If the child was born abroad, a second question regarding the specific country followed (variable p406010_g1R, lower left, output is reduced to enhance readability). This second question is purged in the Download-SUF (lower right). There is no need to generate an additional anonymized version of this second question, as the information is already present in the first shown variable (p406000).

RemoteNEPS	Download

```
SC2_pParent_R_3-0-0.dta
(NEPS SUF, SC2 3.0.0 (remote); doi:10.5157/NEPS:SC2:3.0.0)

p406000 -- Target child born in Germany?
------------------------------------
                     |     Freq.
---------------------+--------------
Valid  -98 Don't know |         1
       1   Yes        |      7658
       2   No         |       173
           Total      |      7832
Missing .             |      3545
Total                 |     11377
------------------------------------


p406010_g1R -- Country of birth target child
------------------------------------------------------
                                  |     Freq.
----------------------------------+--------------
Valid  -98 Don't know              |         1
       -20 Abroad, but not codeable |        1
       0   germany                 |      7658
       124 belgium                 |         2
       125 bulgaria                |         5
       :                           |         :
       475 syrian arab republic    |         2
       476 thailand                |         2
       479 china                   |         4
       536 new zealand             |         1
           Total                   |      7832
Missing .                          |      3545
Total                              |     11377
------------------------------------------------------
```

```
SC2_pParent_D_3-0-0.dta
(NEPS SUF, SC2 3.0.0 (download); doi:10.5157/NEPS:SC2:3.0.0)

p406000 -- Target child born in Germany?
------------------------------------
                     |     Freq.
---------------------+--------------
Valid  -98 Don't know |         1
       1   Yes        |      7658
       2   No         |       173
           Total      |      7832
Missing .             |      3545
Total                 |     11377
------------------------------------


p406010_g1R -- Country of birth target child
------------------------------------
                     |     Freq.
---------------------+--------------
Valid  -53 Anonymized |      7832
Missing .             |      3545
Total                 |     11377
------------------------------------
```

3 Examples

3.4 Federal states

Regional locations are usually recoded to different derived variables (see section 2.3). In this example, we focus on the region of the school in Starting Cohort 3 (5th graders). The first derived variable is a binary variable for Western and Eastern Germany (tx80109_g1), present in both SUF-versions (upper left and upper right). The second variable tx80109_g2R, containing the federal states, is only complete in the RemoteNEPS-SUF (lower left), and is purged in the Download-SUF (lower right).

RemoteNEPS	Download

```
SC3_CohortProfile_R_3-1-0.dta
(NEPS SUF, SC3 3.1.0 (remote); doi:10.5157/NEPS:SC3:3.1.0)

tx80109_g1 -- Sample: Federal state school (west/east)
---------------------------------------------
                                    |   Freq.
------------------------------------+------------
Valid   -55 Not determinable        |     458
        1   Western Germany         |   16299
        2   Eastern Germany incl. Berlin |  3784
        Total                       |   20541
---------------------------------------------


tx80109_g2R -- Sample: Federal state school
---------------------------------------------
                                    |   Freq.
------------------------------------+------------
Valid   -55 Not determinable        |     458
        1   Schleswig-Holstein      |     784
        2   Hamburg                 |     377
        3   Lower Saxony            |    2209
        4   Bremen                  |     158
        5   North Rhine-Westphalia  |    4398
        6   Hesse                   |    1308
        7   Rhineland-Palatinate    |     971
        8   Baden-Wuerttemberg      |    3265
        9   Bavaria                 |    2677
        10  Saarland                |     152
        11  Berlin (Complete)       |     404
        12  Brandenburg             |    1143
        13  Mecklenburg-Western Pomerania | 619
        14  Saxony                  |     617
        15  Saxony-Anhalt           |     401
        16  Thuringia               |     600
        Total                       |   20541
---------------------------------------------
```

```
SC3_CohortProfile_D_3-1-0.dta
(NEPS SUF, SC3 3.1.0 (download); doi:10.5157/NEPS:SC3:3.1.0)

tx80109_g1 -- Sample: Federal state school (west/east)
---------------------------------------------
                                    |   Freq.
------------------------------------+------------
Valid   -55 Not determinable        |     458
        1   Western Germany         |   16299
        2   Eastern Germany incl. Berlin |  3784
        Total                       |   20541
---------------------------------------------


tx80109_g2R -- Sample: Federal state school
---------------------------------------------
                                    |   Freq.
------------------------------------+------------
Valid   -53 Anonymized              |   20541
---------------------------------------------
```

3.5   Class size

Sometimes, variables are collected numerical. In the example below, the number of students in class was surveyed from the educator in Starting Cohort 2 (Kindergarten) without any further regulations. Thus, the resulting variable e227400_g1R (lower left) does not have a coding scheme. This variable is aggregated to the variable e227400_g1D containing six different class-sizes (upper left). You find this aggregated version in both SUF-versions, the full numerical variable is purged in the Download-SUF, though (lower right).

RemoteNEPS	Download

```
SC2_pEducator_R_3-0-0.dta
(NEPS SUF, SC2 3.0.0 (remote); doi:10.5157/NEPS:SC2:3.0.0)

e227400_g1D -- Class: number of students, total (coarsed)
-----------------------------------------
                           |    Freq.
---------------------------+-------------
Valid  -90 Unspecific missing |      10
       -54 Missing by design  |    1803
        1   Below 10          |       3
        2   10 to 14          |      26
        3   15 to 19          |     203
        4   20 to 24          |     450
        5   25 to 29          |     169
        6   30 to 34          |       4
            Total             |    2668
-----------------------------------------


e227400_g1R -- Class: number of students total
-----------------------------------------
                           |    Freq.
---------------------------+-------------
Valid  -90 Unspecific missing |      10
       -54 Missing by design  |    1803
        8                     |       3
       10                     |       1
       11                     |       1
       12                     |       4
       13                     |       8
       14                     |      12
       15                     |      21
       16                     |      22
       17                     |      34
       18                     |      58
       19                     |      68
       20                     |      75
       21                     |      89
       22                     |      98
       23                     |      88
       24                     |     100
       25                     |      83
       26                     |      39
       27                     |      27
       28                     |      14
       29                     |       6
       30                     |       3
       31                     |       1
            Total             |    2668
-----------------------------------------
```

```
SC2_pEducator_D_3-0-0.dta
(NEPS SUF, SC2 3.0.0 (download); doi:10.5157/NEPS:SC2:3.0.0)

e227400_g1D -- Class: number of students, total (coarsed)
-----------------------------------------
                           |    Freq.
---------------------------+-------------
Valid  -90 Unspecific missing |      10
       -54 Missing by design  |    1803
        1   Below 10          |       3
        2   10 to 14          |      26
        3   15 to 19          |     203
        4   20 to 24          |     450
        5   25 to 29          |     169
        6   30 to 34          |       4
            Total             |    2668
-----------------------------------------


e227400_g1R -- Class: number of students total
-----------------------------------------
                           |    Freq.
---------------------------+-------------
Valid  -54 Missing by design  |    1803
       -53 Anonymized         |     865
            Total             |    2668
-----------------------------------------
```

A Appendix

A.1 Complete overview

The following table lists all variables which are affected by anonymization methods. For all variables, full information is available OnSite, although for many of them, you already find this complete information in the RemoteNEPS-version. Only for those variables marked with an asterisk, the full information is only present OnSite. For most of the variables, an aggregated or generated version is available, which still transports some information to the Download-version. Please see the previous chapters for more information.

Table 7: Complete overview of all restricted variables

file	variable	label (*only available OnSite)
pParent	p32601a	Position generator: country nurse or male nurse
pParent	p32601b	Position generator: country engineer
pParent	p32601c	Position generator: country warehouse/transport worker
pParent	p32601d	Position generator: country social worker
pParent	p32601e	Position generator: country sales clerk
pParent	p32601f	Position generator: country police officer
pParent	p32601g	Position generator: country physician
pParent	p32601h	Position generator: country banker
pParent	p32601k	Position generator: country motor mechanic
pParent	p32601l	Position generator: country legal practitioner
pParent	p32601m	Position generator: country optician
pParent	p32601n	Position generator: country translator
pParent	p32601o	Position generator: country teacher elem. school/Hauptschule/Realschule
pParent	p400010_g1	Country of birth abroad respondent
pParent	p400070_g1	Country of birth mother respondent
pParent	p400090_g1	Country of birth father respondent
pParent	p403010_g1	Country of birth partner abroad
pParent	p403070_g1	Country of birth mother partner
pParent	p403090_g1	Country of birth father partner
pParent	p406010_g1	Country of birth of target child
pParent	p731804_g1	Country highest school-leaving qualification abroad respondent
pParent	p731854_g1	Country highest school-leaving qualification abroad partner
pPartner	c731804_g1	Country highest school-leaving qualification abroad respondent
pPartner	c731804_g2	Country highest school-leaving qualification abroad respondent (categorized)
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
pParent	p410000_g1	First language/mother tongue child (ISO 639.2)
pParent	p410000_g2	First language/mother tongue child (aggregated)

(...)

Table 7: (continued)

file	variable	label (*only available OnSite)	
pParent	p410002_g1	Further first language/mother tongue Child (ISO 639.2)	
pParent	p410002_g2	Further first language/mother tongue Child (aggregated)	
pParent	p412001_g1	Interaction language Household, detailed (ISO 639.2)	
pParent	p412071_g1	Interaction language Interviewed parent - child (ISO 639.2)	
pParent	p412081_g1	Interaction language partner - child detailed (ISO 639.2)	
pParent	p413000_g1	First language/mother tongue Respondent (ISO 639.2)	
pParent	p413002_g1	Further first language/mother tongue Respondent (ISO 639.2)	
pParent	p414000_g1	First language/mother tongue Partner (ISO 639.2)	
pParent	p414002_g1	Further first language/mother tongue Partner (ISO 639.2)	
pParent	p401150_g1	Other citizenship respondent	
pParent	p404050_g1	Other citizenship Partner	
pParent	p407050_g1	Citizenship - target child	
pParent	p407060_g1	Second citizenship, target child	
MethodsCAPI	px80218	Interview: other reason for interview with father (open)	*
MethodsCAPI	px80367	Interviewer: country of origin	*
MethodsCAPI	px80420	Comment on technical malfunctions and problems	*
MethodsCAPI	px80421	Comment on malfunctions and problems in general	*
MethodsCAPI	px80422	Comment on malfunctions and problems Reading Speed	*
MethodsCAPI	px80423	Comment on malfunctions and problems ELFE Text comprehension	*
MethodsCAPI	px80424	Comment on malfunctions and problems Number puzzle	*
MethodsCAPI	px80425	Comment on disturbances and problems picture puzzle	*
MethodsCAPI	px80426	Comment on disturbances and problems science and technology game	*
MethodsCAPI	px80427	Comment on disturbances and problems signs puzzle	*
MethodsCAPI	px80428	Comment on disturbances and problems child survey	*
MethodsCAPI	px80429	Comment on malfunctions and problems Interview	*
MethodsCAPI	px80430	Comment on malfunctions and problems Signs puzzle (fast)	*
MethodsDirectMeasures	px01007	Video recording not available Habituation cause open	*
MethodsDirectMeasures	px02007	Video recording not available Parent-Child-Interaction – cause open	*
MethodsDirectMeasures	px03005	Performance did not work Sensomotoric development cause open	*
MethodsDirectMeasures	px04016	other reasons for refusing the video recording	*
MethodsDirectMeasures	px04028	No performance of direct measures: other reason	*
MethodsDirectMeasures	px04042	No consent to direct measures: other reasons for refusal	*
MethodsDirectMeasures	px04056	Video recording not available (cause open)	*
MethodsDirectMeasures	tx80637	Habituation: Task 1 - comments	*
pEducator	e20110t	Daycare: frequency: other things [open]	*
pEducator	e209103	Educator: vocational degree: other text	*
pEducator	e209125	Daycare: scope working time: other, text	*
pEducator	e209150	Daycare: opening hours Opening time	*
pEducator	e209151	Daycare: opening hours Closing time	*
pEducator	e209160	Daycare: opening hours Opening time	*
pEducator	e209161	Daycare: opening hours Closing time	*
pEducator	e209170	Daycare: opening hours Opening time	*
pEducator	e209171	Daycare: opening hours Closing time	*

(...)

Table 7: (continued)

file	variable	label (*only available OnSite)	
pEducator	e209180	Daycare: opening hours Opening time	*
pEducator	e209181	Daycare: opening hours Closing time	*
pEducator	e212819	Daycare: further training, other, text	*
pEducator	e212821	Daycare: further education, professional qualification, text	*
pEducator	e212823	Daycare: further education, certified additional qualification, text	*
pEducator	e219817	Daycare: scope working time: other, text	*
pEducator	e21984t	Daycare educator: vocational qualification: other text	*
pEducator	e53902t	Admission criteria: other criteria text	*
pEducator	ea01040	Daycare: acclimatization period: other	*
pEducator	ea0104b	Daycare: acclimatization period: presence of parents, other	*
pEducator	ea0201g	Daycare: talks with parents: other issues, including	*
pEducator	ea0301b	Daycare: sponsor, text	*
pEducator	ea0401f	Daycare: fees: other text	*
pEducator	ea0502b	Daycare: language support measure: other, text	*
pEducator	ea0505e	Daycare: conduct of support: other qualification, other	*
pEducator	ea1301g	Daycare: financial source: other text	*
pEducatorChildminder	e20110t	Tageseinrichtung: Frequency of activity: Other [open]	*
pEducatorChildminder	e209118	Daycare: vocational qualification, other qualification, text	*
pEducatorChildminder	e20912t	Daycare: scope working hours: other, text	*
pEducatorChildminder	e209144	Daycare: duration occupation other, text	*
pEducatorChildminder	e20915a	Daycare: opening hours Opening time	*
pEducatorChildminder	e20915b	Daycare: opening hours Closing time	*
pEducatorChildminder	e20916a	Daycare: opening hours Opening time	*
pEducatorChildminder	e20916b	Daycare: opening hours Closing time	*
pEducatorChildminder	e20917a	Daycare: opening hours Opening time	*
pEducatorChildminder	e20917b	Daycare: opening hours Closing time	*
pEducatorChildminder	e20918a	Daycare: opening hours Opening time	*
pEducatorChildminder	e20918b	Daycare: opening hours Closing time	*
pEducatorChildminder	e53902t	Daycare: Admission criteria: Other criteria text	*
pEducatorChildminder	e540000t	Daycare: employment: type text	*
pEducatorChildminder	ea21040	Daycare: acclimatization period: other	*
pEducatorChildminder	ea2104b	Daycare: acclimatization period: presence of parents, other	*
pEducatorChildminder	ea2201g	Daycare: talks with parents: other topics, text	*
pEducatorChildminder	ea2401f	Daycare: fees: other, text	*
pEducatorChildminder	ea2715c	Daycare: further training, other, text	*
pInstitution	h21905t	Institution: problems in the surrounding area: other: text	*
pInstitution	h53902t	Admission criteria: other criteria text	*
pInstitution	hb1006t	Institution: implementation language support: other qualifications, other	*
pParent	p19020j	Special needs OPEN	*
pParent	p201454	favorite show or movie	*
pParent	p201455	favorite show or movie	*
pParent	p201456	favorite show or movie	*
pParent	p202401	Use of digital media Favorite content 1	*
pParent	p202404	Use of digital media Favorite content 2	*

(...)

Table 7: (continued)

file	variable	label (*only available OnSite)	
pParent	p202407	Use of digital media Favorite content 3	*
pParent	p26260f	Domestic learning env. - regular activities outside the home: use other, what	*
pParent	p271603	Parent child groups offer: open 1	*
pParent	p271604	Parent child groups offer: open 2	*
pParent	p271605	Parent child groups offer: open 3	*
pParent	p271606	Parent child groups offer: open 4	*
pParent	p271607	Parent child groups offer: open 5	*
pParent	p401001	Immigration status respondent: other	*
pParent	p403041	Zuwanderungsstatus Partner sonstiges	*
pParent	p410000	First language/mother tongue Child (open)	*
pParent	p410002	Further first language/mother tongue Child (open)	*
pParent	p410060	Language of origin Child (auto variable)	*
pParent	p413000	First language/mother tongue Respondent (open)	*
pParent	p413002	Further first language/mother tongue Respondent (open)	*
pParent	p413060	Language of origin Interviewed parent (auto variable)	*
pParent	p414000	First language/mother tongue Partner (open)	*
pParent	p414002	Further first language/mother tongue Partner (open)	*
pParent	p414060	Language of origin Partner (auto variable)	*
pParent	p41935a	Grammar (Russian): made-up words, open specification	*
pParent	p41937a	Grammar (Russian): distortion of subject-matter, open specification	*
pParent	p41999a	Grammar (Russian): comment adverb item 1, open specification	*
pParent	p41999b	Grammar (Russian): comment adverb item 2, open specification	*
pParent	p41999c	Grammar (Russian): comment adverb item 3, open specification	*
pParent	p41999d	Grammar (Russian): item 1, open specification	*
pParent	p41999e	Grammar (Russian): item 2, open specification	*
pParent	p41999f	Grammar (Russian): item 3, open specification	*
pParent	p41999g	Grammar (Russian): item 4, open specification	*
pParent	p41999h	Grammar (Russian): item 5, open specification	*
pParent	p41999i	Grammar (Russian): item 6, open specification	*
pParent	p41999j	Grammar (Russian): item 7, open specification	*
pParent	p435030	"Religion & Religiousness: other religious community"	*
pParent	p524410	Medically diagnosed health restriction: other	*
pParent	p524428	Type of health impairment: other	*
pParent	p524430	Type health impairment, developmental or behavioral disorder	*
pParent	p524501	Chronic illness - open	*
pParent	p524601	Medications - open	*
pParent	p524702	Anesthesia - type procedure	*
pParent	p524801	Type of developmental and behavioral disorder (open)	*
pParent	p731803	Type of highest school-leaving qualification in Germany respondent: open	*
pParent	p731805	Highest school-leaving qualification abroad respondent: open	*

(...)

Table 7: (continued)

file	variable	label (*only available OnSite)	
pParent	p731814	Type professional qualification in Germany respondent: open	*
pParent	p731815	Educational institution professional qualification in Germany respondent: open	*
pParent	p731817	Type tertiary qualification in Germany respondent: open	*
pParent	p731819	Educational institution tertiary qualification in Germany respondent: open	*
pParent	p731853	Type of highest school-leaving qualification in Germany partner: open	*
pParent	p731855	Highest school-leaving qualification abroad partner: open	*
pParent	p731865	Professional qualification Partner, open, educational institution	*
pParent	p731867	Type tertiary qualification in Germany partner: open	*
pParent	p731869	Educational institution tertiary qualification in Germany partner: open	*
pParent	pa01700	Other types of childcare: open	*
pParent	pa10002	ELFRA2: syntax item 2	*
pParent	pa10048	ELFRA2: syntax item 48	*
pParent	pc13140	Postponement: attendance current institution	*
pParent	pm00040	Other care situation: open	*
pParent	pm00056	Other learning material: open	*
pParent	pm00056_v1	Other learning material: open	*
pParent	pm00071	Changed learning opportunities during school closure: other open	*
pParent	pm00071_v1	Changed learning opportunities during school closure - other	*
pParent	pm00140	Chances Future	*
pParent	px80411	Preparation Training – problems during contacting	*
pParent	px80413	Preparation Training – problems during conducting the interview	*
pPartner	c731803	Type of highest school-leaving qualification in Germany Respondent: open	*
pPartner	c731805	Country highest school-leaving qualification abroad Respondent: open	*
pPartner	c731814	Type professional qualification respondent: open	*
pPartner	c731815	Educational institution vocational qualification respondent: open	*
pPartner	c731819	Institution tertiary degree	*
spParentGap	ps29102	other activity	*
spParentSchool	p723090	Type of school (open)	*
spSibling	p732317	Attended type of higher education institution Sibling (open)	*
spSibling	p732321	Higher education qualification Sibling (open)	*
spSibling	p732323	Educational institution Sibling (open)	*
pParent	p751001_g3	Place of residence (administrative district)	*
pParent	p751001_g4	Place of residence (district)	*
spParentSchool	p723030_g3	Municipality of school (administrative district)	*
spParentSchool	p723030_g4	Municipality of school (district)	*
pParent	p529000	Weight at birth	

(...)

Table 7: (continued)

file	variable	label (*only available OnSite)	
pParent	p529001	Size at birth	
pParent	pa01150	Daycare fee: euros	
pParent	pa01250	Childminder fees: euro	
pParent	p731911	Number of employees respondent	
pParent	p731961	Number of employees partner	
pPartner	c731911	Number of employees respondent	
pEducator	e209105	Daycare: duration of occupation: current institution	∗
pEducator	e209111	Daycare institution Core group: room use: size of rooms	∗
pEducator	e451000	Daycare: number of students with migrant background	
pEducator	e76112m	Educator: month of birth	∗
pEducatorChildminder	e76712m	Daycare: birthday month	∗
pParent	p435030_g1	”Religion & Religiousness: other religious community”	
pParent	pa01151	Daycare fee: cents	
pParent	pa01251	Childminder fees: cents	
pParent	pm00002	Impact: Coronavirus infection - myself	
pParent	pm00003	Impact: Coronavirus infection - household	
pParent	pm00004	Impact: Coronavirus infection - relative	
pParent	pm00005	Impact: Coronavirus infection - friend/acquaintance	
pParent	pm00006	Impact: Coronavirus infection - colleague	
pParent	pm00008	Impact: Quarantine - myself	
pParent	pm00009	Impact: Quarantine - household	
pParent	pm00010	Impact: Quarantine - relative	
pParent	pm00011	Impact: Quarantine - friend/acquaintance	
pParent	pm00012	Impact: Quarantine - colleague	
pParentMicrom			∗
pEducator			
pInstitution			
pEducatorChildminder			

A Appendix

A.2 Recoding of countries/languages/nationalities

The following tables summarize the complete recoding procedure of countries and languages/-nationalities. Each category of the aggregated version (bold) is followed by all entries which have been subsumed to it. All entries are sorted according to their numeric code.

Table 8: Complete recoding map of all countries

country

-23 **parent not known**

-21 **Germany and foreign country, not codeable**

-20 **Foreign country, but not codeable**
[9005] Kurdish areas, [9991] German-speaking country abroad, [9992] English-speaking country abroad, [9993] Spanish-speaking country abroad

1 **Germany**
[0] Germany

2 **Italy**
[137] Italy

3 **Poland**
[152] Poland

4 **Romania**
[154] Romania

5 **Turkey**
[163] Turkey

6 **Former Yugoslavia**
[120] Yugoslavia, [122] Bosnia and Herzegovina, [130] Croatia, [131] Slovenia, [132] Serbia and Montenegro, [138] Yugoslavia, Federal Republic of, [140] Montenegro, [144] Macedonia, [150] Kosovo, [170] Serbia

7 **Former Soviet Union**
[127] Estonia, [139] Latvia, [142] Lithuania, [146] Moldova, Republic of, [159] Soviet Union, [160] Russian Federation, [166] Ukraine, [169] Belarus, [422] Armenia, [425] Azerbaijan, [430] Georgia, [444] Kazakhstan, [450] Kyrgyzstan, [470] Tajikistan, [471] Turkmenistan, [477] Uzbekistan

8 **Central and South America, Caribbean**
[320] Antigua and Barbuda, [322] Barbados, [323] Argentina, [324] Bahamas, [326] Bolivia, Plurinational State of, [327] Brazil, [328] Guyana, [330] Belize, [332] Chile, [333] Dominica, [334] Costa Rica, [335] Dominican Republic, [336] Ecuador, [337] El Salvador, [340] Grenada, [345] Guatemala, [346] Haiti, [347] Honduras, [349] Colombia, [351] Cuba, [353] Mexico, [354] Nicaragua, [355] Jamaica, [357] Panama, [359] Paraguay, [361] Peru, [364] Suriname, [365] Uruguay, [366] Saint Lucia, [367] Venezuela, Bolivarian Republic of, [369] Saint Vincent and the Grenadines, [370] Saint Kitts and Nevis, [371] Trinidad and Tobago

9 **Northern and Western Europe**
[124] Belgium, [126] Denmark, [128] Finland, [129] France, [135] Ireland, [136] Iceland, [141] Liechtenstein, [143] Luxembourg, [147] Monaco, [148] Netherlands, [149] Norway, [151] Austria, [157] Sweden, [158] Switzerland, [168] United Kingdom, [193] Norwegian dependent territories in Europe, [195] British dependent territories in Europe, [196] Danish dependent territories in Europe, [295] British dependent territories in Africa, [298] French dependent territories in Africa, [392] Dutch dependent territories in America, [395] British dependent territories in America, [396] Danish dependent territories in America, [398] French dependent territories in America, [495] British dependent territories in Asia, [593] Norwegian dependent territories in Australia, Oceania, Antarctica, [595] British dependent territories in Australia, Oceania, Antarctica, [598] French dependent territories in Australia, Oceania, Antarctica

10 **North America**

(...)

Table 8: (continued)

country

[348] Canada, [368] United States, [391] US dependent territories in America, [591] US dependent territories in Australia, Oceania, Antarctica

11 **Oceania/Polynesia**

[523] Australia, [524] Solomon Islands, [526] Fiji, [527] Cook Islands, [530] Kiribati, [531] Nauru, [532] Vanuatu, [533] Niue, [536] New Zealand, [537] Palau, [538] Papua New Guinea, [540] Tuvalu, [541] Tonga, [543] Samoa, [544] Marshall Islands, [545] Micronesia, Federated States of, [590] New Zealand's dependent territories in Australia, Oceania, Antarctica, [594] Australian dependent territories in Australia, Oceania, Antarctica

12 **Other Middle East and North Africa**

[221] Algeria, [248] Libya, [252] Morocco, [285] Tunisia, [287] Egypt, [421] Yemen, [424] Bahrain, [438] Iraq, [439] Iran, Islamic Republic of, [441] Israel, [445] Jordan, [447] Qatar, [448] Kuwait, [451] Lebanon, [456] Oman, [469] United Arab Emirates, [472] Saudi Arabia, [475] Syrian Arab Republic, [499] other Asia

13 **Other Africa**

[223] Angola, [224] Eritrea, [225] Ethiopia, [226] Lesotho, [227] Botswana, [229] Benin, [230] Djibouti, [231] Côte d'Ivoire, [232] Nigeria, [233] Zimbabwe, [236] Gabon, [237] Gambia, [238] Ghana, [239] Mauritania, [242] Cape Verde, [243] Kenya, [244] Comoros, [245] Congo, [246] Congo, the Democratic Republic of the, [247] Liberia, [249] Madagascar, [251] Mali, [253] Mauritius, [254] Mozambique, [255] Niger, [256] Malawi, [257] Zambia, [258] Burkina Faso, [259] Guinea-Bissau, [261] Guinea, [262] Cameroon, [263] South Africa, [265] Rwanda, [267] Namibia, [268] Sao Tome and Principe, [269] Senegal, [271] Seychelles, [272] Sierra Leone, [273] Somalia, [274] Equatorial Guinea, [276] Sudan, [281] Swaziland, [282] Tanzania, United Republic of, [283] Togo, [284] Chad, [286] Uganda, [289] Central African Republic, [291] Burundi

14 **Other Asia**

[423] Afghanistan, [426] Bhutan, [427] Myanmar, [429] Brunei Darussalam, [431] Sri Lanka, [432] Vietnam, [434] Korea, Democratic People's Republic of, [436] India, [437] Indonesia, [442] Japan, [446] Cambodia, [449] Lao People's Democratic Republic of, [454] Maldives, [457] Mongolia, [458] Nepal, [460] Bangladesh, [461] Pakistan, [462] Philippines, [465] Taiwan, Province of China, [467] Korea, Republic of, [474] Singapore, [476] Thailand, [479] China, [482] Malaysia, [483] Timor-Leste, Democratic Republic of

15 **Other Central and Eastern Europe**

[125] Bulgaria, [155] Slovakia, [162] Czechoslovakia, [164] Czech Republic, [165] Hungary

16 **Other Southern Europe**

[121] Albania, [123] Andorra, [134] Greece, [145] Malta, [153] Portugal, [156] San Marino, [161] Spain, [167] Holy See (Vatican City State), [181] Cyprus, [297] Spanish dependent territories in Africa

17 **Other**

[996] unknown foreign countries

Table 9: Complete recoding map of all languages/nationalities

language/nationality

1 Arabic
[1011801] Arabic
2 Bosnian
[1021519] Bosnian
3 Bulgarian
[1022112] Bulgarian
4 German
[1070518] German, [1140419] Low German; Low Saxon; German, Low; Saxon, Low
5 English
[1051407] English
6 French
[1061805] French
7 Greek
[1071803] Greek, Ancient (to 1453), [1071805] Greek, Modern (1453-)
8 Italian
[1092001] Italian
9 Croatian
[1081822] Croatian
10 Kurdish
[1112118] Kurdish
11 Polish
[1161512] Polish
12 Portuguese
[1161518] Portuguese
13 Russian
[1182119] Russian
14 Romanian
[1182113] Romanian; Moldavian; Moldovan
15 Serbian
[1191816] Serbian
16 Spanish
[1191601] Spanish; Castilian
17 Turkish
[1202118] Turkish
18 Vietnamese
[1220905] Vietnamese
19 Asian languages
[1010305] Achinese, [1011111] Akkadian, [1011803] Official Aramaic (700-300 BCE); Imperial Aramaic (700-300 BCE), [1011913] Assamese, [1012205] Avestan, [1012301] Awadhi, [1020112] Baluchi, [1020114] Balinese, [1020514] Bengali, [1020815] Bhojpuri, [1020908] Bihari languages, [1020911] Bikol, [1021801] Braj, [1022011] Batak languages, [1022101] Buriat, [1022107] Buginese, [1022118] Burmese

(...)

Table 9: (continued)

language/nationality

, [1030502] Cebuano, [1030807] Chagatai, [1030809] Chinese, [1030811] Chuukese, [1031303] Chamic languages, [1040125] Land Dayak languages, [1040922] Divehi; Dhivehi; Maldivian, [1041509] Dogri, [1042615] Dzongkha, [1051224] Elamite, [1060912] Filipino; Pilipino, [1070125] Gayo, [1071514] Gondi, [1072110] Gujarati, [1080502] Hebrew, [1080912] Hiligaynon, [1080913] Himachali languages; Western Pahari languages, [1080914] Hindi, [1080920] Hittite, [1081314] Hmong; Mong, [1090201] Iban, [1091215] Iloko, [1091404] Indonesian, [1100122] Javanese, [1101614] Japanese, [1101618] Judeo-Persian, [1101802] Judeo-Arabic, [1110101] Kara-Kalpak, [1110103] Kachin; Jingpho, [1110114] Kannada, [1110118] Karen languages, [1110119] Kashmiri, [1110123] Kawi, [1110126] Kazakh, [1110801] Khasi, [1110813] Central Khmer, [1110815] Khotanese; Sakan, [1110918] Kirghiz; Kyrgyz, [1111511] Konkani, [1111518] Korean, [1111821] Kurukh, [1112113] Kumyk, [1120108] Lahnda, [1120115] Lao, [1120526] Lezghian, [1122119] Lushai, [1130104] Madurese, [1130107] Magahi, [1130109] Maithili, [1130111] Makasar, [1130112] Malayalam, [1130118] Marathi, [1130125] Malay, [1130418] Mandar, [1130914] Minangkabau, [1131403] Manchu, [1131409] Manipuri, [1131415] Manobo languages, [1131514] Mongolian, [1132114] Munda languages, [1132318] Marwari, [1140516] Nepali, [1140523] Nepal Bhasa; Newari, [1140901] Nias, [1151809] Oriya, [1151919] Ossetian; Ossetic, [1152001] Turkish, Ottoman (1500-1928), [1160107] Pangasinan, [1160113] Pampanga; Kapampangan, [1160114] Panjabi; Punjabi, [1160515] Persian, Old (ca.600-400 B.C.), [1160518] Persian, [1160814] Phoenician, [1161209] Pali, [1161514] Pohnpeian, [1161801] Prakrit languages, [1162119] Pushto; Pashto, [1180110] Rajasthani, [1190108] Yakut, [1190113] Samaritan Aramaic, [1190114] Sanskrit, [1190119] Sasak, [1190120] Santali, [1190512] Selkup, [1190814] Shan, [1190914] Sinhala; Sinhalese, [1191404] Sindhi, [1191507] Sogdian, [1192114] Sundanese, [1192124] Sumerian, [1192503] Classical Syriac, [1200113] Tamil, [1200120] Tatar, [1200512] Telugu, [1200520] Tetum, [1200711] Tajik, [1200712] Tagalog, [1200801] Thai, [1200902] Tibetan, [1202111] Turkmen, [1202522] Tuvinian, [1210701] Ugaritic, [1210907] Uighur; Uyghur, [1211804] Urdu, [1212602] Uzbek, [1230118] Waray, [1250116] Yapese, [1260801] Zhuang; Chuang

20   African languages

[1010118] Afar, [1010308] Acoli, [1010401] Adangme, [1010608] Afrihili, [1010618] Afrikaans, [1011101] Akan, [1011308] Amharic, [1020104] Banda languages, [1020109] Bamileke languages, [1020113] Bambara, [1020119] Basa, [1020510] Beja; Bedawiyet, [1020513] Bemba, [1020518] Berber languages, [1020914] Bini; Edo, [1021420] Bantu (Other), [1031516] Coptic, [1040914] Dinka, [1042101] Duala, [1042521] Dyula, [1050609] Efik, [1050725] Egyptian (Ancient), [1051101] Ekajuk, [1052305] Ewe, [1052315] Ewondo, [1060114] Fang, [1060120] Fanti, [1061514] Fon, [1062112] Fulah, [1070101] Ga, [1070201] Gbaya, [1070526] Geez, [1071802] Grebo, [1080121] Hausa, [1080518] Herero, [1090215] Igbo, [1091015] Ijo languages, [1091405] Indo-European languages, [1110102] Kabyle, [1110113] Kamba, [1110121] Kanuri, [1110911] Kikuyu; Gikuyu, [1110914] Kinyarwanda, [1111302] Kimbundu, [1111514] Kongo, [1111605] Kpelle, [1111815] Kru languages, [1112101] Kuanyama; Kwanyama, [1120113] Lamba, [1120914] Lingala, [1121512] Mongo, [1121526] Lozi, [1122101] Luba-Lulua, [1122102] Luba-Katanga, [1122107] Ganda, [1122114] Lunda, [1122115] Luo (Kenya and Tanzania), [1130114] Mandingo, [1130119] Masai, [1130514] Mende, [1131207] Malagasy, [1131519] Mossi, [1140212] Ndebele, South; South Ndebele, [1140405] Ndebele, North; North Ndebele, [1140415] Ndonga, [1141915] Pedi; Sepedi; Northern Sotho, [1142501] Chichewa; Chewa; Nyanja, [1142513] Nyamwezi, [1142514] Nyankole, [1142515] Nyoro, [1142609] Nzima, [1151813] Oromo, [1182114] Rundi, [1190104] Sandawe, [1190107] Sango, [1190904] Sidamo, [1191201] Slavic languages, [1191401] Shona, [1191411] Soninke, [1191513] Somali, [1191514] Songhai languages, [1191520] Sotho, Southern, [1191818] Serer, [1191923] Swati, [1192111] Sukuma, [1192119] Susu, [1192301] Swahili, [1200513] Timne, [1200907] Tigre, [1200918] Tigrinya, [1200922] Tiv, [1201308] Tamashek, [1201507] Tonga (Nyasa), [1201914] Tswana, [1201915] Tsonga, [1202113] Tumbuka, [1202309] Twi, [1211302] Umbundu, [1220109] Vai, [1220514] Venda, [1230112] Walamo, [1231512] Wolof, [1240815] Xhosa, [1250115] Yao, [1251518] Yoruba, [1260514] Zenaga, [1261404] Zande languages, [1262112] Zulu

(...)

Table 9: (continued)

language/nationality

21   Other languages

[1010211] Abkhazian, [1011202] Albanian, [1011205] Aleut, [1011207] Algonquian languages, [1011407] English, Old (ca.450-1100), [1011601] Apache languages, [1011807] Aragonese, [1011813] Armenian, [1011814] Mapudungun; Mapuche, [1011816] Arapaho, [1011823] Arawak, [1012008] Athapascan languages, [1012119] Australian languages, [1012201] Avaric, [1012513] Aymara, [1012605] Azerbaijani, [1020111] Bashkir, [1020117] Basque, [1020512] Belarusian, [1020919] Bislama, [1021201] Siksika, [1021805] Breton, [1030104] Caddo, [1030118] Galibi Carib, [1030120] Catalan; Valencian, [1030121] Caucasian languages, [1030801] Chamorro, [1030802] Chibcha, [1030805] Chechen, [1030813] Mari, [1030814] Chinook jargon, [1030815] Choctaw, [1030816] Chipewyan; Dene Suline, [1030818] Cherokee, [1030821] Church Slavic; Old Slavonic; Church Slavonic; Old Bulgarian; Old Church Slavonic, [1030822] Chuvash, [1030825] Cheyenne, [1031518] Cornish, [1031519] Corsican, [1031605] Creoles and pidgins, English based, [1031805] Cree, [1031816] Creoles and pidgins, [1032605] Czech, [1040111] Dakota, [1040114] Danish, [1040512] Delaware, [1040718] Dogrib, [1042113] Dutch, Middle (ca.1050-1350), [1042120] Dutch; Flemish, [1051413] English, Middle (1100-1500), [1051615] Esperanto, [1051920] Estonian, [1060115] Faroese, [1060910] Fijian, [1060914] Finnish, [1061813] French, Middle (ca.1400-1600), [1061815] French, Old (842-ca.1400), [1061825] Western Frisian, [1062118] Friulian, [1070515] Georgian, [1070912] Gilbertese, [1071201] Gaelic; Scottish Gaelic, [1071205] Irish, [1071207] Galician, [1071222] Manx, [1071308] German, Middle High (ca.1050-1500), [1071508] German, Old High (ca.750-1050), [1071518] Gorontalo, [1071520] Gothic, [1071814] Guarani, [1072309] Gwich'in, [1080109] Haida, [1080120] Haitian; Haitian Creole, [1080123] Hawaiian, [1081315] Hiri Motu, [1082114] Hungarian, [1082116] Hupa, [1090305] Icelandic, [1090415] Ido, [1091121] Inuktitut, [1091205] Interlingue; Occidental, [1091401] Interlingua (International Auxiliary Language Association), [1091611] Inupiaq, [1091815] Iroquoian languages, [1110112] Kalaallisut; Greenlandic, [1111513] Komi, [1111519] Kosraean, [1112120] Kutenai, [1120104] Ladino, [1120120] Latin, [1120122] Latvian, [1120913] Limburgan; Limburger; Limburgish, [1120920] Lithuanian, [1122026] Luxembourgish; Letzeburgesch, [1122109] Luiseno, [1130103] Macedonian, [1130108] Marshallese, [1130115] Maori, [1130701] Irish, Middle (900-1200), [1130903] Mi'kmaq; Micmac, [1131220] Maltese, [1131508] Mohawk, [1132119] Creek, [1132514] Mayan languages, [1140108] Nahuatl languages, [1140121] Nauru, [1140122] Navajo; Navaho, [1140903] Niger-Kordofanian languages, [1140921] Niuean, [1141415] Norwegian Nynorsk; Nynorsk, Norwegian, [1141502] Bokmål, Norwegian; Norwegian Bokmål, [1141514] Norse, Old, [1141518] Norwegian, [1150309] Occitan (post 1500); Provençal, [1151009] Ojibwa, [1151901] Osage, [1152015] Otomian languages, [1160112] Pahlavi, [1160116] Papiamento, [1160121] Palauan, [1161815] Provençal, Old (to 1500), [1172105] Quechua, [1180116] Rapanui, [1180118] Rarotongan; Cook Islands Maori, [1181508] Romansh, [1181513] Romany, [1190112] Salishan languages, [1190315] Scots, [1190701] Irish, Old (to 900), [1190915] Siouan languages, [1191215] Slovak, [1191222] Slovenian, [1191305] Northern Sami, [1191309] Sami languages, [1191315] Samoan, [1191804] Sardinian, [1192305] Swedish, [1200108] Tahitian, [1200518] Tereno, [1201112] Tokelau, [1201209] Tlingit, [1201514] Tonga (Tonga Islands), [1201609] Tok Pisin, [1201909] Tsimshian, [1202120] Altaic languages, [1202212] Tuvalu, [1211118] Ukrainian, [1221512] Volapük, [1221520] Votic, [1230111] Wakashan languages, [1230119] Washo, [1230512] Welsh, [1230514] Sorbian languages, [1231214] Walloon, [1250904] Yiddish, [1251611] Yupik languages, [1260116] Zapotec, [1262114] Zuni, [1262601] Zaza; Dimili; Dimli; Kirdki; Kirmanjki; Zazaki

B References

Antoni, M., Drasch, K., Kleinert, C., Matthes, B., Ruland, M., & Trahms, A. (2011). Arbeiten und Lernen im Wandel. Teil I: Überblick über die Studie (2. aktualisierte Fassung). *FDZ Methodenreport*, *Institut für Arbeitsmarkt- und Berufsforschung (IAB)*(Nürnberg).

Hundepool, A., Domingo-Ferrer, J., Franconi, L., Giessing, S., Nordholt, E. S., Spicer, K., & de Wolf, P.-P. (2012). *Statistical Disclosure Control*. Wiley.

Koberg, T. (2016). Disclosing the National Educational Panel Study. In H.-P. Blossfeld, J. von Maurice, M. Bayer, & J. Skopek (Eds.), *Methodological Issues of Longitudinal Surveys.The Example of the National Educational Panel Study*. Springer VS.

Lane, J., Heus, P., & Mulcahy, T. (2008). Data Access in a Cyber World: Making Use of Cyberinfrastructure. *Transactions on Data Privacy*, *1*, 2–16.

Müller, W., Blien, U., & Knoche, P. (1991). Die faktische Anonymität von Mikrodaten (S. Bundesamt, Ed.). *Schriftenreihe Forum der Bundesstatistik*, *19*.