

# **Tobias Koberg**

# **Anonymization Procedures**

NEPS Starting Cohort 4— Grade 9
School and Vocational Training

Scientific Use File Version 9.1.1



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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) 4, version 9.1.1 (doi:10.5157/NEPS:SC4:9.1.1). 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
Grade 9 > 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, Heus, and Mulcahy, 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.

#### 1 Preamble

• 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 reidentification 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<sup>1</sup>, 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 OnSiteversion. 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.

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.

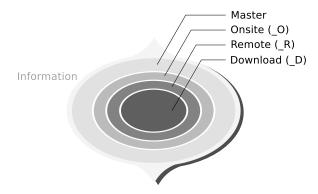


Figure 1: Onion-shaped model defining the different anonymization levels

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 416 out of 6972 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 <sup>1</sup>	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

<sup>&</sup>lt;sup>1</sup> 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
TargetMethods	tf80506	Open draw prize
pInstitution	h22131x	School: all-day school programs: other, text 1
pInstitution	h22131y	School: all-day school programs: other, text 2
pInstitution	h22131z	School: all-day school programs: other, text 3
pInstitution	h22202t	School: quality: other, text
pInstitution	h227011	School: full-time teachers school subject: other school sub-
_		jects, text1
pInstitution	h227012	School: full-time teachers school subject: other school sub-
-		jects, text2
pInstitution	h227013	School: full-time teachers school subject: other school sub-
•	, ,	jects, text3
pInstitution	h229003	School: approach: educational, text
pInstitution	h229005	School: approach: promotion, text
pInstitution	h229007	School: approach: integration, text
1	, 1	11 0 ,

**Table 2:** (continued)

file	variable	label
pInstitution	h229009	School: approach: other, text
pInstitution	h22901t	School: profile: other, text
pInstitution	h41700a	Other remedial measures, other
pInstitution	h41702a	Parent training programs, migration, other
pInstitution	h41704a	Teacher training programs, migration, other
pParent	p19020j	Special educational needs OPEN
pParent	p26210t	Parents: tutoring, other subject (open)
pParent	p296402	Wish: What vocation should TC learn
pParent	p401001	Migrant status - other
pParent	p731803	Highest educational qualification of respondent type open
pParent	p731814	Vocational qualification respondent (open)
pParent	p731817	Type tertiary qualification respondent (open)
pParent	p731853	Highest educational qualification partner type open
pParent	p731864	Vocational qualification, partner, open
pParent	p731867	Type tertiary qualification partner (open)
pTarget	t22260t	Student: School involvement: Other, text
pTarget	t26212a	Student: Subject 1
pTarget	t26212b	Student: Subject 2
pTarget	t26212c	Student: Subject 3
pTarget	t268111	Student: tutoring location somewhere else, text
pTarget	t27111t	Courses outside school: Other courses (open)
pTarget	t27270h	Student: Participation organization/ group: Other, text
pTarget	t31060a	Idealistic vocational aspirations: preferred choice of career
pTarget	t31160a	Realistic vocational aspirations: preferred choice of career
pTarget	t428350	Self-description sense of belonging
pTarget	t516202	Party election (another party)
pTarget	t53131e	Information possibilities of financial aid for higher ed open
pTarget	t53132h	Prospective financing of higher education: Open
pTarget	t66505a	Goal orientation: Work/vocational training
pTarget	t66506a	Goal orientation: Private/family
pTarget	tdoo26x	Favorite subject
pTarget	te05017	Idealistic educational aspiration - type of higher ed. inst
		other, namely
pTarget	te05025	Idealistische Bildungsaspiration - Ausbildungstyp - etwas an-
		deres und zwar
pTarget	te06010	Idealistic aspirations - subject
pTarget	te06020	Idealistic aspirations - subject combination subject
pTarget	teo8010	Profession requiring vocational training
pTarget	te09017	Realistic educational aspiration - type of higher education in-
		stitution - oth
pTarget	te09025	Realistic educational aspiration - type of vocational training -
wTo word	to	something el
pTarget	te10010	Realistic aspirations - subject
pTarget	te10020	Realistic aspirations - subject combination subject
pTarget	te11010	Realistic educational aspiration - vocational training

**Table 2:** (continued)

file	variable	label
pTarget	te14020	Other subjects at advanced performance level - subject 1
pTarget	te14030	Other subjects at advanced performance level - subject 2
pTarget	te14040	Other subjects at advanced performance level - subject 3
pTarget	te14050	Other subjects at advanced performance level - subject 4
pTarget	te16010	Examination subject 1
pTarget	te16020	Examination subject 2
pTarget	te16030	Examination subject 3
pTarget	te16040	Examination subject 4
pTarget	te16050	Examination subject 5
pTarget	tfooo70	first job wish
pTarget	tfoo13b	second vocational wish indication
pTarget	tf00260	Application, occupation 1
pTarget	tfoo29b	Application vocation 2
pTargetCATI	t405531	Immigration status other
pTargetCATI	tf62077	Reasons for not searching 7: Other, open
pTargetCATI	tf62108	Reasons for not applying 8: Other, open
pTargetCAWI	t531229	Other source of funding, open
pTargetCAWI	t66505a	Goal orientation: Work/vocational training
pTargetCAWI	t66506a	Goal orientation: Private/family
spCourses	t272011_w1	Course content
spCourses	t272011_w2	Course content
spCourses	t272011_w3	Course content
spParentGap	ps29102	Other activity
spParentSchool	p723090	Type of school (open)
spSchool	ts11206	Another type of school
spSchool	ts11251	1st 'Abitur' subject, open
spSchool	ts11252	2nd 'Abitur' subject, open
spSchool	ts11253	3rd 'Abitur' subject, open
spSchool	ts11254	4th 'Abitur' subject, open
spSchool	ts11255	5th 'Abitur' subject, open
spSchoolExtExam	ts11305	Other school-leaving qualification awarded
spSchoolExtExam	ts11324	1. Abitur subject (awarded qualification), open
spSchoolExtExam	ts11325	2. Abitur subject (awarded qualification), open
spSchoolExtExam	ts11326	3. Abitur subject (awarded qualification), open
spSchoolExtExam	ts11327	4. Abitur subject (awarded qualification), open
spSchoolExtExam	ts11328	5. Abitur subject (awarded qualification), open
spVocExtExam	ts15305	Other external examination qualification
spVocTrain	ts15458	Support during vocational training program other, open
spVocTrain	ts15558	Support during voc. tr. other, open – early coll. for current
		follow-up episodes

## 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 to the binary information German/non-German. Please note that this variable does not necessarily has the same root of the variable name as the affected variable (e.g. if it is part of the instrument and not generated during the anonymization process). Look in the vicinity of the documented variable to find it. Also, see section 3.3.

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	p32601a p32601b	Position generator: country nurse of male nurse  Position generator: country engineer	
pParent	p326016	Position generator: country engineer  Position generator: country warehouse/transport	
prarent	p32001c	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 doctor	
pParent	p32601h	Position generator: country banker	
pParent	p32601k	Position generator: country car mechanic	
pParent	p32601l	Position generator: country legal practitioner	
pParent	p32601m	Position generator: country optician	
pParent	p32601n	Position generator: country translator	
pParent	p326010	Position generator: country teacher at elementary	
		school, Hauptschule or Real	
pParent	p400010_g1	Country of birth respondent	
pParent	p400010_g2	Respondent's country of birth (aggregated)	
pParent	p400070_g1	Respondent's mother's country of birth	
pParent	p400070_g2	Country of birth of respondent's mother (aggregated)	
pParent	p400090_g1	Country of birth father respondent	
pParent	p400090_g2	Country of birth of respondent's father (aggregated)	
pParent	p400500_g3	group of origin	
pParent	p400500_g3v1	Group of origin	
pParent	p401150_g2	Respondent's nationality not German (aggregated)	
pParent	p403010_g1	Country of birth partner abroad	
pParent	p403010_g2	Partner's country of birth (aggregated)	
pParent	p403070_g1	Country of birth mother partner	
pParent	p403070_g2	Country of birth of partner's mother (aggregated)	
pParent	p403090_g1	Partner's father's country of birth	
pParent	p403090_g2	Country of birth of partner's father (aggregated)	
pParent	p404050_g2	Other nationality partner (aggregated)	
pParent	p406010_g1	Country of birth target child	
pParent	p406010_g1	Target child's country of birth (aggregated)	
1	I I	3	

**Table 3:** (continued)

file	variable	label
pParent	p407050_g2	Target child's nationality (aggregated)
pParent	p407060_g2	Target child's second nationality (aggregated)
pParent	p431010_g1	Destination country
pParent	p431010_g2	Target country (categorized)
pParent	p731804_g1	Highest educational qualification of respondent
•		abroad (country)
pParent	p731804_g2	Country of respondent's highest educational quali-
		fication (aggregated)
pParent	p731823_g1	Country of vocational qualification (additional re-
		sponse)
pParent	p731823_g2	Country of professional qualification (additional re-
		sponse, aggregated)
pParent	p731854_g1	Highest educational qualification partner abroad
		(country)
pParent	p731854_g2	Country of highest educational qualification part-
		ner (aggregated)
pParent	p731873_g1	Country of vocational qualification, partner, (addi-
	-	tional response)
pParent	p731873_g2	Country of partner's professional qualification (ad-
		ditional response, aggrega
pTarget	t400000_g1	Country of own birth
pTarget	t400000_g2	Country of birth (aggregated)
pTarget	t400070_g1	Mother: Country of birth
pTarget	t400070_g2	Mother: Country of birth (aggregated)
pTarget	t400090_g1	Father: Country of birth
pTarget	t400090_g2	Father: Country of birth (aggregated)
pTarget	t400220_g1	Country of birth of your maternal grandparents -
		maternal grandmother
pTarget	t400220_g2	Mother's mother: Country of birth (aggregated)
pTarget	t400240_g1	Country of birth of your maternal grandparents -
		maternal grandfather
pTarget	t400240_g2	Mother's father: Country of birth (aggregated)
pTarget	t400260_g1	Country of birth of your paternal grandparents - pa-
		ternal grandmother
pTarget	t400260_g2	Father's mother: Country of birth (aggregated)
pTarget	t400280_g1	Country of birth of your paternal grandparents - pa-
		ternal grandfather
pTarget	t400280_g2	Father's father: Country of birth (aggregated)
pTarget	t400500_g3	Group of origin
pTarget	t400500_g3v1	Group of origin
pTargetCATI	t405010_g1	Birth country
pTargetCATI	t405010_g2	Country of birthplace (aggregated)
pTargetCATI	t405510_g1	Country of birth respondent
pTargetCATI	t405510_g2	Country of birth respondent (aggregated)
pTargetCATI	t405560_g1	Respondent's mother's country of birth
	<b>-</b>	-

**Table 3:** (continued)

Table 5. (Continued	,	
file	variable	label
pTargetCATI	t405560_g2	Country of birth mother respondent (aggregated)
pTargetCATI	t405570_g1	Country of birth maternal grandmother
pTargetCATI	t405570_g2	Country of birth maternal grandmother (aggre-
		gated)
pTargetCATI	t405580_g1	Country of birth maternal grandfather
pTargetCATI	t405580_g2	Country of birth maternal grandfather (aggregated)
pTargetCATI	t405600_g1	Respondent's father's country of birth
pTargetCATI	t405600_g2	Country of birth father respondent (aggregated)
pTargetCATI	t405610_g1	Country of birth paternal grandmother
pTargetCATI	t405610_g2	Country of birth paternal grandmother (aggregated)
pTargetCATI	t405620_g1	Country of birth paternal grandfather
pTargetCATI	t405620_g2	Country of birth paternal grandfather (aggregated)
pTargetCATI	t406100_g2	other nationality (aggregated)
pTargetCATI	t407010_g1	Partner's country of birth
pTargetCATI	t407010_g2	Country of birth partner (aggregated)
pTargetCATI	t751004_g1	Country of residence (abroad)
pTargetCATI	t751004_g2	Country of place of residence (aggregated)
pTargetCATI	t751015_g1	Country of second residence (outside Germany)
pTargetCATI	t751015_g2	Country of secondary residence (aggregated)
spEmp	ts23239_g1	Country of workplace
spEmp	ts23239_g2	Country of the workplace (aggregated)
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
spSchool	ts1120s_g1	Country of school
spSchool	ts1120s_g2	Country of school (aggregated)
spSchoolExtExam	ts11301_g1	Country of school-leaving qualification
spSchoolExtExam	ts11301_g2	Country of the awarded school-leaving qualification (aggregated)
spVocExtExam	ts15303_g1	Country of external examination
spVocExtExam	ts15303_g1	Country of external examination  Country of external exam (aggregated)
spVocExtExam	ts15303_g2 ts1521s_g1	Country in which vocational training program was
sproc11am	t315215_g1	done
spVocTrain	ts1521s_g2	Country of vocational training (aggregated)
spVocTrain	ts15294_g1	1. country stay abroad
spVocTrain	ts15294_g2	1. country stay abroad (aggregated)
spVocTrain	ts15295_g1	2nd country of stay abroad
spVocTrain	ts15295_g2	2. country stay abroad (aggregated)
ParentMethods	px80204	Interview: interview language (realized case)
TargetMethods	tx80204	Interview: Interview language (realized case)
pEducator	e41100a_g2	Mother tongue (response 1, ISO 639.2)
pEducator	e41100a_g3	Mother tongue (response 2, ISO 639.2)
pEducator	e41100a_g4	Mother tongue (response 3, ISO 639.2)
pEducator	e41100a_g5	Mother tongue (response 4, ISO 639.2)
pParent	p410000_g1	Child's language of origin (ISO 639.2)
pParent	p410000_g2	Child's language of origin (aggregated)

**Table 3:** (continued)

file	variable	label
pParent	p410002_g1	Child's other language of origin (ISO 639.2)
pParent	p410002_g2	Child's other language of origin (aggregated)
pParent	p413000_g1	Respondent's language of origin (ISO 639.2)
pParent	p413000_g2	Respondent's language of origin (aggregated)
pParent	p413002_g1	Respondent's additional language of origin (ISO
_		639.2)
pParent	p413002_g2	Respondent's other language of origin (aggregated)
pParent	p414000_g1	Partner's language of origin (ISO 639.2)
pParent	p414000_g2	Partner's language of origin (aggregated)
pParent	p414002_g1	Partner's additional language of origin (ISO 639.2)
pParent	p414002_g2	Partner's other language of origin (aggregated)
pParent	p414100_g1	Recent partner's language of origin (ISO 639.2)
pParent	p414100_g2	Recent partner's language of origin (aggregated)
pParent	p414102_g1	Recent partner's other language of origin (ISO
_		639.2)
pParent	p414102_g2	Recent partner's other language of origin (aggre-
nTongot	t.10000 mg	gated) Mother tengue (set elternetive ISO (ee.e.)
pTarget	t41000a_g2	Mother tongue (1st alternative, ISO 639.2)
pTarget	t41000a_g3	Mother tongue (2nd alternative, ISO 639.2)
pTarget	t41000a_g4	Mother tongue (3rd alternative, ISO 639.2)
pTarget	t41000a_g5	Mother tongue (4th alternative, ISO 639.2)
pTarget	t410010_g2	Second language (1st alternative, ISO 639.2)
pTarget	t410010_g3	Second language (2nd alternative, ISO 639.2)
pTarget	t410010_g4	Second language (3rd alternative, ISO 639.2)
pTarget	t410010_g5	Second language (4th alternative, ISO 639.2)
pTarget	t41010a_g2	Mother: Mother tongue (1st alternative, ISO 639.2)
pTarget	t41010a_g3	Mother: Mother tongue (2nd alternative, ISO 639.2)
pTarget	t41010a_g4	Mother: Mother tongue (3rd alternative, ISO 639.2)
pTarget	t41010a_g5	Mother: Mother tongue (4th alternative, ISO 639.2)
pTarget	t41012a_g2	Father: Mother tongue (1st alternative, ISO 639.2)
pTarget	t41012a_g3	Father: Mother tongue (2nd alternative, ISO 639.2)
pTarget	t41012a_g4	Father: Mother tongue (3rd alternative, ISO 639.2)
pTargetCATI	t41012a_g5	Father: Mother tongue (4th alternative, ISO 639.2)
pTargetCATI	t413000_g1	1. Language of origin (ISO 639.2) 1st native language (aggregated)
pTargetCATI	t413000_g2	
pTargetCATI pTargetCATI	t413010_g1	<ol> <li>Language of origin (ISO 639.2)</li> <li>2nd native language (aggregated)</li> </ol>
	t413010_g2	
pParent	p401150_g1	Citizenship respondent not German
pParent	p404050_g1	Other citizenship partner
pParent	p407050_g1	Citizenship - target child
pParent	p407060_g1	Second citizenship of the target child
pTarget	t40115a_g2	Nationality (response 1; coded) Nationality (response 2; coded)
pTarget	t40115a_g3	Nationality (response 2; coded) Nationality (response 3; coded)
pTarget	t40115a_g4	, , ,
pTarget	t42850x_g1	Definition culture of origin

Table 3: (continued)

file	variable	label
pTargetCATI	t406100_g1	Other citizenship

## 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.

As NEPS data which has been surveyed in institutional context enjoys special focus in this matter, federal states are only available in RemoteNEPS. When using data collected in connection with schools or higher education institutions, it is not allowed to use Federal-State-related information directly or indirectly contained in the data for analyses aiming at a direct Federal State comparison, direct conclusions to be drawn about a Federal State, or a reconstruction of the concrete Federal State affiliation of persons, households, and institutions. Please see the Data Use Agreement for further information about this topic. Regional localization below this level is not directly available. If you have need to merge data using a regional key below those levels, please 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

£1.	waniahla	lahal
file	variable	label
CohortProfile	tx80109_g2	Sample: Federal state school
Weights	stratum_imp1	Implicit stratum 1 (State of institution)
Weights	stratum_imp2	Implicit stratum 2 (regional classification of the institution)
Weights	stratum_imp3	Implicit stratum 3 (funding body of the institution)
pEducator	e537110_g2	Place of study teaching post (Federal state)
pEducator	e537110_g3	Place of study teaching post (administrative district)
pEducator	e537170_g2	Place: passed the examination (Federal State)
pEducator	e537170_g3	Place: passed the examination (administrative district)
pParent	p751001_g2	Place of Residence (Federal state)
pTarget	ts11202_g2	Municipality of school (federal state)
pTarget	tx44401_g2	Place of school (federal state)
pTargetCATI	t700101_g2	Municipality of birth (federal state)
pTargetCATI	t751001_g2	Municipality of Living (RS federal state)
pTargetCATI	t751011_g2	Municipality of secondary residence (federal state)
pTargetCAWI	ts11203	Federal state of school
spEmp	ts23237_g2	Place of workplace (RS federal state)

**Table 4:** (continued)

file	variable	label
spParentSchool spSchool spVocPrep	p723030_g2 ts11202_g2 ts13105_g2	Municipality of school (federal state) Municipality of school (federal state) Municipality of measure (RS federal state)
spVocTrain	ts15207_g2	Municipality of vocational training center (RS federal state)
spVocTrain	ts15429	Federal state in which higher education institution is located

#### 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 reidentification, this data is only available in RemoteNEPS. This includes the complete datafile(s) pInstitution,

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
- Microm data, describing the surrounding of the school
- RegioInfas (infas geodaten) data, describing the surrounding of the targets residence
- RegioInfas data, describing the surrounding of the school

#### 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.

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

[file]	vari	able:	label
--------	------	-------	-------

[pCourseClass] e227400\_g1: Class: Number of students, total (coarsed)

RemoteNEPS		Download
	1	Below 10
	2	10 to 14
	3	15 to 19
	4	20 to 24
	5	25 to 29
	6	30 to 34
	7	35 and more

[pCourseClass] e229400: Class: Facilities: Classroom size (aggregated)

RemoteNEPS		Download
	1	under 30
	2	30 to 39
	3	40 to 49
	4	50 to 59
	5	60 and more

[pEducator] e229820: Work in occupation (years, categorized)

RemoteNEPS	Download	
	o up to below 5	
	2 5 up to below 10	
	3 10 up to below 15	
	4 15 up to below 20	
	5 20 up to below 25	
	6 25 up to below 30	
	7 30 up to below 35	
	8 35 and more	

[pEducator] e229821: Time in occupation at school (years, categorized)

RemoteNEPS		Download
	1	o up to below 5
	2	5 up to below 10
	3	10 up to below 15
	4	15 up to below 20
	5	20 up to below 25
	6	25 up to below 30
	7	30 up to below 35
	8	35 and more

[pEducator] e536020: Age at choice of occupation (categorized)

RemoteNEPS	Download
	30 30 and older

## **Table 5:** (continued)

## [file] variable: label

[pEducator] e53702y: Year of college admission qualification (categorized)

RemoteNEPS		Download
	1	Before 1970
	2	1970-1979
	3	1980-1989
	4	1990-1999
	5	after 1999

 $[\texttt{pEducator}] \ \ \texttt{e53710y} \text{: Year of study start teacher course (kategorisiert)}$ 

RemoteNEPS		Download	
	1	Before 1970	
	2	1970-1979	
	3	1980-1989	
	4	1990-1999	
	5	after 1999	

[pEducator] e537150: Year of passing the examination (categorized)

RemoteNEPS		Download
	1	Before 1970
	2	1970-1979
	3	1980-1989
	4	1990-1999
	5	after 1999

[pEducator] e76212y: Year of birth (categorized)

RemoteNEPS		Download
	1	before 1950
	2	1950-1959
	3	1960-1969
	4	1970-1979
	5	after 1979

## **Table 5:** (continued)

## [file] variable: label

 $\ensuremath{[\mathsf{pParent}]}$  p727001: Recommendation secondary school or course of education, which ones? (coarsened)

RemoteNEPS		Download
Hauptschule [school for basic secondary education]	1	Hauptschule [basic secondary school]
Realschule [intermediate secondary school]	2	Realschule [intermediate secondary school]
Gymnasium [type of school leading to upper sec-	3	Gymnasium [upper secondary school]
ondary education and Abitur]		
Integrated Gesamtschule [basic and intermediate	4	Integrated Gesamtschule [basic and intermediate
secondary school, in some states also elementary		secondary school]
and upper] with inclusion		
Verbundene Haupt- und Realschule [type of school	5	Joint Haupt- and Realschule [basic and intermediate
in Berlin, Hesse, Mecklenburg-West Pomerania		secondary school]
and Lower Saxony offering basic and intermedi-		
ate secondary education] «also Gemeinschaftss-		
chule, Oberschule, district school, extended Re-		
alschule, Realschule plus, Werkrealschule, Mittel-		
stufenschule»		
Mittelschule [type of school offering basic and in-	6	Mittelschule/Regelschule/Sekundarschule/Regionale
termediate secondary education in Saxony] (Sax-		Schule [basic and intermediate secondary school]
ony/Bavaria)		
Regelschule [basic and intermediate secondary	7	
school in Thuringia] (Thuringia)		
Regionale Schule [type of school in Mecklenburg-	8	
Sekundarschule [type of school in Bremen and	9	
, .		
, , , , , ,		
Remedial level (Hesse)	10	
Special school	11	Special needs school
	12	Orientation stage
	13	School for highly gifted students
2.71	14	
Schleswig-Holstein] (NRW)		
Regionale Schule [type of school in Mecklenburg- West Pomerania offering basic and intermediate secondary education] (Rhineland Palatinate) Sekundarschule [type of school in Bremen and Saxony-Anhalt offering basic and intermediate sec- ondary education] (Bremen, NRW) Remedial level (Hesse)	9 10 11 12 13	1

## **Table 5:** (continued)

## [file] variable: label

 $\ensuremath{[pParent]}$  p727002: Recommendation secondary school or course of education, further ones? (coarse...

RemoteNEPS		Download
Hauptschule [school for basic secondary education]	1	Hauptschule [basic secondary school]
Realschule [intermediate secondary school]	2	Realschule [intermediate secondary school]
Gymnasium [type of school leading to upper sec-	3	Gymnasium [upper secondary school]
ondary education and Abitur]		
Integrated Gesamtschule [basic and intermediate	4	Integrated Gesamtschule [basic and intermediate
secondary school, in some states also elementary		secondary school]
and upper] with inclusion		
Verbundene Haupt- und Realschule [type of school	5	Joint Haupt- and Realschule [basic and intermediate
in Berlin, Hesse, Mecklenburg-West Pomerania		secondary school]
and Lower Saxony offering basic and intermedi-		
ate secondary education] «also Gemeinschaftss-		
chule, Oberschule, district school, extended Re-		
alschule, Realschule plus, Werkrealschule, Mittel-		
stufenschule»		
Mittelschule [type of school offering basic and in-	6	Mittelschule/Regelschule/Sekundarschule/Regionale
termediate secondary education in Saxony] (Sax-		Schule [basic and intermediate secondary school]
ony/Bavaria)		
Regelschule [basic and intermediate secondary	7	
school in Thuringia] (Thuringia)		
Regionale Schule [type of school in Mecklenburg-	8	
West Pomerania offering basic and intermediate		
secondary education] (Rhineland Palatinate) Sekundarschule [type of school in Bremen and		
Saxony-Anhalt offering basic and intermediate sec-	9	
ondary education] (Bremen, NRW)		
Remedial level (Hesse)	10	
Special school	11	Special needs school
Orientation stage [first two years of secondary ed-	12	Orientation stage
ucation]		orientation stage
School for highly gifted students	13	School for highly gifted students
Gemeinschaftsschule [type of Gesamtschule in	14	
Schleswig-Holstein] (NRW)		

## [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		

## **Table 5:** (continued)

## [file] variable: label

## [pParent] p731961: Number of employees partner (categorized)

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	

## [pTargetCATI] t731416: Number of employed mothers (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	

## [pTargetCATI] t731466: Number of employed fathers (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
pCourseClass	e190011	Class: Amount of students with special needs

**Table 6:** (continued)

`	,	
file	variable	label
pCourseClass	e227400	Class: Number of female students
pCourseClass	e227401	Class: Number of male students
pCourseClass	e451000	Day care facility: Amount of students with migration background
pCourseClass	e79201a	Class: Amount from lower social class
pCourseClass	e79201b	Class: Amount from middle social class
pCourseClass	e79201c	Class: Amount from higher social class
pCourseClass	e79202a	Students with at least one parent with a higher education degree
pEducator	e537030	Federal state higher education entrance qualification (Federal state)
pEducator	e537110_g4	Location of university education for teaching professions (county, info from
pEducator	e537170_g4	Location: State examination passed (county, info from 2013)
pEducator	e537200	Federal state second state examination (Federal state)
pEducator	e76212m	Month of birth
pInstitution	h76612m	Month of birth
pTarget	t435030_g1	Religion and religiosity: other religious community
pTarget	t43504a_g1	Other religious community (specific)
pTargetCATI	t435030_g1	Religion and religiosity: other religious community
pTargetCATI	tf40231_g1	Study area subject combination first applied for – Subject 1 (destatis 2010/11)
pTargetCATI	tf40231_g3	ISCED-97 subject combination first applied for – Subject 1 (3-digits)
pTargetCATI	tf40231_g4	ISCED-97 subject combination first applied for – Subject 1 (2-digits)
pTargetCATI	tf40232_g1	Study area subject combination first applied for – Subject 2 (destatis 2010/11)
pTargetCATI	tf40232_g3	ISCED-97 subject combination first applied for – Subject 2 (3-digits)
pTargetCATI	tf40232_g4	ISCED-97 subject combination first applied for – Subject 2 (2-digits)
pTargetCATI	tf40233_g1	Study area subject combination first applied for – Subject 3 (destatis 2010/11)

**Table 6:** (continued)

file	variable	label
pTargetCATI	tf40233_g3	ISCED-97 subject combination first applied for – Subject 3 (3-digits)
pTargetCATI	tf40233_g4	ISCED-97 subject combination first applied for – Subject 3 (2-digits)
pTargetCATI	tf40235_g1	Study area subject combination second applied for – Subject 1 (destatis 2010/11)
pTargetCATI	tf40235_g3	ISCED-97 subject combination second applied for – Subject 1 (3-digits)
pTargetCATI	tf40235_g4	ISCED-97 subject combination second applied for – Subject 1 (2-digits)
pTargetCATI	tf40236_g1	Study area subject combination second applied for – Subject 2 (destatis 2010/11)
pTargetCATI	tf40236_g3	ISCED-97 subject combination second applied for – Subject 2 (3-digits)
pTargetCATI	tf40236_g4	ISCED-97 subject combination second applied for – Subject 2 (2-digits)
pTargetCATI	tf40237_g1	Study area subject combination second applied for – Subject 3 (destatis 2010/11)
pTargetCATI	tf40237_g3	ISCED-97 subject combination second applied for – Subject 3 (3-digits)
pTargetCATI	tf40237_g4	ISCED-97 subject combination second applied for – Subject 3 (2-digits)
pTargetCAWI	t242400_g1	Study area Reference subject Learning environment (destatis 2010/11)
pTargetCAWI	t242400_g3	ISCED-97 Reference subject Learning environment (3-digits)
pTargetCAWI	t242400_g4	ISCED-97 Reference subject Learning environment (2-digits)
spVocTrain	ts15401	Higher education institution
spVocTrain	ts15404_g1	Study area study subject, doctoral subject, habilitation subject 1 (destatis
spVocTrain	ts15404_g3	ISCED-97 study subject, doctoral subject, habilitation subject 1 (3-digits)
spVocTrain	ts15404_g4	ISCED-97 study subject, doctoral subject, habilitation subject 1 (2-digits)
spVocTrain	ts15405_g1	Study area study subject 2 (destatis 2010/11)
spVocTrain	ts15405_g3	ISCED-97 study subject 2 (3-digits)
spVocTrain	ts15405_g4	ISCED-97 study subject 2 (2-digits)

**Table 6:** (continued)

file	variable	label
spVocTrain	ts15406_g1	Study area study subject 3 (destatis 2010/11)
spVocTrain	ts15406_g3	ISCED-97 study subject 3 (3-digits)
spVocTrain	ts15406_g4	ISCED-97 study subject 3 (2-digits)

# 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.

## 3.1 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** (NEPS SUF, SC6 5.1.0 (remote); doi:10.5157/NEPS:SC6:5.1.0) (NEPS SUF, SC6 5.1.0 (download); doi:10.5157/NEPS:SC6:5.1.0) t731406 D -- Number of mother's employees (categorized) t731406 D -- Number of mother's employees (categorized) Freq. Freq. Valid -98 Don't know -98 Don't know Valid -97 Refused -97 Refused -54 Missing by design -54 Missing by design 0 none 423 0 none 423 1 to 4 1 to 4 330 330 5 to 9 64 2 5 to 9 64 10 to 19 3 10 to 19 22 22 20 and more 28 20 and more 28 37575 Missing . 15982 Missing . 15982 Total Total t731406 R -- Number of mother's employees t731406 R -- Number of mother's employees Frea. Frea. -98 Don't know -54 Missing by design Valid Valid 36700 -53 Anonymized 875 -97 Refused -54 Missing by design 36700 Total 37575 Missing . 1 to 4 330 Total 53557 10 to 19 22 20 to 49 50 to 99 21 3 100 to 199 200 to 249 Total 37575 Missing . 15982 53557

## 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.

Valid	RemoteNEPS			Download			
Freq.   Freq.			SC6:5.1.0)		C6:5.1.0		
Freq.	t40501	9_g2 Country of birthplace (categorized)		t405010_g2 Country of birthplace (categorized)			
Valid					Fre		
-54 Missing by design			+				
1   Germany   15388   1   Germany   1   1   1   1   1   1   1   1   1	vaciu				364		
1   Germany   15388   1   Germany   1   1   1   1   1   1   1   1   1					304		
2			1		153		
3				,	133		
4 Romania   98			1		2		
5 Turkey         182         5 Turkey           6 Former Yugoslavia         113         6 Former Yugoslavia           7 Former Soviet Union         522         7 Former Soviet Union           8 Central and South America, Caribbean         42         8 Central and South America, Caribbean           9 Northern and Western Europe         154         9 Northern and Western Europe           10 North America         33         10 North America           12 Other Middle East and North Africa         73         12 Other Middle East and North Africa           13 Other Africa         30         13 Other Africa           14 Other Asia         74         14 Other Asia           15 Other Central and Eastern Europe         84         15 Other Central and Eastern Europe           16 Other Southern Europe         44         16 Other Southern Europe           16 Other Southern Europe         44         16 Other Southern Europe           14405010_glR Country of place of birth         5           14405010_glR Country of place of birth         5           1405010_glR Country of place of birth         5           1405010_glR Country of place of birth         6           1405010_glR Country of place of birth         7           1405010_glR Country of place of birth         7			•		2		
6 Former Yugoslavia 113 6 Former Yugoslavia 7 Former Soviet Union 522 7 Former Soviet Union 522 8 Central and South America, Caribbean 42 8 Central and South America, Caribbean 9 Northern and Western Europe 154 9 Northern and Western Europe 10 North America 33 10 North America 12 Other Middle East and North Africa 13 Other Africa 30 13 Other Africa 14 Other Asia 74 14 Other Asia 15 Other Central and Eastern Europe 16 Other Southern Europe 17 Otal 53557 Total 55 Other Central and Eastern Europe 17 Otal 53557 Total 55 Other Central and Eastern Europe 18 4 16 Other Southern Europe 19 Other Africa 19 Other Africa 19 Other Africa 19 Other Southern Europe 19 Other Africa					1		
7   Former Soviet Union   522   7   Former Soviet Union   8   Central and South America, Caribbean   42   8   Central and South America, Caribbean   9   Northern and Western Europe   154   9   Northern and Western Europe   154   9   North America   10   North America   11   10   North America   12   Other Middle East and North Africa   13   Other Africa   13   Other Africa   14   Other Africa   14   Other Africa   15   Other Central and Eastern Europe   84   15   Other Central and Eastern Europe   16   Other Southern Europe   16   Other Southern Europe   16   Other Southern Europe   17   Other Southern Europe   17   Other Southern Europe   18   Other Southern Europe   18   Other Southern Europe   Other Southern Eur				1 1 1			
8					1		
9 Northern and Western Europe 10 North America 11 Other Middle East and North Africa 12 Other Middle East and North Africa 13 Other Africa 13 Other Africa 14 Other Asia 15 Other Central and Eastern Europe 16 Other Southern Europe 17 Otal 18 Other Southern Europe 19 At 15 Other Central and Eastern Europe 19 At 16 Other Southern Europe 19 At 16 Other Southern Europe 10 Other Southern Europe 10 Other Southern Europe 11 Other Southern Europe 12 Other Missing by design 13 Other Central and Eastern Europe 16 Other Southern Europe 17 Otal 18 Other Country of place of birth 19 Freq.  10 Other Southern Europe 10 Other Southern Europe 11 Other Southern Europe 12 Other Missing by design 13 Other Africa 14 Other Asia 15 Other Central and Eastern Europe 16 Other Southern Europe 17 Otal 18 Other Southern Europe 18 Other Southern Europe 19 Other Southern Europe 10 Other Southern Europe 10 Other Southern Europe 10 Other Southern Europe 11 Other Southern Europe 12 Other Middle East and North Africa 13 Other Africa 14 Other Asia 15 Other Central and Eastern Europe 16 Other Southern Europe 17 Otal 18 Other Africa 18 Other Africa 19 Other Africa 10 Other Africa 11 Other Africa 12 Other Middle East and North Africa 13 Other Africa 14 Other Africa 15 Other Central and Eastern Europe 16 Other Southern Europe 16 Other Southern Europe 16 Other Southern Europe 16 Other Africa 16 Other Southern Europe 16 Other Africa 16 Other Southern Europe 16 Other Southern Europe 16 Other Southern Europe 16 Other Southern Europe 17 Other Central and Eastern Europe 18 Other Africa 18 Other Africa 19 Other Africa 19 Other Africa 10 Other Africa 10 Other Africa 11 Other Africa 11 Other Africa 11 Other Africa					5		
10 North America   33   10 North America   12 Other Middle East and North Africa   13 Other Africa   13 Other Africa   13 Other Africa   13 Other Africa   14 Other Asia   74   14 Other Asia   15 Other Central and Eastern Europe   84   15 Other Central and Eastern Europe   16 Other Southern Europe   44   16 Other Southern Europe   17 Otal   53557   Total   5 Other Central and Eastern Europe   16 Other Southern Europe   17 Otal   5 Other Central and Eastern Europe   18 Other Central and Eastern Europe   18 Other Central and Eastern Europe   18 Other Southern Europe   18 Other Central and Eastern Europe   18 Other Central and Eastern Europe   18 Other Southern Europe   18 Other Southern Europe   18 Other Central and Eastern Europe   18 Other Cen			•				
12 Other Middle East and North Africa   73   13 Other Africa   30   13 Other Africa   14 Other Asia   74   14 Other Asia   15 Other Central and Eastern Europe   84   15 Other Central and Eastern Europe   16 Other Southern Europe   44   16 Other Southern Europe   17 Otal   18 Other Central and Eastern Europe   18 Other Central and Eastern Europe   19 Other Southern Eur			1		1		
13 Other Africa   30							
14 Other Asia   74   15 Other Central and Eastern Europe   84   15 Other Central and Eastern Europe   16 Other Southern Europe   44   16 Other Southern Europe   17 Total   5							
15 Other Central and Eastern Europe   84   16 Other Southern Europe   753557   75tal   75tal							
16 Other Southern Europe							
Total 53557 Total 55557  t405010_glR Country of place of birth 55557    Freq.   Fre							
t405010_g1R Country of place of birth    Freq.							
Freq.   Freq.   Freq.   Freq.     Freq.       Freq.					535		
Freq.   Freq.   Freq.     Freq.	t40501						
Valid -97 Refused   2		I	Freq.				
-54 Missing by design 36417 -53 Anonymized 17140 -20 Foreign, but not codeable 5 Total 53557 0 germany 15388				The state of the s			
-20 Foreign, but not codeable 5 Total 53557 0 germany 15388							
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							
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124 belgium 5 :   : 477 uzbekistan   6 479 china   7 482 malaysia   2 499 other asia   1							
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477 uzbekistan 6 479 china 7 482 malaysia 2 499 other asia 1							
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482 malaysia 2 499 other asia 1		477 uzhekistan					
499 other asia 1							
· ·		479 china	7				
		479 china 482 malaysia	7 2				

## 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).

#### **Download RemoteNEPS** (NEPS SUF, SC2 3.0.0 (remote); doi:10.5157/NEPS:SC2:3.0.0) (NEPS SUF, SC2 3.0.0 (download); doi:10.5157/NEPS:SC2:3.0.0) p406000 -- Target child born in Germany? p406000 -- Target child born in Germany? Freq. Freq. Valid -98 Don't know Valid -98 Don't know | 1 Yes 2 No 7658 1 Yes 2 No 7658 173 Total 7832 Total 7832 Missing . Missing . 3545 3545 Total 11377 Total 11377 p406010\_g1R -- Country of birth target child p406010\_g1R -- Country of birth target child Freq. Valid -98 Don't know Valid -53 Anonymized | -20 Abroad, but not codeable $\hbox{\tt Missing .}$ 3545 0 germany 124 belgium 7658 125 bulgaria 475 syrian arab republic 476 thailand 536 new zealand Total 7832 Missing . 3545 11377

#### 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 SC3\_CohortProfile\_D\_3-1-0.dta (NEPS SUF, SC3 3.1.0 (remote); doi:10.5157/NEPS:SC3:3.1.0) (NEPS SUF, SC3 3.1.0 (download); doi:10.5157/NEPS:SC3:3.1.0) tx80109 g1 -- Sample: Federal state school (west/east) tx80109 g1 -- Sample: Federal state school (west/east) Freq. Freq. -55 Not determinable Valid -55 Not determinable 1 Western Germany 16299 1 Western Germany 16299 Eastern Germany incl. Berlin Eastern Germany incl. Berlin 3784 3784 Total 20541 Total 20541 tx80109\_g2R -- Sample: Federal state school tx80109\_g2R -- Sample: Federal state school Freq. Freq. Valid -55 Not determinable -53 Anonymized Schleswig-Holstein 784 Hamburg Lower Saxony 377 2209 5 North Rhine-Westphalia 4398 Rhineland-Palatinate 971 Baden-Wuerttemberg Bavaria 2677 Berlin (Complete) 11 404 Brandenburg 13 Mecklenburg-Western Pomerania 619 14 Saxony 15 Saxony-Anhalt 401 16 Thuringia 20541 Total

#### 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
	Tota	al j	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)

					1	Freq.
					-+	
-90	Uns	pe	cific	missing		10
-54	Mis	ira	ng by	design		1803
1	Bel	.ow	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
Tot	al				1	2668
	-54 1 2 3 4 5	-54 Mis 1 Bel 2 10 3 15 4 20 5 25	-54 Missin 1 Below 2 10 to 3 15 to 4 20 to 5 25 to 6 30 to	-54 Missing by 1 Below 10 2 10 to 14 3 15 to 19 4 20 to 24 5 25 to 29 6 30 to 34	-54 Missing by design 1 Below 10 2 10 to 14 3 15 to 19 4 20 to 24 5 25 to 29 6 30 to 34	1 Below 10   2 10 to 14   3 15 to 19   4 20 to 24   5 25 to 29   6 30 to 34

e227400\_g1R -- Class: number of students total

		Freq.
Valid	-54 Missing by design -53 Anonymized Total	1803   865   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	p32601a p32601b	Position generator: country nurse of male nurse  Position generator: country engineer
pParent	p326016 p32601c	Position generator: country engineer  Position generator: country warehouse/transport worker
pParent	p32601d	Position generator: country warehouse/transport worker
pParent	p32601e	Position generator: country sales clerk
pParent	p326016	Position generator: country police officer
pParent	p326011 p32601g	Position generator: country doctor
pParent	p32601h	Position generator: country banker
pParent	p32601h p32601k	Position generator: country banker  Position generator: country car mechanic
pParent	p32601k p32601l	Position generator: country legal practitioner
pParent	p326011 p32601m	Position generator: country regal practitioner
pParent	p32601111 p3260111	Position generator: country translator
pParent	p326010	Position generator: country translator  Position generator: country teacher at elementary school,
of arcin	p320010	Hauptschule or Real
pParent	p400010_g1	Country of birth respondent
pParent	p400010_g2	Respondent's country of birth (aggregated)
pParent	p400070_g1	Respondent's mother's country of birth
Parent	p400070_g2	Country of birth of respondent's mother (aggregated)
pParent	p400090_g1	Country of birth father respondent
pParent	p400090_g2	Country of birth of respondent's father (aggregated)
pParent	p400500_g3	group of origin
Parent	p400500_g3v1	Group of origin
pParent	p401150_g2	Respondent's nationality not German (aggregated)
pParent	p403010_g1	Country of birth partner abroad
pParent	p403010_g2	Partner's country of birth (aggregated)
pParent	p403070_g1	Country of birth mother partner
pParent	p403070_g2	Country of birth of partner's mother (aggregated)
pParent	p403090_g1	Partner's father's country of birth
pParent	p403090_g2	Country of birth of partner's father (aggregated)
pParent	p404050_g2	Other nationality partner (aggregated)
pParent	p406010_g1	Country of birth target child
pParent	p406010_g2	Target child's country of birth (aggregated)
pParent	p407050_g2	Target child's nationality (aggregated)

**Table 7:** (continued)

file	variable	label (*only available OnSite)
pParent	p407060_g2	Target child's second nationality (aggregated)
pParent	p431010_g1	Destination country
pParent	p431010_g2	Target country (categorized)
pParent	p731804_g1	Highest educational qualification of respondent abroad
•		(country)
pParent	p731804_g2	Country of respondent's highest educational qualification
		(aggregated)
pParent	p731823_g1	Country of vocational qualification (additional response)
pParent	p731823_g2	Country of professional qualification (additional re-
		sponse, aggregated)
pParent	p731854_g1	Highest educational qualification partner abroad (coun-
	-	try)
pParent	p731854_g2	Country of highest educational qualification partner (ag
		gregated)
pParent	p731873_g1	Country of vocational qualification, partner, (additiona
		response)
pParent	p731873_g2	Country of partner's professional qualification (additiona
		response, aggrega
Target	t400000_g1	Country of own birth
Target	t400000_g2	Country of birth (aggregated)
Target	t400070_g1	Mother: Country of birth
Target	t400070_g2	Mother: Country of birth (aggregated)
Target	t400090_g1	Father: Country of birth
Target	t400090_g2	Father: Country of birth (aggregated)
Target	t400220_g1	Country of birth of your maternal grandparents - mater
		nal grandmother
pTarget	t400220_g2	Mother's mother: Country of birth (aggregated)
pTarget	t400240_g1	Country of birth of your maternal grandparents - mater
		nal grandfather
oTarget	t400240_g2	Mother's father: Country of birth (aggregated)
Target	t400260_g1	Country of birth of your paternal grandparents - paterna
		grandmother
pTarget	t400260_g2	Father's mother: Country of birth (aggregated)
pTarget	t400280_g1	Country of birth of your paternal grandparents - paterna
		grandfather
Target	t400280_g2	Father's father: Country of birth (aggregated)
oTarget	t400500_g3	Group of origin
pTarget	t400500_g3v1	Group of origin
pTargetCATI	t405010_g1	Birth country
pTargetCATI	t405010_g2	Country of birthplace (aggregated)
pTargetCATI	t405510_g1	Country of birth respondent
oTargetCATI	t405510_g2	Country of birth respondent (aggregated)
pTargetCATI	t405560_g1	Respondent's mother's country of birth
pTargetCATI	t405560_g2	Country of birth mother respondent (aggregated)
pTargetCATI	t405570_g1	Country of birth maternal grandmother
pTargetCATI	t405570_g2	Country of birth maternal grandmother (aggregated)
pTargetCATI	t405580_g1	Country of birth maternal grandfather
pTargetCATI	t405580_g2	Country of birth maternal grandfather (aggregated)
oTargetCATI	t405600_g1	Respondent's father's country of birth

**Table 7:** (continued)

file	variable	label (*only available OnSite)
pTargetCATI	t405600_g2	Country of birth father respondent (aggregated)
pTargetCATI	t405610_g1	Country of birth paternal grandmother
pTargetCATI	t405610_g2	Country of birth paternal grandmother (aggregated)
pTargetCATI	t405620_g1	Country of birth paternal grandfather
pTargetCATI	t405620_g2	Country of birth paternal grandfather (aggregated)
pTargetCATI	t406100_g2	other nationality (aggregated)
pTargetCATI	t407010_g1	Partner's country of birth
pTargetCATI	t407010_g2	Country of birth partner (aggregated)
pTargetCATI	t751004_g1	Country of residence (abroad)
pTargetCATI	t751004_g2	Country of place of residence (aggregated)
pTargetCATI	t751015_g1	Country of second residence (outside Germany)
pTargetCATI	t751015_g2	Country of secondary residence (aggregated)
spEmp	ts23239_g1	Country of workplace
spEmp	ts23239_g2	Country of the workplace (aggregated)
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
spSchool	ts1120s_g1	Country of school
spSchool	ts1120s_g2	Country of school (aggregated)
spSchoolExtExam	ts11301_g1	Country of school-leaving qualification
spSchoolExtExam	ts11301_g2	Country of the awarded school-leaving qualification (ag-
		gregated)
spVocExtExam	ts15303_g1	Country of external examination
spVocExtExam	ts15303_g2	Country of external exam (aggregated)
spVocTrain	ts1521s_g1	Country in which vocational training program was done
spVocTrain	ts1521s_g2	Country of vocational training (aggregated)
spVocTrain	ts15294_g1	1. country stay abroad
spVocTrain	ts15294_g2	1. country stay abroad (aggregated)
spVocTrain	ts15295_g1	2nd country of stay abroad
spVocTrain	ts15295_g2	2. country stay abroad (aggregated)
ParentMethods	px80204	Interview: interview language (realized case)
TargetMethods	tx80204	Interview: Interview language (realized case)
pEducator	e41100a_g2	Mother tongue (response 1, ISO 639.2)
pEducator	e41100a_g3	Mother tongue (response 2, ISO 639.2)
pEducator	e41100a_g4	Mother tongue (response 3, ISO 639.2)
pEducator	e41100a_g5	Mother tongue (response 4, ISO 639.2)
pParent	p410000_g1	Child's language of origin (ISO 639.2)
pParent	p410000_g2	Child's language of origin (aggregated)
pParent	p410002_g1	Child's other language of origin (ISO 639.2)
pParent	p410002_g2	Child's other language of origin (aggregated)
pParent	p413000_g1	Respondent's language of origin (ISO 639.2)
pParent	p413000_g2	Respondent's language of origin (aggregated)
pParent	p413002_g1	Respondent's additional language of origin (ISO 639.2)
pParent	p413002_g2	Respondent's other language of origin (aggregated)
pParent	p414000_g1	Partner's language of origin (ISO 639.2)
pParent	p414000_g2	Partner's language of origin (aggregated)
pParent	p414002_g1	Partner's additional language of origin (ISO 639.2)
pParent	p414002_g2	Partner's other language of origin (aggregated)
	1 - 1	
pParent	p414100_g1	Recent partner's language of origin (ISO 639.2)

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
pParent	p414102_g1	Recent partner's other language of origin (ISO 639.2)	
pParent	p414102_g2	Recent partner's other language of origin (aggregated)	
pTarget	t41000a_g2	Mother tongue (1st alternative, ISO 639.2)	
pTarget	t41000a_g3	Mother tongue (2nd alternative, ISO 639.2)	
pTarget	t41000a_g4	Mother tongue (3rd alternative, ISO 639.2)	
pTarget	t41000a_g5	Mother tongue (4th alternative, ISO 639.2)	
pTarget	t410010_g2	Second language (1st alternative, ISO 639.2)	
pTarget	t410010_g3	Second language (2nd alternative, ISO 639.2)	
pTarget	t410010_g4	Second language (3rd alternative, ISO 639.2)	
pTarget	t410010_g5	Second language (4th alternative, ISO 639.2)	
pTarget	t41010a_g2	Mother: Mother tongue (1st alternative, ISO 639.2)	
pTarget	t41010a_g3	Mother: Mother tongue (2nd alternative, ISO 639.2)	
pTarget	t41010a_g4	Mother: Mother tongue (3rd alternative, ISO 639.2)	
pTarget	t41010a_g5	Mother: Mother tongue (4th alternative, ISO 639.2)	
pTarget	t41012a_g2	Father: Mother tongue (1st alternative, ISO 639.2)	
pTarget	t41012a_g3	Father: Mother tongue (2nd alternative, ISO 639.2)	
pTarget	t41012a_g4	Father: Mother tongue (3rd alternative, ISO 639.2)	
pTarget	t41012a_g4	Father: Mother tongue (4th alternative, ISO 639.2)	
pTargetCATI	t413000_g1	1. Language of origin (ISO 639.2)	
pTargetCATI	t413000_g1	1st native language (aggregated)	
pTargetCATI	t413000_g2	2. Language of origin (ISO 639.2)	
pTargetCATI	t413010_g1 t413010_g2	2nd native language (aggregated)	
pParent	p401150_g1	Citizenship respondent not German	
pParent	p404050_g1	Other citizenship partner	
pParent		Citizenship - target child	
pParent	p407050_g1 p407060_g1	Second citizenship of the target child	
pTarget	t40115a_g2	Nationality (response 1; coded)	
pTarget	t40115a_g2 t40115a_g3	Nationality (response 2; coded)	
pTarget		Nationality (response 2; coded)	
	t40115a_g4	Definition culture of origin	
pTargetCATI	t42850x_g1	Other citizenship	
pTargetCATI	t406100_g1		
TargetMethods	tf80506	Open draw prize	*
pInstitution pInstitution	h22131X	School: all-day school programs: other, text 1	*
-	h22131y	School: all-day school programs: other, text 2 School: all-day school programs: other, text 3	*
pInstitution	h22131z h22202t	School: quality: other, text	*
pInstitution			*
pInstitution	h227011	School: full-time teachers school subject: other school	*
T. atitution	h	subjects, text1	
pInstitution	h227012	School: full-time teachers school subject: other school	*
Ttimti	1	subjects, text2	
pInstitution	h227013	School: full-time teachers school subject: other school	*
T	1	subjects, text3	
pInstitution	h229003	School: approach: educational, text	*
pInstitution	h229005	School: approach: promotion, text	*
pInstitution	h229007	School: approach: integration, text	*
pInstitution	h229009	School: approach: other, text	*
pInstitution	h22901t	School: profile: other, text	*
pInstitution	h41700a	Other remedial measures, other	*
pInstitution	h41702a	Parent training programs, migration, other	*

# A Appendix

**Table 7:** (continued)

pInstitution h41704a Teacher training programs, migration, other pParent p19020j Special educational needs OPEN pParent p26210t Parents: tutoring, other subject (open) pParent p296402 Wish: What vocation should TC learn pParent p401001 Migrant status - other pParent p731803 Highest educational qualification of responsopen open pParent p731814 Vocational qualification respondent (open) pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger pTarget t31160a	* * * andent type *
pParent p26210t Parents: tutoring, other subject (open) pParent p296402 Wish: What vocation should TC learn pParent p401001 Migrant status - other pParent p731803 Highest educational qualification of responsore open pParent p731814 Vocational qualification respondent (open) pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, tex pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred character.	* * * ndent type *
pParent pparen	* andent type *
pParent p401001 Migrant status - other pParent p731803 Highest educational qualification of responsion open pParent p731814 Vocational qualification respondent (open) pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t31160a Realistic vocational aspirations: preferred charger	* ndent type *
pParent pParent p731803 Highest educational qualification of response open  pParent p731814 Vocational qualification respondent (open) pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t26211 Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger	ndent type *
pParent p731814 Vocational qualification respondent (open) pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, tex pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred chereer pTarget t31160a Realistic vocational aspirations: preferred chereer	
pParent p731817 Type tertiary qualification respondent (open) pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, tex pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred chere pTarget t31160a Realistic vocational aspirations: preferred chere	*
pParent p731853 Highest educational qualification partner type pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t31060a Idealistic vocational aspirations: preferred charget pTarget t31160a Realistic vocational aspirations: preferred charget pTarget t31160a Realistic vocational aspirations: preferred charget pTarget t31160a	
pParent p731864 Vocational qualification, partner, open pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t27270h Student: Participation organization/ group: Ot pTarget t31060a Idealistic vocational aspirations: preferred charget pTarget t31160a Realistic vocational aspirations: preferred charget	*
pParent p731867 Type tertiary qualification partner (open) pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, tex pTarget t27111t Courses outside school: Other courses (open) pTarget t27270h Student: Participation organization/ group: Ot pTarget t31060a Idealistic vocational aspirations: preferred charget pTarget t31160a Realistic vocational aspirations: preferred charget	open *
pTarget t22260t Student: School involvement: Other, text pTarget t26212a Student: Subject 1 pTarget t26212b Student: Subject 2 pTarget t26212c Student: Subject 3 pTarget t268111 Student: tutoring location somewhere else, text pTarget t27111t Courses outside school: Other courses (open) pTarget t27270h Student: Participation organization/ group: Ott pTarget t31060a Idealistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger	*
pTarget tz6212a Student: Subject 1 pTarget tz6212b Student: Subject 2 pTarget tz6212c Student: Subject 3 pTarget tz68111 Student: tutoring location somewhere else, tex pTarget tz7111t Courses outside school: Other courses (open) pTarget tz7270h Student: Participation organization/ group: Ot pTarget tz31060a Idealistic vocational aspirations: preferred charger pTarget tz31160a Realistic vocational aspirations: preferred charger	*
pTarget tz6212b Student: Subject 2 pTarget tz6212c Student: Subject 3 pTarget tz68111 Student: tutoring location somewhere else, tex pTarget tz7111t Courses outside school: Other courses (open) pTarget tz7270h Student: Participation organization/ group: Ot pTarget tz1060a Idealistic vocational aspirations: preferred charger pTarget tz1160a Realistic vocational aspirations: preferred charger	*
pTarget tz6212c Student: Subject 3 pTarget tz68111 Student: tutoring location somewhere else, tex pTarget tz7111t Courses outside school: Other courses (open) pTarget tz7270h Student: Participation organization/ group: Ot pTarget tz31060a Idealistic vocational aspirations: preferred charger pTarget tz31160a Realistic vocational aspirations: preferred charger	*
pTarget tz68111 Student: tutoring location somewhere else, text pTarget tz7111t Courses outside school: Other courses (open) pTarget tz7270h Student: Participation organization/ group: Ott pTarget tz31060a Idealistic vocational aspirations: preferred charget pTarget tz31160a Realistic vocational aspirations: preferred charget pTarget tz31160a	*
pTarget t27111t Courses outside school: Other courses (open) pTarget t27270h Student: Participation organization/ group: Ot pTarget t31060a Idealistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger	*
pTarget t27270h Student: Participation organization/ group: Ot pTarget t31060a Idealistic vocational aspirations: preferred charget pTarget t31160a Realistic vocational aspirations: preferred charget	xt *
pTarget t31060a Idealistic vocational aspirations: preferred charger pTarget t31160a Realistic vocational aspirations: preferred charger	*
pTarget t <sub>31160a</sub> reer Realistic vocational aspirations: preferred che	ther, text *
	oice of ca- *
reer	oice of ca- *
pTarget t <sub>42</sub> 8 <sub>35</sub> 0 Self-description sense of belonging	*
pTarget t516202 Party election (another party)	*
pTarget t53131e Information possibilities of financial aid for his open	igher ed *
pTarget t53132h Prospective financing of higher education: Ope	en *
pTarget t66505a Goal orientation: Work/vocational training	*
pTarget t66506a Goal orientation: Private/family	*
pTarget tdoo26x Favorite subject	*
pTarget teo5017 Idealistic educational aspiration - type of high- other, namely	er ed. inst. *
pTarget teo5025 Idealistische Bildungsaspiration - Ausbildungst anderes und zwar	typ - etwas *
pTarget teo6010 Idealistic aspirations - subject	*
pTarget teo6020 Idealistic aspirations - subject combination sub	bject *
pTarget teo8010 Profession requiring vocational training	*
pTarget teo9017 Realistic educational aspiration - type of higher institution - oth	r education *
pTarget teo9025 Realistic educational aspiration - type of vocation ing - something el	ional train- *
pTarget te10010 Realistic aspirations - subject	*
pTarget te10020 Realistic aspirations - subject combination subject	
pTarget te11010 Realistic educational aspiration - vocational tra	
pTarget te14020 Other subjects at advanced performance level	
pTarget te14030 Other subjects at advanced performance level	
pTarget te14040 Other subjects at advanced performance level	
pTarget te14050 Other subjects at advanced performance level	

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
pTarget	te16010	Examination subject 1	*
pTarget	te16020	Examination subject 2	*
pTarget	te16030	Examination subject 3	*
pTarget	te16040	Examination subject 4	*
pTarget	te16050	Examination subject 5	*
pTarget	tfooo70	first job wish	*
pTarget	tfoo13b	second vocational wish indication	*
pTarget	tf00260	Application, occupation 1	*
pTarget	tfoo29b	Application vocation 2	*
pTargetCATI	t405531	Immigration status other	*
pTargetCATI	tf62077	Reasons for not searching 7: Other, open	*
pTargetCATI	tf62108	Reasons for not applying 8: Other, open	*
pTargetCAWI	t531229	Other source of funding, open	*
pTargetCAWI	t66505a	Goal orientation: Work/vocational training	*
pTargetCAWI	t66506a	Goal orientation: Private/family	*
spCourses	t272011_w1	Course content	*
spCourses	t272011_w2	Course content	*
spCourses	t272011_w3	Course content	*
spParentGap	ps29102	Other activity	*
spParentSchool	p723090	Type of school (open)	*
spSchool	ts11206	Another type of school	*
spSchool	ts11251	1st 'Abitur' subject, open	*
spSchool	ts11252	2nd 'Abitur' subject, open	*
spSchool	ts11253	3rd 'Abitur' subject, open	*
spSchool	ts11254	4th 'Abitur' subject, open	*
spSchool	ts11255	5th 'Abitur' subject, open	*
spSchoolExtExam	ts11305	Other school-leaving qualification awarded	*
spSchoolExtExam	ts11324	1. Abitur subject (awarded qualification), open	*
spSchoolExtExam	ts11325	2. Abitur subject (awarded qualification), open	*
spSchoolExtExam	ts11326	3. Abitur subject (awarded qualification), open	*
spSchoolExtExam	ts11327	4. Abitur subject (awarded qualification), open	*
spSchoolExtExam	ts11328	5. Abitur subject (awarded qualification), open	*
spVocExtExam	ts15305	Other external examination qualification	*
spVocTrain	ts15458	Support during vocational training program other, open	*
spVocTrain	ts15558	Support during voc. tr. other, open – early coll. for current follow-up episodes	*
CohortProfile	tx80109_g2	Sample: Federal state school	
Weights	stratum_imp1	Implicit stratum 1 (State of institution)	
Weights	stratum_imp2	Implicit stratum 2 (regional classification of the institution)	
Weights	stratum_imp3	Implicit stratum 3 (funding body of the institution)	
pEducator	e537110_g2	Place of study teaching post (Federal state)	
pEducator	e537110_g3	Place of study teaching post (administrative district)	
pEducator	e537170_g2	Place: passed the examination (Federal State)	
pEducator	e537170_g3	Place: passed the examination (administrative district)	
pParent	p751001_g2	Place of Residence (Federal state)	
pTarget	ts11202_g2	Municipality of school (federal state)	
pTarget	tx44401_g2	Place of school (federal state)	
pTargetCATI	t700101_g2	Municipality of birth (federal state)	

**Table 7:** (continued)

file	variable	label (*only available OnSite)
pTargetCATI	t751001_g2	Municipality of Living (RS federal state)
pTargetCATI	t751001_g2	Municipality of secondary residence (federal state)
pTargetCAWI	ts11203	Federal state of school
spEmp	ts23237_g2	Place of workplace (RS federal state)
spParentSchool	p723030_g2	Municipality of school (federal state)
spSchool	ts11202_g2	Municipality of school (federal state)
spVocPrep	ts13105_g2	Municipality of measure (RS federal state)
spVocTrain	ts15103_g2	Municipality of vocational training center (RS federal
sprocriam	t31520/_gz	state)
spVocTrain	ts15429	Federal state in which higher education institution is located
pCourseClass	e227400_g1	Class: Number of students total
pCourseClass	e229400	Class: Set-up: Classroom size
pEducator	e229820	Time in occupation - overall
pEducator	e229821	Time in occupation - school
pEducator	e536020	Age when profession chosen
pEducator	e53702y	Year of university entrance qualification
pEducator	e53710y	Start of teacher training
pEducator	e537150	Year of state examination
pEducator	e76212y	Year of birth
pParent	p727001	Recommendation secondary school or course of educa-
prurent	P/2/001	tion, which ones?
pParent	p727002	Recommendation secondary school or course of educa-
praient	p/2/002	tion, further ones?
pParent	p731911	Number of employees respondent
pParent	p731961	Number of employees partner
pTargetCATI	t731416	Number of employees respondent
pTargetCATI	t731466	Number of employees father
pCourseClass	e190011	Class: Amount of students with special needs
pCourseClass	e227400	Class: Number of female students
pCourseClass	e227401	Class: Number of male students
pCourseClass	e451000	Day care facility: Amount of students with migration
F	-13	background
pCourseClass	e79201a	Class: Amount from lower social class
pCourseClass	e79201b	Class: Amount from middle social class
pCourseClass	e79201c	Class: Amount from higher social class
pCourseClass	e79202a	Students with at least one parent with a higher education degree
pEducator	e537030	Federal state higher education entrance qualification (Federal state)
pEducator	e537110_g4	Location of university education for teaching professions (county, info from
pEducator	e537170_g4	Location: State examination passed (county, info from 2013)
pEducator	e537200	Federal state second state examination (Federal state)
pEducator	e76212m	Month of birth
pInstitution	h76612m	Month of birth
pTarget	t435030_g1	Religion and religiosity: other religious community
pTarget	t43504a_g1	Other religious community (specific)

**Table 7:** (continued)

file	variable	label (*only available OnSite)
		•
pTargetCATI	t435030_g1	Religion and religiosity: other religious community
pTargetCATI	tf40231_g1	Study area subject combination first applied for – Subject 1 (destatis 2010/11)
pTargetCATI	tf40231_g3	ISCED-97 subject combination first applied for – Subject
prangeteriff	1140251_55	1 (3-digits)
pTargetCATI	tf40231_g4	ISCED-97 subject combination first applied for – Subject
1 0	1 3 =81	1 (2-digits)
pTargetCATI	tf40232_g1	Study area subject combination first applied for – Subject
		2 (destatis 2010/11)
pTargetCATI	tf40232_g3	ISCED-97 subject combination first applied for – Subject
		2 (3-digits)
pTargetCATI	tf40232_g4	ISCED-97 subject combination first applied for – Subject
		2 (2-digits)
pTargetCATI	tf40233_g1	Study area subject combination first applied for – Subject
T 10 ATT	46	3 (destatis 2010/11)
pTargetCATI	tf40233_g3	ISCED-97 subject combination first applied for – Subject
pTargetCATI	tf40233_g4	3 (3-digits) ISCED-97 subject combination first applied for – Subject
praigeteriri	1140233_84	3 (2-digits)
pTargetCATI	tf40235_g1	Study area subject combination second applied for – Sub-
1 8	1 33_8	ject 1 (destatis 2010/11)
pTargetCATI	tf40235_g3	ISCED-97 subject combination second applied for - Sub-
		ject 1 (3-digits)
pTargetCATI	tf40235_g4	ISCED-97 subject combination second applied for – Sub-
		ject 1 (2-digits)
pTargetCATI	tf40236_g1	Study area subject combination second applied for – Sub-
m		ject 2 (destatis 2010/11)
pTargetCATI	tf40236_g3	ISCED-97 subject combination second applied for – Sub-
nTangatC ATI	tfinant mi	ject 2 (3-digits) ISCED-97 subject combination second applied for – Sub-
pTargetCATI	tf40236_g4	ject 2 (2-digits)
pTargetCATI	tf40237_g1	Study area subject combination second applied for – Sub-
Piangereilli	14023/_81	ject 3 (destatis 2010/11)
pTargetCATI	tf40237_g3	ISCED-97 subject combination second applied for – Sub-
- •	,-0-	ject 3 (3-digits)
pTargetCATI	tf40237_g4	ISCED-97 subject combination second applied for - Sub-
		ject 3 (2-digits)
pTargetCAWI	t242400_g1	Study area Reference subject Learning environment
T		(destatis 2010/11)
pTargetCAWI	t242400_g3	ISCED-97 Reference subject Learning environment (3-
nTorgatC AM/I	ta 12 100	digits) ISCED-97 Reference subject Learning environment (2-
pTargetCAWI	t242400_g4	digits)
spVocTrain	ts15401	Higher education institution
spVocTrain spVocTrain	ts15401 ts15404_g1	Study area study subject, doctoral subject, habilitation
-r	2013404-81	subject 1 (destatis
spVocTrain	ts15404_g3	ISCED-97 study subject, doctoral subject, habilitation
-		subject 1 (3-digits)

# A Appendix

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
spVocTrain	ts15404_g4	ISCED-97 study subject, doctoral subject, habilitation subject 1 (2-digits)	
spVocTrain	ts15405_g1	Study area study subject 2 (destatis 2010/11)	
spVocTrain	ts15405_g3	ISCED-97 study subject 2 (3-digits)	
spVocTrain	ts15405_g4	ISCED-97 study subject 2 (2-digits)	
spVocTrain	ts15406_g1	Study area study subject 3 (destatis 2010/11)	
spVocTrain	ts15406_g3	ISCED-97 study subject 3 (3-digits)	
spVocTrain	ts15406_g4	ISCED-97 study subject 3 (2-digits)	
pTargetMicrom			*
pTargetRegioInfas			*
pInstitutionMicrom			*
pInstitutionRegioInfas			*
pInstitution			

# **B** References

- Hundepool, A., Domingo-Ferrer, J., Franconi, L., Giessing, S., Nordholt, E. S., Spicer, K., & de Wolf, P.-P. (2012). *Statistical Disclosure Control*. Chichester: 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*. Wiesbaden: Springer VS.
- Lane, J., Heus, P., & Mulcahy, T. (2008). Data Access in a Cyber World: Making Use of Cyber-infrastructure. *Transactions on Data Privacy*, 1, 2–16.
- Müller, W., Blien, U., & Knoche, P. (1991). Die faktische Anonymität von Mikrodaten. Schriftenreihe Forum der Bundesstatistik, 19.