# NEPS National Educational Panel Study

Starting Cohort 3: Grade 5 (SC3) SUF Version 6.0.0

**Anonymization Procedures** 

Tobias Koberg



Copyrighted Material Leibniz Institute for Educational Trajectories (LIfBi) Wilhelmsplatz 3, 96047 Bamberg

Director: Prof. Dr. Hans-Günther Roßbach

Executive Director of Research: Dr. Jutta von Maurice Executive Director of Administration: Dr. Robert Polgar

Bamberg, 2017

# 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) 3, version 6.0.0 (doi:10.5157/NEPS:SC3:6.0.0). 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 (\_0, \_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 5 > 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 **LaneHeusMulcahy2008.20130315** 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 **koberg2016disclosing** 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.

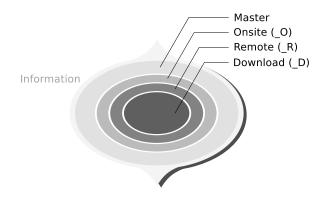


Figure 1: Onion-shaped model defining the different anonymization levels

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 308 out of 5329 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

<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
	1	
pCourseGerman	ed0015x	Spelling knowledge - other
pCourseGerman	ed0016h	Strategies - other
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

**Table 2:** (continued)

file variable	label
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
pInstitution h41704a	Teacher training programs, migration, other
pInstitution hd0041b	Other function in school administration, specifically:
pParent p19020j	Special educational needs OPEN
pParent p26210t	Parents: tutoring, other subject (open)
pParent p296402	Wish: What vocation should TC learn
pParent p401001	Immigration 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 degree partner (open)
pParent p731867	Type tertiary qualification partner (open)
pTarget t22260t	Student: School involvement: Other, text
pTarget t261201	Student: internship duration
pTarget t262400	Student: Content of part-time job
pTarget t27111t	Courses outside school: other courses, open
pTarget t27111u	Student: Courses outside of school: Other courses: Text, what
pTarget t27111v	Student: Courses outside of school: Music school lessons, text
pTarget t27111w	Student: Courses outside of school: Volkshochschule course,
	text
pTarget t27111x	Student: Courses outside of school: Youth art school course,
	text
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 t34002f	Frequency reading (genre): namely
pTarget t526012	Place warm meal: other place
pTarget td0021x	Favorite subject
pTarget tf00070	first job wish
pTarget tf0013b	Second desires profession indication
pTarget tf0021b	vocational training
pTarget tf00260	Trade 1
pTarget tf0029b	Application occupation 2
spParentGap ps29102	Other activity
spParentSchool p723090	Type of school (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 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	p32601b	Position generator: country nuise of male nuise  Position generator: country engineer
pParent	p32601c	Position generator: country warehouse/transport
prarent	p320010	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	p32601o	Position generator: country teacher at elementary
		school, Hauptschule or Real
pParent	p400010_g1	Respondent's country of birth
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 (aggre-
		gated)
pParent	p400090_g1	Respondent's father's country of birth
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	Partner's country of birth
pParent	p403010_g2	Partner's country of birth (aggregated)
pParent	p403070_g1	Partner's mother's country of birth
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

**Table 3:** (continued)

file	variable	label
pParent	p406010_g2	Target child's country of birth (aggregated)
pParent	p407050_g2	Target child's nationality (aggregated)
pParent	p407060_g2	Target child's second nationality (aggregated)
pParent	p731804_g1	Highest educational qualification of respondent
prairii	p/31001_81	abroad
pParent	p731804_g2	Country of respondent's highest educational quali-
1	1 –8	fication (aggregated)
pParent	p731823_g1	Country of vocational qualification (additional re-
1	1 –6	sponse)
pParent	p731823_g2	Country of professional qualification (additional re-
•	1 –0	sponse, aggregated)
pParent	p731854_g1	Country of partner's highest school-leaving qualifi-
-		cation
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	Birth country
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 mother's mother
pTarget	t400220_g2	Mother's mother: Country of birth (aggregated)
pTarget _	t400240_g1	Country of birth of your mother's father
pTarget _	t400240_g2	Mother's father: Country of birth (aggregated)
pTarget	t400260_g1	Country of birth of your father's mother
pTarget	t400260_g2	Father's mother: Country of birth (aggregated)
pTarget	t400280_g1	Country of birth of your father's father
pTarget	t400280_g2	Father's father: Country of birth (aggregated)
pTarget	t400500_g3	Group of origin
pTarget	t400500_g3v1	Group of origin
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
ParentMethods	px80204	Interview: interview language (realized case)
pEducator	e41100a_g2	Mother tongue (response 1, ISO 639.2)
pEducator	e41100a_g3	Mother tongue (response 3, ISO 639.2)
pEducator pEducator	e41100a_g4 e41100a_g5	Mother tongue (response 3, ISO 639.2) Mother tongue (response 4, ISO 639.2)
pEducator pParent	p410000_g1	Child's language of origin (ISO 639.2)
pParent	p410000_g1 p410000_g2	Child's language of origin (aggregated)
pi areni	P410000_g2	Cilia s language of origin (aggregateu)

**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	p412001_g1	Interactive language household detailed (ISO 639.2)
pParent	p412001_g2	Interactive language household detailed (aggre-
_		gated)
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 other 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 other 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-
		gated)
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_g5	Father: Mother tongue (4th alternative, ISO 639.2)
pParent	p401150_g1	Citizenship respondent not German
pParent	p404050_g1	Other citizenship partner
pParent	p407050_g1	Citizenship of the target child
pParent	p407060_g1	Second citizenship of the target child
pTarget	t40115a_g2	Nationality (response 1; coded)
pTarget	t40115a_g3	Nationality (response 2; coded)
pTarget	t40115a_g4	Nationality (response 3; coded)

#### 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

<u>C1</u>	+ 11	111
file	variable	label
CohortProfile	tx80109_g2	Sample: Federal state school
Weights	stratum_imp2	implicit stratum 2 (federal states of institution)
Weights	stratum_imp3	implicit stratum 3 (regional classification of institution)
Weights	stratum_imp4	implicit stratum 4 (organizing institution)
pEducator	e537110_g2	Place of study teaching post (Federal state)
pEducator	e537110_g3	Place of study teaching post (administrative district)
pEducator	e537110_g4	Place of study teaching post (district)
pEducator	e537170_g2	Place: passed the examination (Federal State)
pEducator	e537170_g3	Place: passed the examination (administrative district)
pEducator	e537170_g4	Place: passed the examination (district)
pParent	p751001_g2	Place of Residence (Federal State)
pTarget	tx44401_g2	Place of school (federal state)
spParentSchool	p723030_g2	Municipality of school (federal state)
spSibling	p723050	State of school

#### 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) 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] variable: label

 $[{\tt CohortProfile}] \ {\tt tx80505} : List of children \ / \ pupils: Special \ educational \ needs \ target \ child \ (aggregated)$ 

RemoteNEPS		Download
No special educational needs	1	No special educational needs
Special educational needs with priority reading	2	Special educational needs
Special educational needs with priority language	3	
Special educational needs with priority emotional and social development	4	
Special educational needs with priority autism	5	
Special educational needs with other priority	6	
Special educational needs with priority learn-	23	
ing/language		
Special educational needs with priority learning/e- motional development	24	
Special educational needs with priority learn-	25	
ing/autism	0.0	
Special educational needs with priority learning/other	26	
Special educational needs with priority emotional social development/autism	45	
Special needs with focus on emotional social development/other	46	
not administered	97	
Special educ.needs priority learning/language/emo- tional social development	234	

[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)

	Download	
1	under 30	
2	30 to 39	
3	40 to 49	
4	50 to 59	
5	60 and more	
	3 4	<ol> <li>under 30</li> <li>30 to 39</li> <li>40 to 49</li> <li>50 to 59</li> </ol>

[pCourseGerman] ed0001h: Amount of German lessons (categorized)

RemoteNEPS		Download
	1	to 4
	2	5
	3	6 and more

#### Table 5: (continued)

#### [file] variable: label

[pCourseGerman] ed0001m: German lessons (duration in min per lessons, categorized)

RemoteNEPS		Download
	1	45
	2	Other

[pCourseGerman] ed0002h: Remedial teaching (number of lessons, categorized)

RemoteNEPS		Download
	1	below 2
	2	2 or more

[pCourseMath] ed00035: Remedial teaching (number of lessons, categorized)

RemoteNEPS		Download
	1	below 2
	2	2 or more

[pCourseMath] ed0025h: Amount of Math lessons (categorized)

RemoteNEPS		Download
	1	to 4
	2	5
	3	6 and more

[pCourseMath] ed0025m: Math lessons (duration in minutes per lessons, categorized)

RemoteNEPS		Download
	1	45
	2	Other

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

RemoteNEPS		Download
	1	0 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

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

#### [file] variable: label

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

RemoteNEPS		Download
	1	0 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

[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	

[pEducator] e53710y: 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»	_	Minute leader (Decorded to 1, 1/C) leader to the leader (Decorded to 1, 1/C)
Mittelschule [type of school offering basic and in- termediate secondary education in Saxony] (Sax-	6	Mittelschule/Regelschule/Sekundarschule/Regionale
ony/Bavaria)		Schule [basic and intermediate secondary school]
Regelschule [basic and intermediate secondary	7	
school in Thuringia] (Thuringia)	,	
Regionale Schule [type of school in Mecklenburg-	8	
West Pomerania offering basic and intermediate	Ü	
secondary education] (Rhineland Palatinate)		
Sekundarschule [type of school in Bremen and	9	
Saxony-Anhalt offering basic and intermediate sec-		
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]		
School for highly gifted students	13	School for highly gifted students
Gemeinschaftsschule [type of Gesamtschule in	14	
Schleswig-Holstein] (NRW)		

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

#### [file] variable: label

 $\mbox{\tt [pParent]}$  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)	0	
Sekundarschule [type of school in Bremen and	9	
Saxony-Anhalt offering basic and intermediate sec- 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]	12	Orientation stage
School for highly gifted students	13	School for highly gifted students
Gemeinschaftsschule [type of Gesamtschule in	14	sensor for inginy gired students
Schleswig-Holstein] (NRW)	••	
ocincowig frontenij (14101)		

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

RemoteNEPS		Download	
1 to 4	1	1 to 4	
5 to 9	2	5 to 9	
10 to 19	3	10 to 19	
20 to 49	4	20 and more	
50 to 99	5		
100 to 199	6		
200 to 249	7		
250 to 499	8		
500 to 999	9		
1,000 to 1,999	10		
2,000 and more	11		

**Table 5:** (continued)

#### [file] variable: label

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

RemoteNEPS		Download	
1 to 4	1	1 to 4	
5 to 9	2	5 to 9	
10 to 19	3	10 to 19	
20 to 49	4	20 and more	
50 to 99	5		
100 to 199	6		
200 to 249	7		
250 to 499	8		
500 to 999	9		
1,000 to 1,999	10		
2,000 and more	11		

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

file	variable	label
Weights	tx80113	Total number of classes in the 8th grade (according to the Federal Statistica
Weights	tx80114	Total number of classes in the 8th grade (according to the Federal Statistica
pCourseClass	e190011	Class: Amount of students with special needs
pCourseClass	e199001	Class: amount of students with special needs learning
pCourseClass	e199002	Class: amount of students with special needs language
pCourseClass	e199003	Class: amount of students with special needs physical/motor development
pCourseClass	e199004	Class: amount of students with special needs emotional/social development
pCourseClass	e199005	Class: amount of students with special needs mental development
pCourseClass	e199006	Class: amount of students with special needs sight
pCourseClass	e199007	Class: amount of students with special needs hearing
pCourseClass	e199008	Class: amount of students with special needs autism
pCourseClass	e227400	Class: Number of female students
pCourseClass	e227401	Class: Number of male students

Table 6: (continued)

file	variable	label
pCourseClass	e451000	Class: Amount of students with migration back- ground
pCourseClass	e79201a	Class: proportion class affiliation - low class
pCourseClass	e79201b	Class: proportion class affiliation - middle class
pCourseClass	e79201c	Class: proportion class affiliation - upper class
pCourseClass	e79202a	Class: proportion of parents with a higher education degree
pEducator	e537030	Federal state higher education entrance qualification (Federal state)
pEducator	e537200	Federal state second state examination (Federal state)
pEducator	e76212m	Month of birth
pInstitution	h76512m	Month of birth
pParent	p435030_g1	Religion and religiosity: other religious community
pTarget	t435030_g1	Religion and religiosity: other religious community
pTarget	t43504a_g1	Religion or denomination (specific)

# 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

#### 3 Examples

(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			Down	Download		
(NEPS S	nrget_R_5-1-0.dta SUF, SC6 5.1.0 (remote); c 5_D Number of mother's		SC6_pTarget_D_5-1-0.dta (NEPS SUF, SC6 5.1.0 (download t731406_D Number of mother':	s employees (categorized)		
		Freq.		Freq.		
Missing Total  t731406	;_R Number of mother's	423 330 64 22 28 37575 15982 53557	Valid -98 Don't know -97 Refused -54 Missing by design 0 none 1 1 to 4 2 5 to 9 3 10 to 19 4 20 and more Total Missing . Total	36700 423 330 64 22 28 37575 15982 53557		
	 	Freq.		Freq.		
	-98 Don't know   -98 Refused   -54 Missing by design   0 None   1 1 to 4   2 5 to 9   3 10 to 19   4 20 to 49   5 50 to 99   6 100 to 199   7 200 to 249   Total	7 1	Valid -54 Missing by design -53 Anonymized Total Missing . Total	36700 875 37575 15982 53557		
Missing Total 		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.

#### RemoteNEPS Download

SC6_pTarget	_R_5-1-0.dta	
(NEPS SUF,	SC6 5.1.0 (remote); doi:10.5157/NEPS:SC6:5.1.0	მ)

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
	Tot	al	53557

+405010	σ1R	 Country	οf	nlace	οf	hirth	

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

t405010\_g2 -- Country of birthplace (categorized)

		<u> </u>	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
	Tota	al	53557

 ${\tt t405010\_g1R} \,\, {\tt --} \,\, {\tt Country} \,\, {\tt of} \,\, {\tt place} \,\, {\tt of} \,\, {\tt birth}$ 

	<u> </u>	Freq.
Valid	-54 Missing by design	36417
vacia	-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
	Tota	al		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
	:	i :
	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	
	Tota	al		7832	
Missing				3545	
Total				11377	

p406010\_g1R -- Country of birth target child

		Freq.
Valid -53 An	onymized	1 7832
Missing .	,	3545
Total		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**

### SC3\_CohortProfile\_R\_3-1-0.dta

#### tx80109\_g1 -- Sample: Federal state school (west/east)

(NEPS SUF, SC3 3.1.0 (remote); doi:10.5157/NEPS:SC3:3.1.0)

			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
	Tota	al	20541

#### **Download**

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	i	 	 	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	-54 1 2 3 4	Unspecific missing Missing by design Below 10 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34	10 1803 3 26 203 450 169 4
	Tota	al	2668

e227400\_g1R -- Class: number of students total

	<u> </u>	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.
-54 1 2 3 4	20 to 24 25 to 29 30 to 34	10 1803 3 26 6 203 450 169 4 2668

e227400\_g1R -- Class: number of students total

		ļ	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	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 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	p32601o	Position generator: country teacher at elementary school,
-	_	Hauptschule or Real
pParent	p400010_g1	Respondent's country of birth
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	Respondent's father's country of birth
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	Partner's country of birth
pParent	p403010_g2	Partner's country of birth (aggregated)
pParent	p403070_g1	Partner's mother's country of birth
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)

**Table 7:** (continued)

,		
file	variable	label (*only available OnSite)
pParent	p407050_g2	Target child's nationality (aggregated)
pParent	p407060_g2	Target child's second nationality (aggregated)
pParent	p731804_g1	Highest educational qualification of respondent abroad
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	Country of partner's highest school-leaving qualification
pParent	p731854_g2	Country of highest educational qualification partner (ag-
		gregated)
pParent	p731873_g1	Country of vocational qualification, partner, (additional
		response)
pParent	p731873_g2	Country of partner's professional qualification (additional
		response, aggrega
pTarget	t400000_g1	Birth country
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 mother's mother
pTarget	t400220_g2	Mother's mother: Country of birth (aggregated)
pTarget	t400240_g1	Country of birth of your mother's father
pTarget _	t400240_g2	Mother's father: Country of birth (aggregated)
pTarget	t400260_g1	Country of birth of your father's mother
pTarget	t400260_g2	Father's mother: Country of birth (aggregated)
pTarget	t400280_g1	Country of birth of your father's father
pTarget	t400280_g2	Father's father: Country of birth (aggregated)
pTarget	t400500_g3	Group of origin
pTarget	t400500_g3v1	Group of origin
spParentSchool	p723060_g1	Country of school
spParentSchool	p723060_g2	Country of school (aggregated)
ParentMethods	px80204	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) Child's language of origin (ISO 639.2)
pParent	p410000_g1	
pParent pParent	p410000_g2	Child's language of origin (aggregated) Child's other language of origin (ISO 639.2)
pParent pParent	p410002_g1 p410002_g2	Child's other language of origin (150 659.2)  Child's other language of origin (aggregated)
pParent pParent	p410002_g2 p412001_g1	Interactive language household detailed (ISO 639.2)
_	p412001_g1 p412001_g2	Interactive language household detailed (aggregated)
pParent pParent	p412001_g2 p413000_g1	Respondent's language of origin (ISO 639.2)
pParent	p413000_g1 p413000_g2	Respondent's language of origin (aggregated)
pParent	p413000_g2 p413002_g1	Respondent's other language of origin (ISO 639.2)
pParent	p413002_g1 p413002_g2	Respondent's other language of origin (aggregated)
P. arent	P113002_52	respondent a other tanguage of origin (aggregated)

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
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 other 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 (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_g5	Father: Mother tongue (4th alternative, ISO 639.2)	
pParent	p401150_g1	Citizenship respondent not German	
pParent	p404050_g1	Other citizenship partner	
pParent	p407050_g1	Citizenship of the target child	
pParent	p407060_g1	Second citizenship of the target child	
pTarget	t40115a_g2	Nationality (response 1; coded)	
pTarget	t40115a_g3	Nationality (response 2; coded)	
pTarget	t40115a_g4	Nationality (response 3; coded)	
pCourseGerman	ed0015x	Spelling knowledge - other	*
pCourseGerman	ed0016h	Strategies - other	*
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 subjects, text1	*
pInstitution	h227012	School: full-time teachers school subject: other school subjects, text2	*
pInstitution	h227013	School: full-time teachers school subject: other school 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	*

# A Appendix

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
pInstitution	h41700a	Other remedial measures, other	*
pInstitution	h41702a	Parent training programs, migration, other	*
pInstitution	h41704a	Teacher training programs, migration, other	*
pInstitution	hd0041b	Other function in school administration, specifically:	*
pParent	p19020j	Special educational needs OPEN	*
pParent	p26210t	Parents: tutoring, other subject (open)	*
pParent	p296402	Wish: What vocation should TC learn	*
pParent	p401001	Immigration 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 degree partner (open)	*
pParent	p731867	Type tertiary qualification partner (open)	*
pTarget	t22260t	Student: School involvement: Other, text	*
pTarget	t261201	Student: internship duration	*
pTarget	t262400	Student: Content of part-time job	*
pTarget	t27111t	Courses outside school: other courses, open	*
pTarget	t27111u	Student: Courses outside of school: Other courses: Text,	*
		what	
pTarget	t27111v	Student: Courses outside of school: Music school lessons,	*
		text	
pTarget	t27111w	Student: Courses outside of school: Volkshochschule	*
		course, text	
pTarget	t27111x	Student: Courses outside of school: Youth art school	*
		course, text	
pTarget	t27270h	Student: Participation organization/group: other, text	*
pTarget	t31060a	Idealistic vocational aspirations: preferred choice of ca-	*
		reer	
pTarget	t31160a	Realistic vocational aspirations: preferred choice of ca-	*
		reer	
pTarget	t34002f	Frequency reading (genre): namely	*
pTarget	t526012	Place warm meal: other place	*
pTarget	td0021x	Favorite subject	*
pTarget	tf00070	first job wish	*
pTarget	tf0013b	Second desires profession indication	*
pTarget	tf0021b	vocational training	*
pTarget	tf00260	Trade 1	*
pTarget	tf0029b	Application occupation 2	*
spParentGap	ps29102	Other activity	*
spParentSchool	p723090	Type of school (open)	*
CohortProfile	tx80109_g2	Sample: Federal state school	
Weights	stratum_imp2	implicit stratum 2 (federal states of institution)	
Weights	stratum_imp3	implicit stratum 3 (regional classification of institution)	
Weights	stratum_imp4	implicit stratum 4 (organizing institution)	
pEducator	e537110_g2	Place of study teaching post (Federal state)	
pEducator	e537110_g3	Place of study teaching post (administrative district)	

**Table 7:** (continued)

trict)
trict)
trict)
profes-
s target
educa-
educa-
g to the
g to the
nıng
ning guage
ning guage ysical/-
guage
guage ysical/-
guage ysical/- tional/- ntal de-
guage ysical/- tional/-
ı į

# A Appendix

**Table 7:** (continued)

file	variable	label (*only available OnSite)	
pCourseClass	e227400	Class: Number of female students	
pCourseClass	e227401	Class: Number of male students	
pCourseClass	e451000	Class: Amount of students with migration background	
pCourseClass	e79201a	Class: proportion class affiliation - low class	
pCourseClass	e79201b	Class: proportion class affiliation - middle class	
pCourseClass	e79201c	Class: proportion class affiliation - upper class	
pCourseClass	e79202a	Class: proportion of parents with a higher education de-	
		gree	
pEducator	e537030	Federal state higher education entrance qualification	
		(Federal state)	
pEducator	e537200	Federal state second state examination (Federal state)	
pEducator	e76212m	Month of birth	*
pInstitution	h76512m	Month of birth	*
pParent	p435030_g1	Religion and religiosity: other religious community	
pTarget	t435030_g1	Religion and religiosity: other religious community	
pTarget	t43504a_g1	Religion or denomination (specific)	
pTargetMicrom			*
pTargetRegioInfas			*
pInstitutionMicrom			*
pInstitutionRegioInfas			*
pInstitution			

# **B** References