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**Historische Entwicklung der sozialen Reproduktion
in Deutschland**

**[Historical developments of social reproduction
in Germany]**

DFG Project

Historical developments of social reproduction in Germany

Description of the REPRO File

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Overview

The REPRO File was created as part of the research project *Historical developments of social reproduction in Germany*, funded by the German Research Foundation (DFG), grant number HI 767 / 6-1.

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Project leader: Prof. Dr. Steffen Hillmert

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Homepage: www.socialreproduction.de

Project documentation: Hillmert et al. (2012)

The project analyzes historical developments of social reproduction in Germany as a combination of demographic and social mobility processes. Starting from specific cohorts of parents, it distinguishes between partial process of social selectivity such as partnership formation, selective fertility and differential educational attainment in the children's generation. The project thus links different research traditions within the social sciences, demographic research and mobility research. While each of these research traditions has led to a considerable amount of research, they have rarely been combined. Comparing different cohorts of parents also allows mapping historical changes.

Conventional approaches tend to look 'backwards' to study inequalities in educational opportunities by using an offspring generation and looking at their parents' generation. As pointed out by Duncan in 1966 (cf. Matras 1967: 613) and later on by Mare and Maralani (2006), the common approach misses that "*the intergenerational effects of changes in the socioeconomic characteristics of adults occur partly through individual- and family-level variables that intervene between those characteristics and the characteristics of the offspring generation (e.g., Blau and Duncan 1967; Jencks et al. 1972)*" (Mare and Maralani 2006: 543). This affects the estimations of the underlying mechanisms conducted, as described by Prais (1955: 80/81). Our analysis of social reproduction takes a different perspective. It starts with a particular generation and looks at the characteristics of the successive generations.

As a consequence, this approach sets high demands with respect to the included data, because having complete information on all important variables affecting the social reproduction process is needed. This includes completed educational careers of both parents and offspring as well as full information about parental fertility behavior. In order to have a sufficient and comprehensive data base for the analyses of this project, various data sources were combined. These data sets were

first harmonized with respect to all variables we were interested in and in a second step appended to each other.

The REPRO File is a selection of the dataset used for this research project. It contains 29.604 cases, i.e. respondents born between 1901 and 1970. The aim of the REPRO File is to provide researchers with an easily accessible data set containing important variable for studying the process of social reproduction in West Germany. It contains seven (out of originally 14) data sets (see Table 1). These seven data sets were made available to us by the Leibniz-Institut für Sozialwissenschaften (GESIS) (see: <http://www.gesis.org/en/services/>). We would like to thank the Leibniz-Institut für Sozialwissenschaften for this cooperation and the support we received.

This brief documentation describes the harmonization and combination of the seven data sets that were included in the REPRO File.

Table 1: Overview over data sets (data sets included in the REPRO File in bold)

No.	Name	year/waves	Sample design	(Included) N**	Included in the REPRO File
01	Allbus (<i>combined file</i>)	1982-2008	*	28.725	No
02	Das sexuelle Verhalten des Mannes/der Frau	1970/1973	Multi-stage stratified random sample	3.332	Yes
03	German Alterssurvey	1996, 1998 & 2001/02	Stratified random sample	3.221	Yes
04	German Familiensurvey	1988, 1994 & 2000	*	12.302	No
05	International Social Justice Project	1996 & 2000	*	3.540	Yes
06	Life History Study	1981/83, 1985/86, 1987/88, 1989, 1998/99	*	6.298	No
07	Lebensführung älterer Menschen	1993	Quota sample*	2.195	Yes
08	Mikrozensus	1996, 2000, 2004 & 2008	Stratified cluster sampling	953.629	No
09	Mikrozensus-Trendfile	1978, 1982, 1987 & 1991	*	820.846	No
10	Pairfam	2008	*	2.806	No
11	Politische Ideologie II	1980	Multi-stage stratified random sample	2.323	Yes
12	Volks- und Berufszählung	1970 & 1987	Stratified cluster sampling	4.800.225	No
13	Wohlfahrtssurvey	1978 & 1998	Multi-stage stratified random sample	3.003	Yes
14	ZUMA Standard Demographie	1976 – 1982* (without already listed surveys)	Multi-stage stratified random sample	11.990	Yes

* = for further information on the description of the data sets see Hillmert et al. 2012

** = Panel parts and East Germany not included

1. Theoretical background

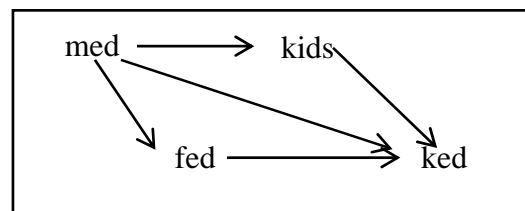
1.1 Defining social reproduction

‘Social reproduction’ in general refers to the process of reproducing given social structures and can be understood in a broader sense as the process of preserving societies. Concerning social stratification research, social reproduction is often understood as the intergenerational transmission of certain characteristics, like social status or social classes. Yet it is important to note that social reproduction is much more than the simple conditional analogy of parents and their children. A social structure, like the structure of social classes in a society, can for example be reproduced by opposing developments: children of the upper social strata experiencing downward mobility and children of the lower strata experiencing upwards mobility. Hence, it is important to include the different social mechanisms through which social reproduction takes place, to reveal such processes.

As the term social reproduction is still rather broad, we limit it to a special case: the reproduction of educational attainment. Social positions in contemporary societies highly depend on educational careers (Aschaffenburg and Maas 1997) and education is regarded as one of the central elements of reproducing existent social inequalities (Breen and Jonsson 2005). The intergenerational transmission of educational attainment works through different partial process of social selectivity, which have been described and researched separately in different research traditions for a long time within the social sciences (such as demographic research and mobility research). However, they have rarely been combined.

1.2 The basic model of inter-generational educational reproduction

To understand the development of social reproduction, it is necessary to understand the mechanisms through which the social characteristics of a parental generation are transferred to the children’s generation and affect their social outcomes. Therefore we use a model first introduced by Mare and Maralani (2006) to describe and later analyse these mechanism, in which we concentrated on family background (see Figure 1):



*med: mother's education; fed: father's education
kids: no. of children; ked: Children's education*

Figure 1: Basic conceptual model (based on Mare and Maralani 2006: 548)

As outlined in this basic model, we start by looking at mothers' education as an important dimension of social background, not least because it is easier to get empirical information about demographic behavior of women than of men. Also some analyses have shown that their educational level usually has a stronger influence on children's educational attainment than the father's educational level (e.g., Ermish and Francesconi 2001: 146). In a developmental perspective, this leads to the assumption that resource investment into a mother's education is more crucial regarding the social reproduction process (see Mare and Maralani 2006).

The social reproduction process is conceptualized as working through direct and indirect effects. While the direct effects (med->ked) represent an influence of mother's education on children's education, the indirect effects work through the demographic processes (e.g., number of children and temporal spacing of childbirth) and through the educational attainment of the father, which is affected by the process of assortative mating. It has also to be considered that these mechanisms may change over time. Many determinants of educational attainment have largely disappeared due to educational expansion, but inequalities in educational attainment based upon social origin have persisted until today (Blossfeld 1990: 165; Breen and Goldthorpe 1997: 275-276; Pfeffer 2008: 555).

2. Description of the data sources

The outlined approach as well as the necessity for complete information on educational careers (for both parents and offspring) and full information about parents' fertility behavior (as this affects the characteristics of the offspring generation; Mare 1991), sets high demands for the included data-sets. Additionally, it sets up the frame for the data selection criteria described later on. As there is no data source containing all the described information, we had to use different data sets to first estimate and then compile the different parts of our model. In the following part of this documentation the different data sources as well as their harmonization is described before turning to the topic on how the probability tables used in the simulation model were derived.

2.1 Selection criteria

The first criterion refers to the included area. It was decided to include only data for West Germany, as there is a lack of data sources on East Germany. Furthermore the significant differences between the East and the West German political and educational systems over decades make a combined analysis of social reproduction processes difficult. The second criterion refers to respondents' age. It was decided to include only persons aged 30 and older, in order to get information about completed educational careers as well as a large part of fertility histories. The maximum age for including respondents was set to 75 years. The aim was to reduce the effect of selective mortality, i.e. the fact

that better educated persons tend to live longer. Finally, respondents without German citizenship were (as far as it was possible) excluded.

Table 1 gives an overview over all used data sources, the years in which the different surveys were conducted, the numbers of waves, sample design and the number of cases included in the REPRO file. Some of the selected data sets contained respondents not fulfilling the mentioned selection criteria. Therefore, the original N of the data sets – as mentioned in the following descriptions – is in some cases higher.

2.2 Das sexuelle Verhalten von Männern und Frauen in Deutschland (02)

These two surveys focus on sexual behavior as well as the social and economic positions of males and females in Germany. They were organized and conducted by GETAS from 1970 to 1972 and contain important variables for this research project.

The first wave of the survey – conducted in 1970/71 – concentrated on females, the second wave – conducted in 1972 – on males. In both waves the sample design based on a multi-stage stratified random sample of individuals aged 18 to 60 years, with German citizenship, living in private households in Germany¹. Therefore, in a first step households were randomly chosen using 600 sampling points. In a second step, respondents were selected out of the household based on a series of random numbers (GETAS 1972: 18). Together, both waves contain 4.577 interviews; 2.327 with males and 2.261 with females (ibid: 18-19).

Concerning the female survey in 1970/71, the weighting of the data was done by GETAS on the basis of duplication and deletion of cases. The deletion and duplication of cases followed the relative distributions of the characteristics ‘Land’, community size, as well as age groups in the official statistics (GETAS 1971: 19, 26).

The weighting in the males’ survey of 1972 was done by CONRING (the company responsible for drawing the sample and partially conducting the interviews in the males survey). The created weights were adjusted to the relative distributions of the characteristics Land, community size, number of individuals living in the household, age, and sex of the respondents (GETAS 1972: 21).

2.3 The Alterssurvey (03)

The German Alterssurvey is a panel survey, which started in 1996, that focuses on the living-conditions and living-concepts of the German population aged 40 years and older. The Survey was developed in cooperation of ‘Forschungsgruppe Altern und Lebenslauf’ (Martin Kohli), the ‘Forschungsgruppe Psychogerontologie’ (Freya Dittmann-Kohli) and Infas-Sozialforschung (Doris Hess and Menno Smid), and was financed by the German ministry of family, seniors, females and

¹For reference see: <http://info1.gesis.org/dbksearch13/> (04.01.2011)

children (BMFSFJ).

In the first wave, conducted in 1996, a sample of 5,000 individuals was drawn out of the German resident population with German citizenship. This sample was disproportional and consisted out of three age groups: 44-54 year olds, 55-69 year olds, and respondents who were 70 years and older. The reason for this disproportional sample design was the assumption that older people are less willing and quite often less able to take part in a study. Hence a first thing to reduce the impact of this problematic a higher selection probability of cases belonging to the older age groups was addressed. The disproportional age selection the sample was drawn in two stages: First of all a sample of 290 communities (200 in West and 90 in East Germany) was drawn. The communities were selected representing proportionally the regarded age groups in the population (Schmid et al. 1997: 12, 17). In the second step, addresses within each community were selected randomly and used for the interviews (ibid: 8). As an additional feature to increase the number of older respondents not only paper-and-pencil but also oral interviews were conducted (ibid: 15).

The panel structure of the German Alterssurvey is as follows: The first wave was repeated in 1998 and later on in 2001/02 (ibid: 8). In addition to the panel study in 2001/02 also a replication study was conducted, reproducing the sample design of the first study. In this replication another 3.000 respondents - of whom 2.038 were West Germans - were interviewed (ibid: 24, 32). In contrast to the first wave of the original study, the replication study also included a separate foreigner survey, consisting out of another 900 respondents (ibid: 45).

In 2008 a fourth wave was conducted, the last wave so far. As this wave does not really add new information to our study, it is not further regarded here.

All waves of the Alterssurvey were adjusted to the marginal distributions from official statistics ('Bevölkerungsfortschreibung') using the characteristics age-groups, sex and region (East and West Germany including West Berlin) and their combinations. For the oral and written interviews different weights were created.

From the German Alterssurvey only the original wave and its replication in 2001/02 were used.

2.4 International Social Justice Project (5)

*"The ISJP is an international collaborative research project in which social scientists from twelve countries join to study popular beliefs and attitudes on social, economic and political justice."*² All conducted studies are therefore standardized regarding their content.

The first wave of the ISJP was realized in 1991. A first replication of survey was then held in 1996, another one in 2000. About 500 respondents of the third wave were again interviewed in two panel waves in 2001 and 2002. In the year 2006 a fourth wave of the ISJP was conducted under the

²See <http://www.sowi.hu-berlin.de/lehrbereiche/empisoz/forschung/isjp/> (08.02.11)

name 'Justice in Time' (JIT)³. In Germany the study was organized and conducted by ZUMA, USUMA (Berlin) and INFAS. In all waves only individuals with German citizenship aged 18 and older were interviewed.

All waves and replication surveys of the German ISJP were based on household samples, based on a three stage ADM Mastersample (Wegener 1997: 4). In the first stage voting districts were randomly selected and used sampling points. Here a disproportionally stratified sample – regarding East and West German voting districts – was drawn, as the information on voting districts in East Germany was regarded as being less established than in West Germany. This led to an oversampling of East Germany (Wegener and Mason: 3).

Starting from a randomly selected address within these sampling points, households were selected based on a random-route procedure. In the third step the persons to be interviewed inside the households were selected based on a Kish grid (Wegener 1997: 6-7).

In the project the first three waves were used. In the first wave a sample of 1,837 interviews in West Germany and 1,019 interviews in East Germany, and in the second wave a sample size of 1.137 West Germans and 987 East Germans was realized. In 2000, 3.215 respondents (1.324 in East and 1.891 in West Germany) were successfully interviewed.

To correct for selection bias due to household size as well as refusals and other non-neutral drop out in the sample, weighting variables (like V2139) based on census data were included. Concerning the latter correction the weight "construction uses an iterative proportional fitting procedure by which observed combinations of respondent attributes are fitted to tables of combined attributes of other large data sets, e.g. census data" (Wegener and Mason: 7). Within the fitting procedure the following characteristics were used to adjust the weights: state, community size, respondent's sex and age.

2.5 Lebensführung älterer Menschen (07)

The purpose of this survey was to analyze the living conditions and the family situation of the elderly in Germany. On behalf of the Deutsches Jugendinstitut (DJI), financed by the German Ministry of Family, Elderly, Women and Children (BMFSFJ) and organized by Infratest in cooperation with ZUMA, a quota sample was drawn in 1993. The quota sample focused on personal interviews of eight groups (Infratest 1993: 4):

- single women aged between 55 and 64 years old;
- single men aged between 55 and 64 years old;
- non-single women aged between 55 and 64 years old;
- Non-single men aged between 55 and 64 years old;

³See <http://www.sowi.hu-berlin.de/lehrbereiche/empisoz/forschung/jit/> (08.02.11)

- single women aged between 65 and 79 years old;
- single men aged between 65 and 79 years old;
- non-single women aged between 65 and 79 years old;
- Non-single men aged between 65 and 79 years old;

The original goal of the survey was to achieve two thirds of all interviews with singles, while 50% of them should be aged between 55 and 64 years. Next to this two thirds of all interviewed should be female, while also two thirds of all respondents should be living in West Germany (ibid: 5). In the end 4.130 interviews were realized – mostly fulfilling this quota set. About 72% of the interviewed came out of the circle of friends of the interviewer. Inconsistencies within the data or mistakes concerning the data were corrected or set to ‘no response’ by Infratest (ibid: 16).

2.6 Politische Ideologie II (11)

The survey ‘Politische Ideologie II’ is an international, comparative survey, that was conducted in 1980 as a follow-up to a 1974 survey called ‘Politische Ideologie’. Its main purpose was to analyze the determinants and structures of political participation as well as political ideology⁴. The survey was organized by ZUMA and GETAS and was based on a multi-stage stratified random sample design. In the first stage households were selected based on an ADM-design and used as sample points (GETAS 1980: 10). Within households respondents were selected on a random basis. Furthermore the survey consisted of two parts: a panel part in which 1.092 interviews with respondents of the first wave in 1974 were realized and a replication part consisting of 2.095 interviews. In both waves only persons aged 16 years and older with German citizenship were interviewed (ibid: 2, 10).

Concerning the panel part of this survey no formal weights were created (GETAS 1980: 28). To correct for the fact that a household sample was conducted, the cross-sectional survey contains weights which transform the household sample into an individual sample using information about respondent’s household size. Furthermore these weights were adjusted to the margins of selected characteristics gained from official statistics (‘Bevölkerungsfortschreibung’) to also adjust for non-response (GETAS 1980: 29/30). This was done in two steps: In a first step, the characteristics included ‘Länder’ (state) and municipality size (next to household size). In the second step, the weights were adjusted due to ‘Länder’ and age groups (this was done separately for males and females; GETAS 1980: 29/30).

⁴see the description of the survey: <http://info1.gesis.org/dbksearch13/> (08.01.11)

2.7 Wohlfahrtssurvey 1978 & 1998 (13)

The German Wohlfahrtssurvey is to assess objective living conditions and their presumed living quality in (West) Germany (Siara 1980). It was designed by the 'Sonderforschungsbereich 3' situated at the Universities of Mannheim and Frankfurt. First conducted in 1978, seven surveys were held so far (Schöb 2001). The first four (1978, 1980, 1984 and 1988) surveys were conducted for West Germany. In 1990, after unification, a baseline study was then realized in East Germany, while in the years 1993 and 1998 the study was then conducted for the whole of Germany. Only the waves of 1978 and 1998 were used in our study.

All waves were organized by ZUMA, and the data was collected by Infratest (München). In the waves 1978 to 1993 the German resident population with German citizenship aged 18 and older, and in 1998 including persons with foreign citizenship, were defined as population. In all waves a multi-stage stratified random sample design (ADM Design) was realized (ibid: 4). In the first step, all communities in Germany were stratified based on their size (using BIK - Classifications, as well as regional disparities; Thum et al. 1999: 3). Based on this stratification sampling points were drawn proportionally to the distribution of households inside the resulting layers. In the second step, addresses within the sampling points were randomly chosen and used as starting points from which a random walk lead to selected households. In the third step, individuals within the selected households were interviewed using a Kish grid (ibid: 4).

In this first wave (1978) 2.012 interviews were realized (Siara 1980: XXIX). The last wave used (1998) consists of 3.042 respondents (including East and West Germany; Thum et al. 1999: 6). [An overview over all waves, their sampling-design, and their size is given by Schöb (2001)].

To allow for transformations from a household sample into a personal sample, weighting variables were included. The created weights were adjusted to the relative distributions of the different characteristics: Länder, community size, number of individuals living in a selected household, age, and sex of the respondents (Schöb 2001: 5-7).

2.8 ZUMA Standard Demographie (14)

In order to gain a data basis of demographic information about the German population and to standardize the use of this information in empirical research, the ZUMA Standarddemographie was created in 1976. Since then, several studies were conducted with similar operationalization regarding demographic variables, thus creating new statistical guidelines. In the 'ZUMA Standard Demographie' these data sets were put together, to provide basic information about demographic developments in Germany. The 'ZUMA Standard Demographie' file consists of ten different surveys containing 20.977 cases in total:

Table 2: Surveys included in the ‘ZUMA Standard Demographie’

No.	Name	Year	Study-No.	N
01	ZUMABUS 1	1976	ZA0861	2036
02	ZUMABUS 2	1977	ZA0814	2002
03	ZUMABUS 3	1979	ZA1224	2012
04	ZUMABUS 4	1979	ZA1017	2001
05	ZUMABUS 5	1980	ZA1225	1997
06	Politik in der BRD	1978	ZA1220	2030
07	Politik in der BRD	1980	ZA1221	1939
08	ALLBUS	1980	ZA1000	2955
09	Wohlfahrtssurvey	1978	ZA1141	2012
10	ZUMABUS 6	1982	ZA1226	1993

Since the Wohlfahrtssurvey 1978 (09) and the ALLBUS 1980 (08) were already integrated in our data set, they were dropped in this part.

3. Preparing the data sets

The following table gives an overview over information derived from the different data sets.

Table 3: Data sets and derived information (data sets included in the REPRO File in bold)

No.	Name	Respondent's education	Partner's education	Parents' education	Respondent's fertility
01	Allbus (<i>combined file</i>)	X	X	X	X
02	Das sexuelle Verhalten des Mannes/der Frau	X	X	X	X
03	German Alterssurvey	X	X		X
04	German Familiensurvey	X	X	X	X
05	International Social Justice Project	X	X		
06	Life History Study	X	X	X	X
07	Lebensführung älterer Menschen	X	X		X
08	Mikrozensus	X	X		
09	Mikrozensus-Trendfile	X			
10	Pairfam	X	X	X	X
11	Politische Ideologie II	X			X
12	Volks- und Berufszählung 1970	X			X
	Volks- und Berufszählung 1987	X			
13	Wohlfahrtsurvey	X			X
14	ZUMA Standarddemographie	X			

Some of the data sets included cases from East Germany as well as persons without German citizenship. These cases may have spent at least part of their education in a foreign country and hence in a different educational system. As experiences in a different educational system as well as being migrated might have had a significant influence on the social reproduction process, these cases were excluded. Unfortunately not all data sets contained information whether the respondents had attained their education in West Germany, or not. In some data sets we were also not able to identify immigrants, especially when they already got German citizenship.

Table 4: Information on citizenship in the data sets

No.	Data set	Year: Variable no.	Response Categories
02	Das sexuelle Verhalten des Mannes/der Frau	#	#
03	German Alterssurvey	#	#
05	International Social Justice Project	#	#
07	Lebensführung älterer Menschen	#	#
11	Politische Ideologie II	#	#
13	Wohlfahrssurvey	1998: v57	1 Die deutsche Staatsangehörigkeit 2 Eine andere
14	ZUMA - Standard Demographie	#	#

only persons with German citizenship considered (see sample description)

Table 5: Information on respondent's place of residence (East/West Germany)

No.	Data set	Year: Variable no.	Response Categories
02	Das sexuelle Verhalten des Mannes/der Frau	#	#
03	German Alterssurvey	1996: land 2002: westost	1 Schl.Hol. 2 Hamburg 3 Nieders. 4 Bremen 5 nrw 6 Hessen 7 Rh.Pf. 8 Baden.W 9 Bayern 10 Saarl. 11 Berlin 12 Brandenb. 13 Me.Vorp. 14 Sachsen 15 Sa.Anh. 16 Thuer. 1 Früheres Bundesgebiet 2 Neue Länder, einschl. Berlin-Ost
05	International Social Justice Project	1991: CODE 1996 & 2000: CODE	9103 1991:Western Germany 199603 1996:Western Germany 200003 2000:Western Germany
07	Lebensführung älterer Menschen	westost	0 alte Bundesl.nder 1 neue Bundesl.nder
11	Politische Ideologie II	#	#
13	Wohlfahrssurvey	1978: # 1998: v3	1 West 2 Ost
14	ZUMA - Standard Demographie	#	#

not necessary (see sample description) * no information available (due to anonymization)

As most of these data sets represented only persons with German citizenship, it was assumed that the majority in the data sets received their school education as well as their vocational training in West Germany.

A consecutive identification number *id* was created for all cases that were included in the new dataset. The variable *study* identifies their original source. In the next step the different data sets were harmonized (and in many respects simplified).

3.1 Demographic variables & Year of the interview

The following demographic information in the data sets was derived: respondent's gender, age and year of birth. The respondent's year of birth in order is needed to identify changes in the educational distribution over birth cohorts. In some cases no clear information about a respondent's year of birth was available. In these cases, the information on the year of the survey was used in combination with respondent's age to compute respondent's years of birth. It is also important to include the years in which the surveys were conducted, in order to compute respondent's age (if not available). The information on a respondent's age had to be included in order to allow deriving age-specific fertility rates later on. Hence, in the cases where this information was missing in the data set, a new variable indicating the year of the interview was created.

Gender

To identify male and female respondents in all data sets in the same way, a new homogenized variable called *female* was created. For this new variable, a value of zero indicated a male respondent and a one a female respondent. Table 6 lists the original variables containing the gender information in the different data sets:

Table 6: Gender information in the data sets

Data set	Year: Variable-Nr. and/or code	Response categories
Deutscher Alterssurvey	1996: sex 2002: w1_11	1 male 2 female
Das sexuelle Verhalten des Mannes/der Frau	Males: gen female = 0 Female: gen female = 1	
International Social Justice Project	1991 & 1996 : v5 2000: v5	1 male 2 female
Lebensführung älterer Menschen	sex	1 male 2 female
Politische Ideologie II	v238	1 male

		2 female
Wohlfahrtssurvey	1978: v266 1998: v58	1 male 2 female
ZUMA - Standard Demographie	v48	1 male 2 female

Year of birth

Another important variable was the variable on respondent's year of birth as it was used later on to analyze differences in the social reproduction over birth cohorts. All variables containing information about respondent's year of birth were again harmonized, by creating the new variable *birthyear*. This was done in most cases by adding the number of 1900 to the values included in the data sets. The data set 'Das sexuelle Verhalten der Frau' (03) was problematic as it only included age groups. To solve this problem the mean value of each age group was used as a proxy indication for individual age. In combination with the information on the year of the survey, respondent's year of birth was then computed. The range of the new variable *birthyear* is 70 years, ranging from 1901 to 1970. The variables containing the information about the individuals' year of birth in the data set are described in Table 7.

Table 7: Year of birth in the data sets

Data set	Year: Variable-Nr. and code	Min. – Max.
Deutscher Alterssurvey	1996: gen birthyear = v1_16 + 1900 2002: gen birthyear = w1_16 + 1900	1911 - 1956 1917 - 1962
Das sexuelle Verhalten des Mannes/der Frau	Males: gen birthyear = v22+1900 Females: v8 (agegroups)	1911 – 1954 1911 – 1951
International Social Justice Project	1991: v7 2000: v7	1894 – 1975 1900 – 1982
Lebensführung älterer Menschen	gen birthyear = 1900 + fs014000	1913 – 1939
Politische Ideologie II	v146	1889 - 1958
Wohlfahrtssurvey	1978: gen birthyear = v249 + 1900 1998: gen birthyear = v52 + 1900	1887 – 1960 1901 – 1980
ZUMA - Standard Demographie	v72	1880 – 1964

Year of the interview

To derive the age of the respondent's in the data sets which only contained information on respondent's year of birth a variable was created indicating the year of the interview (see Table 1). The year of the interview was simply coded into a new variable called *year*.

Age

Not only respondent's year of birth is important for the following analyses, but also respondent's

age. As we are only interested in cases who finished their educational career, it is important to control for respondent's age. This variable is also important when computing age specific fertility rates. We sometimes used the variable 'year of the interview' to derive individual age. Table 8 lists information about the original variables representing age in the data sets.

Table 8: Age in the data sets

Data set	Year: Variable-Nr. and code	Min. – Max.
Deutscher Alterssurvey	gen age = year – birthyear	40 - 85 years old
Das sexuelle Verhalten des Mannes/der Frau	Males: gen age = 1972 – birthyear Females: v8 (age in groups)	18 – 61 years old 1 18 - 20 2 21 - 23 3 24 - 26 4 27 - 29 5 30 – 32 6 33 – 35 7 36 – 38 8 39 – 41 9 42 - 44 10 45 - 47 11 48 - 50 12 51 - 53 13 54 - 56 jahre 14 57 - 60 jahre
International Social Justice Project	1991 & 1996: v8 2000: v8	16 – 97 years old 17 – 96 years old
Lebensführung älterer Menschen	age	53 – 80 years old
Politische Ideologie II	v147	16 – 93 years old
Wohlfahrtssurvey	1978: v286 1998: v336	18 – 90 years old 18 – 99 years old
ZUMA - Standard Demographie	v73	17 – 96 years old

In the dataset 'Das sexuelle Verhalten der Frau' (03) the problem occurred that age was only included in form of age groups. s it only contains age groups. To solve this problem in each of the age groups the medium age in each category was regarded as the respondent's age.

Also in some other data sets no clear information about age was included. In these cases, age was simply computed by subtracting the respondent's year of birth from the year of the interview. The result was a new variable **age** which is harmonized over all data sets.

Focusing on cases with completed educational careers, all cases younger than 30 years old were excluded. Hence, the distribution of the new variable has a range of 45 years (between 30 years of age and 75 years). Later on also an upper age limit was set in order to reduce the effect of selective mortality (especially with respect to education).

3.2 Educational information

To derive the educational distribution of the respondents, information on their highest achieved school degree (or the first school degree if other information was not available) was used, and it was combined with the information on respondent's vocational training or attained university degree (including 'Fachhochschule'). To further distinguish between the large proportion of individuals attaining vocational training, it was decided to split up them up into three groups, depending on their achieved school degree. This seems reasonable as future life chances (and especially the possibilities of performing vocational training) are shaped by their attained school degree (see Gaupp et al. 2008: 389/390). In the case of panel data the first available entry of the respondent was used.

Table 9 presents more detailed information about the different variables and their response categories. In most cases, this information was available in form of ordered scales, in some cases only in form of dummy variables.

Table 9: School education in the data sets

Data set	Educational information: Year: <i>Variable-Nr – Variable Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v29 – schulabgang Females: v28 -- schulabgang	1 volksschule 2 mittlere reife 3 abitur
Deutscher Alterssurvey	v4_11 -- Höchster Schulabschluß	1 Hilfs-/Sonderschule 2 Volks-/Hauptschule 3 Realschule 4 POS, 8. Klasse 5 POS, 10. Klasse 6 Fachhochschulreife 7 Hochschulreife 8 Anderer Abschluß 9 Keinen Schulabschluß
International Social Justice Project (combined waves 1991, 1996, 2000)	1991 & 1996: V67 - RESPONDENT'S EDUC: CASMIN 2000: V2017 -- F24. education	1 Level 1a: less th primary formal edu 2 Level 1b: primary formal education 3 Level 1c: prim form edu + basic vocat train 4 Level 2a and 2b: medium for edu and vocat train 5 Level 3a: secondary form edu (abitur, maturitas) 6 Level 3b: lower tertiary (vocational) training 7 Level 3c: higher tertiary (vocational) training 9 NA 1 still a pupil at a full-time school 2 still a pupil at a school for intermediate vocational qualification 3 left school without a certificate 4 Volks-/ Hauptschulabschluss 5 Mittlere Reife, Realschulabschluss, Fachschulreife

		6 Polytechnische Oberschule (8 years) 7 Polytechnische Oberschule (10 years) 8 Fachhochschulreife, Fachgebundene Hochschulreife, Fachoberschule 9 Abitur, allgemeine Hochschulreife, Erweiterte Oberschule (EOS) 99 NA
Lebensführung älterer Menschen	fs033000 – fs33_hoehster_schulabschl.	1 A Vorzeitig von der Schule abgegangen 2 B Volksschule 8. oder 9. Klasse 3 C Abschluss der 10. Klasse oder Mittlere Reife 4 D Fachhochschulreife 5 E Abitur (Hochschulreife)
Politische Ideologie II 1980	v160 -- befragter:schulabschluss	1 volksschule o abschl 2 volksschule m abschl 3 berufsschule 4 mittlere reife 5 abitur 6 technikerschule 7 sonst. Berufsfachschule 8 ingenieurschule 9 universitaet 10 noch in ausbildung 97 verweigert 99 ka
Wohlfahrtssurvey 1978 & 1998	1978: v208 – f86.schulabschluss 1998: v59 -- Schulabschluß	1 volkssschulabschluss 2 mittlere reife 3 fachhochschulreife 4 abitur 5 keinen 1 A Schule beendet ohne Abschluß 2 B Volks- Hauptschulabschluß bzw. POS 3 C Mittlere Reife, Realschulabschluß 4 D Abschluß einer Fachhochschulreife 5 E Abitur bzw. EOS 12. Klasse 6 F Anderer Schulabschluß 7 G Bin Schüler, habe noch keinen
ZUMA - Standard Demographie	v5 -- s.3.schulabschluss	1 Volks-, (Haupt-)schulabschluss 2 Mittlere Reife, Realschulabschluss 3 Fachhochschulreife 4 Abitur (Hochschulreife) 5 keinen dieser Abschlüsse 9 KA 10 TNZ

Quite often the variables containing educational information used different response categories or different terms for the same educational degrees. This is mainly due to historical changes.

Another explanation for changes in the educational categories is relatively simple: general adjustments in the questionnaires due to an increasing common interest in educational information. This is reflected in many older surveys in Germany in which variables regarding respondent's education were often not included at all or only to a limited extent. Here the German Mikrozensus

is an example, where the waves before 1971 did not include variables gathering information on respondent's education (Lengerer et al. 2010: F1). We find more differentiation in the educational variables with respect to the included categories in the younger surveys. While in the older surveys only 'Volksschule' or 'Hauptschule' were included as the lowest educational categories, some of the more recent surveys also include the category 'without educational degree' ('ohne Abschluss'). The same is true for the category 'Hilfs-/ Sonderschule' that is found more frequently in the recent surveys. Here we sometimes find additional categories like 'Berufsschule' or 'Berufsfachschule' (referring to either the schooling part of dual vocational training or school-based vocational training) in the data sets. More recent data sets also differentiate between the 'Fachhochschulreife' (technical college entrance diploma) and 'Hochschulreife/Abitur' (university entrance diploma). These categorizations were harmonized by simplifying the data. The educational information in all data sets was recoded into the new variable *school* which differentiates between three categories:

- *low*, which contains individuals with no educational degree or 'Volks-/Hauptschule' (coded as 1);
- *medium* for respondents who attained 'Mittel-/Realschule' (coded 2);
- *and high* for respondents with 'Fachschulreife' or 'Hochschulreife/Abitur' (coded 3).

Answers like 'Berufsschule', 'Berufsfachschule', 'Technikerschule' or 'Ingenieursschule' indicating vocational training were not considered at this stage. In some cases there was no information on vocational training in a separate variable, so this information was used as an indicator for respondent's vocational training.

Simplification of the variables as a solution did not work in all cases. Especially when international data sets were added, like the ISJP Survey (04) in which the CASMIN-Scale was included, international educational schemes had to be recoded into a simple scheme of educational categories. Other data sets that were originally intended to be used like the European Social Survey (which includes ISCED scales) - had to be dropped in the case that it was not possible to transfer the educational information into the scheme.

Table 10 gives an overview of the variables containing the information about vocational or academic training. When generating a summarizing variable we sometimes needed to rely on dummy variables. In some cases information from different educational variables was used to identify respondent's vocational training.

Table 10: Information on vocational/academic training in the data sets

Data set	Educational information: <i>Variable – Variable Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v30 – berufsausbildng Females: v29 -- berufsausbildng	1 keine berufsausbildung 2 berufs handels o abschl. 3 berufs handels m abschl. 4 fachschule o abschluss 5 fachschule m abschluss 6 universitaet o abschluss 7 universitaet m abschluss
Deutscher Alterssurvey	v4_13 -- Höchster Ausbildungsabschluß	1 Teilfacharbeiter 2 Lehre 3 Berufsfachschule 4 Fachschule etc. 5 Fachhochschule 6 Hochschulabschluß 7 Anderer Abschluß 8 Keinen Abschluß
International Social Justice Project (combined waves 1991, 1996, 2000)	1991 & 1996: V2021 -- F25. VOC. EDUCATION: BETR.ANLERNZEIT V2022 -- GEWERBL.ANLERNZEIT V2023 -- KAUFM.LEHRE V2024 -- LANDW.LEHRE V2025 -- BERUFSFACHSCHULE V2026 -- INTERNSHIP V2027 -- MEISTER V2028 -- FACHSCHULE V2029 -- FACHHOCHSCHULE V2030 -- OHNE DIPLOM V2031 -- MIT DIPLOM V2032 -- OTHER V2033 -- NONE 2000: V2021 -- F25. VOC. EDUCATION: BETR.ANLERNZEIT V2022 -- GEWERBL.ANLERNZEIT V2023 -- KAUFM.LEHRE V2024 -- LANDW.LEHRE V2025 -- BERUFSFACHSCHULE V2026 -- INTERNSHIP V2027 -- MEISTER V2028 -- FACHSCHULE V2029 -- FACHHOCHSCHULE V2030 -- OHNE DIPLOM V2031 -- MIT DIPLOM V2032 -- OTHER V2033 -- NONE	1 yes 2 no 6 INAP, is still in education 9 NA 1 yes 2 no 9 NA
Lebensführung älterer Menschen	fs034000 -- fs34_hoechs_berufsabschl_befr	0 Keinen berufl. Ausbildungsabschlu. 1 Gewerbliche Lehre/Facharbeiter 2 Kaufm.nnische Lehre/Facharbeiter 3 Haus-, landwirtschaftl. Lehre/Facharb. 4 Berufs-, Fachschulabschlu. 5 .ffent. Dienst /Meister, Techniker 6 Meister, Techniker/Hochschulabschlu. 7 Fachhochschule / Hochschulabschlu. 8 Hochschulabschlu.
Politische Ideologie II	v160 – befragter:schulabschluss	1 volksschule o abschl.

1980		2 volksschule m abschl. 3 berufsschule 4 mittlere reife 5 abitur 6 technikerschule 7 sonst. Berufsfachschr. 8 ingenieurschule 9 universitaet 10 noch in ausbildung 97 verweigert 99 ka
	v161 -- abgeschloss berufsausbildung	1 ja 2 nein 7 verweigert 8 weiss nicht 9 ka
Wohlfahrtssurvey 1978 & 1998	1978: v210 – f88.berufl.ausbildung 1998: v60 -- Ausbildungsabschluß	1 berufsschule, gewerb 2 berufssch., kaufm 3 berufsfachschule 4 berufliches prakt 5 meister,techniker 6 fh-abschluss 7 hochschulabschluss 8 kein berufl.ausbildg 1 A beruflich-betriebliche Anlernzeit 2 B Teilfacharbeiterabschluß 3 C Abgeschlossene gewerbliche oder landw. Lehre 4 D Abgeschlossene kaufmännische Lehre 5 E Fachschulabschluß 6 F Berufsfachschulabschluß 7 G Meister-, Techniker- oder gleichwertig 8 H Fachhochschulabschluß auch Abschl. 9 J Hochschulabschluß 10 K Anderer beruflicher Ausbildungsabs. 11 L Kein beruflicher Ausbildungsabschl.
ZUMA - Standard Demographie	v71 -- s4.beruf.ausb.abschluss	1 Berufsabschluß mit gewerblicher oder landw. Lehre 2 Berufsabschluß mit kaufmänn. oder sonstiger Lehre 3 Berufsfachschulabschluß 4 Berufliches Praktikum 5 Meister-, Techniker- oder gleichwertiger Abschluß 6 Fachhochschulabschluß (auch Ingenieurschulabschluß) 7 Hochschulabschluß 8 kein beruflicher Ausbildungsabschluß 99 KA 00 TNZ

Again it was decided to recode the information about vocational training and whether they attended university into three groups. It was decided to regard categories like ‘Anlernzeit/berufliche Anlernzeit’ – which meant training on the job – as vocational training. The result was the new variable *voc*. It differentiates the following categories:

- *none*, which contained individuals with no vocational training so far (coded as 1);
- *voc* for respondents who attained vocational training (including ‘Berufsfachschule’, ‘Meister’, ‘Ingenieursschule’ etc.) (coded 2);
- and *uni* for respondents who attained university or ‘Fachhochschule’ (formerly ‘Ingenieursschule’) (coded 3).

After harmonizing all the information on respondent’s school degree (coded in *school*) as well as respondent’s vocational training (coded in *voc*), a new variable called ‘respondent’s education’ (*ed*) was created. Within this new variable five categories of education are distinguished:

- *basic* - containing individuals with only *lower* secondary education (for example ‘Volksschule’ but also ‘Realschule’) and no vocational training (coded 1);
- *lower vocational* - consisting of the respondents with *lower* secondary education (for example ‘Volksschule’) and basic vocational training (coded 2);
- *medium vocational* - for respondents with for example Realschulabschluss (medium school education) having attained vocational training (coded 3);
- *high vocational* - for respondents with university entrance diploma and vocational training (coded 4);
- and *university* – in which all individuals having a university degree were coded (coded 5).

3.3 Information on fertility

Information about respondent’s fertility does not only include the number of children, but also children’s year of birth and hence the timing of respondent’s fertility. Yet, finding out the actual number of children of a respondent was sometimes problematic. First, there were differences in the scales used in the various data sets. One major problem here was that some data sets did not include the possibility of having no children. In other cases, data sets only included questions for persons with children out of which the number of children could be derived, while missing values probably represented childlessness and hence were coded accordingly. Still, with respect to the first problem it is possible that in some data sets the number of cases who never had children is underestimated.

Apart from this major problem, another minor problem was the type of question asked in some of the included data sets: In some data sets the question was asked whether respondents ‘have’ any children, while in other surveys the question how many children a respondent ‘gave birth to’ was included. In principle this difference in question wording could lead to different fertility distribution but it is assumed that these are only minor differences.

Finally, a few data sets contained no variables on the actual number of children, but variables indicating children’s birth years (and vice versa). In these cases the number of children was derived from the birth years of the children.

Table 11: Fertility information in the data sets: Number of children

Data set	Fertility <i>Variables & Variables-Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males:: v81 -- zahl kinder insgesamt Females: v345 -- zahl kinder insgesamt	1 ... 11
Deutscher Alterssurvey	v11_39 -- Anzahl Kinder	0 Keine Kinder ...
Politische Ideologie II 1980	v153 -- befragter:kinder? <i>use variable</i> v154 -- 1.kind: geburtsjahr <i>to</i> v159 -- 6.kind: geburtsjahr <i>to count for children</i>	1 nein 2 ja 7 verweigert 9 ka

The new harmonized variable containing information about the number of children of the respondents is called *kids*. Furthermore information was used on the children's years of birth to create another harmonized variable called *birthkidy** (with * indicating the i^{th} child). In a few cases, the year of birth of the (first) child turned out to be before or equal to the respondent's year of birth. In these un plausible cases, the values for child's year of birth were deletedwere deleted.

3.4 Partner's education

The existence of a partner as well as his or her education plays an important role in the social reproduction process. In some case we had information on whether the respondents were living together with a partner. In other cases information was limited as we only had information on marital status. In these cases the response categories were also not covering all possible living arrangements, like for example cohabitation. Regarding marital status, we decided to code only married respondents as living together with a partner. In the older cohorts marriage was most common as a legitimate form of living arrangement, so it is assumed the number of persons living in a partnership is only slightly underestimated in the data sets. Regarding the new harmonized variable *partner*, we found that 67% of all respondents (who provided information) were living together with a partner.

Similar to the creation of the respondent's education all available information on their partner's school education was used as well as their vocational training in order to create a new harmonized variable. The information on school education in all data sets was recoded into three different educational groups:

- *low*, which contained individuals with no school degree or ‘Volks-/Hauptschule’ degree (coded as 1);
- *medium* for respondents who attained ‘Mittel-/Realschule’ (coded 2);
- and *high*, for respondents with ‘Fachschulreife’ or ‘Hochschulreife/Abitur’ (coded 3).

In a second step all available information on vocational training and whether the partners attained university or not was coded into the following categories:

- *none*, which contained individuals with no vocational training so far (coded as 1);
- *voc* for respondents who attained vocational training (also ‘Berufsfachschule’, ‘Meister’, ‘Ingenieursschule’ etc.) (coded 2);
- and *uni* for respondents who attained university or Fachhochschule (formerly ‘Ingenieursschule’ (coded 3).

Having all information about partner’s school degree (coded in *pschool*) as well as their vocational training (coded in *pvoc*) a common variable called ‘partner’s education’ (*ped*) was created. Similar to the variable *ed* which contains respondent’s education, this new variable distinguished between five categories of education:

- *basic* containing individuals with only lower secondary education (for example ‘Volksschule’ but also ‘Realschule’) and no vocational training (coded as 1).
- *lower vocational* consisting of respondents with lower secondary education (for example ‘Volksschule’) and basic vocational training (coded 2);
- *medium vocational* in which individuals with ‘Realschulabschluss’ (medium school education) or equivalents who attained vocational training were included (coded 3);
- *high vocational* for respondents with university entrance diploma and vocational training (coded 4);
- and *university* in which we coded all persons having a university degree (coded 5).

Table 12 gives an overview of the information on partner’s school education in the data sets, while Table 13 provides this information for partner’s vocational/academic training.

Table 12: Partner’s school education in the data sets[illegible]

Table 13: Information on vocational/academic training of the partners in the data sets

Data set	Year: Variable-Nr. and code	Response Categories
Das sexuelle Verhalten des Mannes/der Frau	<p>Males: v183 - Berufsausbildung</p> <p>Females: v41 – Intimpartner Berufsausbildung</p>	<p>2 berufsschule ohne abschluss 3 berufsschule mit abschluss 4 fachschule ohne abschluss 5 fachschule mit abschluss 6 universitaet ohne abschluss 7 universitaet mit abschluss</p> <p>1 keine berufsausbildung 2 noch in der ausbildung 3 berufsschule ohne abschluss 4 berufsschule mit abschluss 5 fachschule ohne abschluss 6 fachschule mit abschluss 7 universitaet ohne abschluss 8 universitaet mit abschluss</p>
Deutscher Alterssurvey	<p>1996: v10_13 2002: w18_214</p> <p>w18_296</p>	<p>0 überfiltert 1 Teilfacharbeiter 2 Lehre 3 Berufsfachschule 4 Fachschule etc 5 Fachhochschule 6 Hochschulabschluß 7 Anderer Abschluß 8 Keinen Abschluß</p> <p>0 überfiltert 1 in Betrieb angelernt 2 in Betrieb Ausbildung gemacht 3 berufsbildende Schule besucht 4 Hochschule besucht</p>
International Social Justice Project	<p>1991 & 1996: V2040 - V2052 – Partner Education</p> <p>2000: V2040 – V2052 – Partner Education</p>	<p>0 INAP, no partner 1 yes 2 no 8 DK 9 NA</p> <p>0 INAP, no partner 1 yes 2 no 9 NA</p>
Lebensführung älterer Menschen	Fs034001 -- hoechs_berufsabschl_part.	<p>0 Kein Abschluss 1 Gewerbliche Lehre 2 Kaufmännische Lehre 3 Haus-, landwirtschaftliche Lehre 4 Berufs-, Fachschulabschluss 5 öffentlicher Dienst/ Meister 6 Meister/ Hochschule 7 Fachhochschule/Hochschulabschluss 8 Hochschulabschlu.</p>

3.5 Parents' education

To compare the respondent's and his or her parent's education the available information on the parental school education was used, and it was combined with the information about vocational training. Tables 14 and 15 list the information about the education of respondent's parents in the different data sets. In the REPRO file only the data set 'Das sexuelle Verhalten von Männern und Frauen in Deutschland' contained information on parent's education.

Table 14: Parent's school education in the data sets

Data set	Parent's school education <i>Variables & Variables-Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v149 -- vater schulabgang v151 -- mutter schulabgang Females: v47 -- vater schulabgang v52 -- mutter schulabgng	1 volksschule 2 mittlere reife 3 abitur 1 volksschule 2 mittlere reife 3 abitur

Table 15: Information about parent's vocational/academic training in the data sets

Data set	Parent's vocational training <i>Variables & Variables-Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v150 -- vater berufsausbldng v152 -- mutter berufsausbldng Females: v48 -- vater berufsausbldng v53 -- mutter berufsausbldng	2 berufssch o abschluss 3 berufssch m abschluss 4 fachschule o abschluss 5 fachschule m abschluss 6 universitaet o abschluss 7 universitaet m abschluss 1 keine berufsausbildung 3 berufsschule o abschluss 4 berufsschule m abschluss 5 fachschule o abschluss 6 fachschule m abschluss 7 universitaet o abschluss 8 universitaet m abschluss

A first step used the information provided for the parent's school education to create two new variables *mschool* (for mother's school education) and *fschool* (for father's school education). To harmonize all school variables in all data sets, it was decided to code the variables again into three categories of school education:

- *low* for no educational degree or 'Volks-/Hauptschule' (coded as 1);
- *medium* for 'Mittel-/Realschule' (coded 2);
- and *high* for 'Fachschulreife' or 'Hochschulreife/Abitur' (coded 3).

The next step looked at parents' vocational training (or whether they attained university or

‘Fachhochschule’). Again, variables were harmonized by recoding the information on vocational training in the data sets and creating new variables called *fvoc* (for father’s vocational training) or *mvoc* (for mothers vocational training). These new variables distinguished whether the parents had:

- *none*; which contained individuals with no vocational training so far (coded as 1);
- *vocational training*; for parents who had attained vocational training (also ‘Berufsfachschule’, ‘Meister’, ‘Ingenieursschule’ etc.) (coded 2);
- or attained *university* or ‘Fachhochschule’ (coded 3).

Finally, the information on school education was combined with the information on vocational training in two new variables indicating mother’s (*med*) and father’s education (*fed*). Like the respondent’s educational variables, the new variable for the parental education distinguishes between five categories:

- *basic* - containing individuals with only *lower* secondary education (for example ‘Volksschule’ but also ‘Realschule’) and no vocational training (coded as 1);
- *lower vocational* - consisting of the respondents with *lower* secondary education (for example ‘Volksschule’) and basic vocational training (coded 2);
- *medium vocational* – i.e., cases with for example ‘Realschulabschluss’ (medium school education) having attained vocational training (coded 3);
- *high vocational* – for respondents with university entrance diploma and vocational training (coded 4);
- and *university* – in which all cases having a university degree were coded (coded 5).

3.6 Additional variables

With the most important variables being described, there are some additional variables in the data set that were created out of the available information. These are the variable called *sibs* (indicating the number of sibs of the respondent), the variables *wmo* and *wfa* (indicating whether a respondent grew up with his/her mother or his/her father), and the variable *weight* including individual weights. The original values were used if weights were already included in the original files and set to 1 in cases they were missing. These variables were not crucial for our own analysis but may still be rather useful.

Table 16: Respondent’s number of siblings

Data set	Parent’s vocational training Variables & Variables-Label	<i>Min. – Max.</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v94 - wieviel geschwister	1 - 14

	Females: v226 -- einzelkind v227 -- wieviel schwester v228 -- wieviel brüder	1 ja 2 nein 1 - 9
Deutscher Alterssurvey	1996: v3_48 -- Keine Geschwister v3_44 -- Anzahl Brüder v3_46 -- Anzahl Schwestern 2002: w4_15 -- Keine Geschwister w4_11 -- Anzahl Brüder w4_13 -- Anzahl Schwestern	0 Hat Geschw. 1 Keine Geschw. 0 – 7 0 – 8 0 überfiltert\hat Geschwister 1 Keine Geschwister 0 – 11 0 – 8

The variables *wmo* and *wfa* were created to see whether the respondents grew up with one or both parents (or none). This seemed important as parents' education should influence their children's education mostly during early childhood. If one of the parents was not there during this time span, we acknowledged the fact that his or her education could not therefore had such an influence in the social reproduction process.

Table 17: Information on the presence of the respondent's parents

Data set	Parent's school education <i>Variables & Variables-Label</i>	<i>Response Categories</i>
Das sexuelle Verhalten von Männern und Frauen in Deutschland	Males: v147 -- vorwiegend erzogen Females: v169 -- vorwiegend erzogen	1 von beiden eltern 2 ohne vater 3 ohne mutter 4 anderen verwandten 5 einer anderen familie 6 internat heim 1 elternhaus von beiden 2 elternhaus ohne vater 3 elternhaus ohne mutter 4 bei anderen verwandten 5 einer anderen familie 6 in einem internat heim

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