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German Ageing Survey (DEAS):  
User Manual SUF DEAS 2020,  
Version 1.0

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## **1 THE GERMAN AGEING SURVEY (DEAS) – CROSS-SECTIONAL AND LONGITUDINAL DATA ON THE SECOND HALF OF LIFE**

The German Ageing Survey (DEAS), funded by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ), is a nationwide representative cross-sectional and longitudinal survey of the German middle-aged and older population. The German Centre of Gerontology in Berlin (DZA) is responsible for the conduct and ongoing development of the study. The primary goal of the DEAS survey program is to provide a representative national database containing information describing the living conditions and to study the diversity within the older section of the population, the process of ageing as it affects individuals and processes of social change as they relate to old age and ageing.

The DEAS covers a wide range of topics. The data obtained provide information on socioeconomic and demographic attributes as well as household composition, housing, family structure, social networks, psychological resources, attitudes as well as and physical and mental health. The comprehensive examination of people over 40 provides micro data for use both in social and behavioral scientific research and in reporting on social developments. The data thus provides a source of information for decision-makers, the general public and for scientific research.

Microdata of the German Ageing Survey (DEAS) are available free of charge to scientific researchers for non-profitable purposes. The Research Data Centre (FDZ-DZA) provides access and support to scholars interested in using DEAS data for their research. Data and documentations from completed DEAS waves are available by the FDZ-DZA (<https://www.dza.de/en/research/fdz>). However, for reasons of data protection, signing a data distribution contract is required before data can be obtained.

The DEAS applies a cohort-sequential design, which allows the users to analyze societal trends and individual trajectories (embedded inside societal trends) and to disentangle age effects from cohort effects. The first DEAS survey wave took place in 1996. Further waves followed in 2002, 2008, 2011, 2014, 2017 and an additional shortened paper-and-pencil questionnaire was carried out in the summer of 2020. An initially planned face-to-face interview with panel participants and a new basic sample in 2020 could not take place due to the Corona pandemic. The seventh wave of DEAS was organized in June and July 2020 with panel participants in form of a smaller written-postal survey. The main survey started in December 2020 with an extensive telephone survey of the panel participants, supplemented by a written drop-off for self-completion. A newly drawn basic sample was dispensed of. The field phase of the main survey is expected to end in mid-April 2021.

The focus of the DEAS survey, which took place between June 8th and July 22nd, centered around the affect the first wave of the COVID19 pandemic had on the everyday life and the living situations of people in their second half of life. The collection of data was, just as in the prewaves, conducted by infas - Institut für angewandte Sozialwissenschaft GmbH, Bonn.

## 1.1 Design and sampling

The DEAS uses a combination of cross-sectional and longitudinal samples. Since 1996 every six years a new baseline sample of community dwelling 40- to 85 year- olds is drawn up. The baseline samples are stratified by age group, sex, and place of residence (East- or West-Germany) and drawn from the registration office. Using cross-sectional weights to correct for this the DEAS baseline samples are nationally representative for adults aged from 40 to 85 years. Participants are interviewed personally by interviewers. Since wave 2 (2002), all panel-willing participants from the baseline samples are tracked. After the 3rd wave in the year 2008, panel members are interviewed again after three years already. Therefore, in 2011 there was only a panel sample.

The target population in 1996 was defined as German citizens residing in the community. In 2002, a comparable sample of German citizens was drawn up; in addition, a separate random sample of non-German citizens residing in Germany was set up. Since 2008, German and non-German citizens have been drawn up together from the population residing in the community in Germany.

The short PAPI survey in summer 2020 addressed all panel participants who had, a least once prior, taken part in the DEAS. The basis for the longitudinal survey in 2020 were all participants of the basic samples from 1996 to 2014 who were still available and willing for the panel. In total, valid questionnaires were available for 4,823 people aged 46 to 100. Of these, 4,228 people were last interviewed in 2017.

The SUF DEAS2020 dataset contains anonymised data from the short survey 2020. It contains information on the survey participants from the following samples:

<b>Sample 2020 by baseline year</b>	<b>n</b>
Panel respondents, B1996	539
Panel respondents, B2002	525
Panel respondents B2008	1.549
Baseline respondents, B2014	2.210
Total	4.823

The sampling design of the German Ageing Survey (DEAS) allows for different perspectives of research, e.g the option for analysis of the individual living situations and the living conditions over a period of 24 years (see Klaus et al. 2017). Furthermore, the analysis documents social changes in a particular year of sampling over this period, starting from 1996 to 2020 (see Mahne et al. 2017), as well as estimating individual trends over three to 24 years with the panel data are possible (see Vogel et al. 2019). Another perspective arises from the comparison of individual changes over six, respectively three years, in the time spans of 1996 to 2002, 2002

to 2008, 2008 to 2014 and 2014-2020. This makes cohort analysis possible that studies the comparison of trends in constant age groups for different birth cohorts. One example is the prospective comparison of the transition from work to retirement or the health change in individuals for different cohorts.

## **1.2 Topics and instruments of DEAS 2020**

The focus was put on questions regarding the immanent living situation as well as experiences of change during the first wave of the Corona pandemic in different areas of life. In order to identify possible changes, the questions were partly repeated from previous pre-waves. These included, amongst others, psychological scales of life satisfaction, loneliness, depression and experiencing of age, data regarding use of the internet, socio-demographic characteristics and subjective assessment of various areas of life. Furthermore, experiences of change and shifts in perception caused by the first wave of the Corona pandemic were targeted. Specifically, the working life, social relationships, physical activities and materialistic situation. Following subjects were highlighted in detail:

- Fears caused by the Corona crisis
- Self infection with Corona virus or in personal environment
- Situation of the household and family
- Changes in social contacts
- Received, provided and possible lack of social support
- Life satisfaction, loneliness, depression and health
- Physical activity
- Age experience and age discrimination
- Use of Internet
- Labour force participation, limitations and changes in work situation
- Material situation, standard of living, receipt of state benefits
- Sociodemographic characteristics

More information about the design, content and the process of the 2020-survey are given in the infas methodological report (infas 2020) and the questionnaire. Instruments and methodological reports of all waves of the DEAS can be downloaded via the webpages of the Research Data Centre ([FDZ-DZA](#)).

## 2 CROSS-SECTIONAL AND LONGITUDINAL WEIGHTS

### *Response rate*

After fieldwork was finished, the first data check done by infas as well as a detailed check and data cleaning by the DZA resulted in removing some interviews. This happened when there was evidence that the questionnaire was not completed by the target person. In the end, there were 4.823 valid cases left for analysis. The response rate of the panel sample reaches 56,5 percent of the adjusted gross sample. It is comparable with the response rate of other longitudinal studies on similar age groups (Blom & Schröder, 2011: 57), but lower than in the face-to-face oral interview of the previous DEAS wave in 2017

### *Data weighting*

Infas calculated the data weighting. This took place in close coordination with the DEAS-team. The chosen procedure corresponds to the familiar methods of all panel studies.<sup>1</sup>

Basis of the *longitudinal weighting* were statistical default models (logistical regression) for the determination of the probability participation for the present and the future survey (excluded panel respondents who died meanwhile), using a small range of Boolean predictors (see infas 2020: chapter 8.1). To construct the longitudinal weights of the face-to-interviews the multiplying of the cross-sectional weighting of the first wave is calculated by the reciprocal of the participation probability in the next wave. This method has been done for all waves since 2002. In the Scientific Use File for the DEAS 2020 (short survey), the variable *ls17\_20* contains this longitudinal weight. Combining the wave-specific probability participation longitudinal comparisons are possible (for details, see infas 2018: chapter 7.1). The Scientific Use Files of the survey waves do not include neither the longitudinal weighting variables nor the variables of the reciprocal values. The variables are retrieved in a separate file which is only available for registered users.

Since 2002 an *integrated cross-sectional weight* has been done. To achieve this, each of the subsamples of a wave has been integrated to a collective cross-sectional sample. The subsamples represent (a) returnees (“Wiederteilnehmende”), (b) respondents with nonresponse in the wave before (“Rückkehrer nach temporärerem Ausfall) und (c) new respondents (“Erstbefragte”). Weighting for the integration is the real cross-sectional weighting of the base sample and for returnees of the previous wave the longitudinal weighting of the present wave. For the returnees with temporary nonresponse two default models have been calculated on the base of auxiliary module: statistical default model and statistical model of return (for details see infas 2020: chapter 8.2). The weighting of the three subsamples have been combined by composite weighting (“Konvexkombination”) to an integrated cross-sectional

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<sup>1</sup> for details, see Hammon et al. 2016; Trappmann 2014; European Central Bank 2016

weighting (“Querschnittsgewicht”) by multiplication the individual initial weight and the relative share of the subsample in the sample.

The integrated cross-sectional weighting of a wave are the basic distributions reveals in the micro-census of a particular year. The post-stratification is reported with iterative proportional fitting according to the indicators \*age\*gender\*federal states. Due to the relatively low numbers, respondents from the age 91 and upwards, were not given post-stratified cross-sectional weightings until 2017. In the Scientific Use File for the DEAS 2020, the variable *qsps\_20\_u91* includes this integrated cross-sectional weighting. A post-stratified cross-sectional weighting lacking age restriction, as well as the integrated cross-sectional weighting without poststratification are available in a separate file for registered data users.

Using the panel weights is the responsibility of the individual user. The data weighting shows one of different possibilities for solving the problem of selective panel mortality. The cross-sectional representations is recommended to use descriptive presentation and statements.

### **3 DATAFORMATS**

The Scientific Use File (SUF) 2020 as well as the SUF Meta (see chapter 5) are available in SPSS- and Stata-data format. If problems occur, please contact FDZ-DZA ([fdz@dza.de](mailto:fdz@dza.de)) for advice.

### **4 CLASSIFICATION OF VARIABLE NAMES AND MISSING CODES IN DEAS 2020**

The new statistical classification of naming variables, introduced in 2008 (wave 3), has been maintained for further waves, so for the 2020 survey as well. In the first two waves the variables were coded in the logic of a card scheme<sup>2</sup>. Since wave three, the variables are coded on the basis of the question number. The question number is concurrently thematically grouped (for example all questions regarding the family situation are coded with 300) which makes it easier for the user to get along with the data as well as writing the analysis syntax.

The variables of the short survey of the year 2020 start with a “j” as a wave marker, followed by a “p” to indicate the type of survey (paper questionnaire).

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<sup>2</sup> For example: question 101 in the oral interview of wave 2 in 2002 (asking for the occupational status; code “w”) was placed on the second position at card 14 (labeled as *w14\_12*).



The following number is then the question number. Multiple answers or answering options are differentiated using a serial numeric ending (for example *jp1\_1*, *jp1\_2*, etc.). Open specifications are indicated by the suffix “o” (*jp47\_24o*).

An entire overview of all variable names ever used in DEAS data can be found in the variable correspondence list on the web page on [documentation](#) of the FDZ- DZA. Basic values of all variables of the SUF DEAS 2020 including all labels and missing values can be found on the same web page in the codebook 2020.

The labeling of missing codes was basically altered in the DEAS wave 4 compared to previous waves. The new coding facilitates the automatic definition of missing values and harmonizes the reasons and specification for non-valid information.<sup>3</sup>

In the following table all codes for missing values are described:

Value in SPSS	Value in Stata	Label [description]
-1	.a	declined
-2	.b	don't know
-3	.c	filtered
-4	.d	not asked (sample) <i>[if question is either posed to panel respondents or baseline sample respondents; does not apply in 2020]</i>
-5	.e	no drop-off <i>[does not apply in 2020]</i>
-6	.f	no answer <i>[without closer differentiation]</i>
-7	.g	deleted
-8	.h	double entry <i>[if not deleted before]</i>

Generally the missing-codes were valued as missing values. It is recommended to carry out a frequency count for the values before using them for further analyses.

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<sup>3</sup> Missing values in previous waves were coded as 0, -1, -2 or as 7, 8, 9 or 97, 98, 99 respectively. A consistent definition of missing values for all variables in one data set was therefore not possible.

## 5 META-DATA ON PARTICIPATION HISTORY, DROP-OUT REASONS AND MORTALITY OF DEAS RESPONDENTS

For easier using and overview the research data center provides sets of meta-data as an overview of the participation history of the respondents. The meta-data file contains information about all persons that have ever participated in any of the survey questionnaires. It is easier to merge data sets and to analyse continuance. The following table shows all variables contained in the data set (date: February 2021):

Variable	Label	Description
fallnum	Case number (first digit for initial interview wave)	To merge information from all SUFs (1996- 2014)
stich	Sample ID	Baseline sample of respondent
part_96	Participation 1996	Yes; no
part_02	Participation 2002	Yes – baseline sample 2002; yes – foreigner sample 2002; yes – panel; no
part_08	Participation 2008	Yes – baseline sample 2008; yes – panel; no
part_11	Participation 2011	Yes – panel; no
part_14	Participation 2014	Yes – baseline sample 2014; yes – panel; no
part_17	Participation 2017	Yes – panel; no
part_20	Participation 2020 (Short survey)	Yes – panel; no
part	Participation profile, Status 2014	Shows in which survey year respondent was interviewed
lastpart	Last participation	Year of last participation
n_obs	Number of participation	Number of individual participation (1-7)
entry	Year of entry	Year of first interview
yob	Year of birth	Year of birth (possibly updated after plausibility check)
gender	Gender	Male; female
natdeutsch	German citizenship	Feature of the first interview: German, non-German

Variable	Label	Description
migrat	Migratory background	No migratory background, Immigrated, Migratory background, not immigrated
bildung4	Level of education, 4 categories	determined from highest level of education and vocational training: low, medium, high, high
isced	Level of education by ISCED, 3 categories	low (ISCED 0-2), medium (ISCED 3-4), high (ISCED 5-6)
bland_96 – bland_20	Federal State	16 different federal states of Germany
westost_96 – westost_20	East-West-Assignment (place of residence)	Former FRG (incl. Berlin-West), Former GDR (incl. Berlin-Ost)
westost_20neu	Est-West-Assignment (Berlin=East)	Western States, Eastern States (incl. Berlin)
fiktiv_kreis_96 – fiktiv_kreis_17	Fictional number of district	The real district numbers (since 31.12.2013) were replaced with a fictional number; this number can be used for multilevel analysis
bbsr_kreistyp96 – bbsr_kreistyp20	Type of district	Urban-rural typology (4 categories)
rlc2002_kat	Return code 2002	Reasons for not participating in wave 2 (or code for participation)
rlc2008_kat	Return code 2008	Reasons for not participating in wave 3 (or code for participation)
rlc2011_kat	Return code 2011	Reasons for not participating in wave 4 (or code for participation)
rlc2014_kat	Return code 2014	Reasons for not participating in wave 5 (or code for participation)
rlc2017_kat	Return code 2017	Reasons for not participating in wave 6 (or code for participation)
vitalstatus_last	Last known vital status	Notes if person is dead (0) or alive (1)
vitalstatus_source	Year of last information on vital status	Either year of survey field work or year of address update (including information from registration offices)
surv_birth	Survival period in months	Months since birth until death or end of observation

Variable	Label	Description
surv1996	Survival period since interview 1996	Months since interview 1996 until death or end of observation
surv2002	Survival period since interview 2002	Months since interview 2002 until death or end of observation
surv2008	Survival period since interview 2008	Months since interview 2008 until death or end of observation
surv2011	Survival period since interview 2011	Months since interview 2011 until death or end of observation
surv2014	Survival period since interview 2014	Months since interview 2014 until death or end of observation
surv2017	Survival period since interview 2017	Months since interview 2017 until death or end of observation

Especially the development of a longitudinal data set is facilitated by using the Meta dataset. Furthermore information on drop-outs and on participation in panel questionnaires make the mortality and failure analyses possible. Data users who want to analyse reasons of panel attrition may contact the research data centre FDZ-DZA to get more details about return codes.

## 5.1 Profile of participation

The variable *part* combines information on all seven DEAS surveys. All respondents get a seven decimal places: 1111111 for example shows that this person participated in all DEAS waves, respondents with the number 0100111 were firstly asked in 2002, declined to participate in 2008 and in 2011 and then answered the questionnaire again in 2014, 2017 and 2020. The sample to be analysed can be easily compiled with the help of variable *part*. If somebody wants to conduct a longitudinal analysis for example, it can be made by means of the variable *n\_obs*. The personal information from the SUFs 1996, 2002, 2008, 2011, 2014, 2017 and/or 2020 can be added to the selected cases with the help of the personal identifier *fallnum*. If you have any questions in using this Meta dataset please consult the FDZ: [fdz@dza.de](mailto:fdz@dza.de).

## 5.2 Data on survival of respondents

All respondents were contacted by the field research institute before the next panel questionnaire as well as in panel maintenance or in a special survey of whereabouts of previous respondents. This was done to record the recent vital status. In case of death the exact date of death was detected by the registration office. The variable *vitalstatus\_last* indicates the last known vital status of all DEAS respondents (0=alive, 1=dead). Respondents

that were only interviewed once and were not willing to participate again maintain the status they had at the first interview. Otherwise the last information booth is used. Variable *vitalstatus\_source* contains the calendar year from which we know the last known vital status. Variable *surv\_birth* contains the number of months since birth until death or last known survival status. Variables *surv\_birth*, *surv1996*, *surv2002*, *surv2008*, *surv201*, *surv20141* and *surv2017* (survival since the respective date of interview) – together with the variable *vitalstatus\_last* (death or censoring indicator) - enable to do survival analysis of the risk of death.

Variables *rlc2002\_kat* to *rlc2017\_kat* give the return codes of all respondents who were selected to be part of the panel samples for the DEAS surveys in 2002 up to 2017. The return codes are categorized and provide information if the target person could be interviewed or not. If there was no interview possible, reasons for that are listed. Interviews that were deleted later in the process of data cleaning get code 6.

## **6 APPLIED MEASURES TO ANONYMIZE DATA IN THE SUF**

To ensure the factual anonymity of respondents, some variables are not included in the SUF 2020. Other variables are oversimplified in some characteristics:

- Some variables with information on the regional context are deleted because in some cases it might be possible to determine the living area of the respondent. Also deleted are information on birthday and month of birth of respondents.
- Some variables with open answer option are deleted or specific answers were generalized. Such changes at open answers were marked with the sign #.
- Rare demographic characteristics of family formations were oversimplified. The few people with the attribute “civil union” are assigned to the category “married, living together with spouse”.
- Rare year specifications were merged to categories. This was done by generating a new categorical variable or by recoding this value in an existing numerical variable to the next value (with the appropriate designation of the value labels).
- Top-coding of maximum values (for example number of siblings, household size).

There are secured PC workplaces available for guest researchers within the DZA. Please contact the consulting of the FDZ ([fdz@dza.de](mailto:fdz@dza.de)) if you want to conduct research using the full DEAS data to do research on the level of districts or including some context characteristics of the immediate neighborhood for example.

## 7 GENERATED VARIABLES

There are various generated variables added to the Scientific Use File (SUF) DEAS 2020. This helps to compare constructs over time and with other data sources and simplifies the entry into the data analysis. If you need the syntax files for the generated variables, please contact the FDZ: [fdz@dza.de](mailto:fdz@dza.de) and get registered.

Overview of generated variables in the SUF DEAS 2020 (date: March 2021)

Variable	Label	Available for the years					
		1996	2002	2008	2011	2014	2017
fallnum	Case number (first digit for initial interview wave)	x	x	x	x	x	x
stich	Sample identification	x	x	x	x	x	x
qsps_20_u91	Integrated cross-sectional weight, post-stratified	x <sup>1</sup>	x	x	x	x	x
part_96	Participation 1996	x	x	x	x	x	x
part_02	Participation 2002	-	x	x	x	x	x
part_08	Participation 2008	-	-	x	x	x	x
part_11	Participation 2011	-	-	-	x	x	x
part_14	Participation 2014	-	-	-	-	x	x
part_17	Participation 2017	-	-	-	-	-	x
natdeutsch_20	Nationality in initial interview <sup>3</sup>	x <sup>1</sup>	x	x	x	x	x
migrat_20	Migratory background <sup>3</sup>	-	x	x	x	x	x
westost_20	Western or eastern part of Germany (with division of Berlin)	x	x	x	x	x	x
westost_20neu	Western or eastern part of Germany (Berlin=east)						
bland_20	Federal state	x	x	x	x	x	x
bbsr_kreistyp_20	Type of district	x	x	x	x	x	x
alter_20	Age (year of interview minus year of birth)	x	x	x	x	x	x
altervoll_20	Consummate age at interview	x	x	x	x	x	x
bildung4_20	Level of education, 4 categories <sup>3</sup>	x	x	x	x	x	x
iscsed_20	Level of education by ISCED, 3 categories <sup>3</sup>	x	x	x	x	x	x
erw_20	Main employment status	x	x	x	x	x	x
partner_20	Existence and type of partnership	x	x	x	x	x	x
depressive_20 <sup>4</sup>	Depression Scale (CES-D, Hautzinger)	x	x	x	x	x	x
lone6_20	Scale for Loneliness (DeJong & Gierveld)	x	x	x	x	x	x

Variable	Label	Available for the years					
		1996	2002	2008	2011	2014	2017
lz_20	Life satisfaction Scale (Pavot & Diener)	x	x	x	x	x	x
atoa_20	Subjective ageing experience scale			x <sup>5</sup>		x <sup>5</sup>	x <sup>5</sup>

- 1) In previous waves a differently named variable keeps information on German nationality.
- 2) 1996: ISCO68 codes; 2002-2011: ISCO88 codes.
- 3) Information given in the starter interview
- 4) In short survey 2020 as 10-item sum score, otherwise as 15-item sum score
- 5) Items available to form the scale variable

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The generated variables are described in the following.

### 7.1 Identification number

The variable *fallnum* contains a respondent's code number, which differs from the original ID of the interviewed person. It is a seven-digit number: the first three digits show the wave on which the person participated the first time (B1996: 100, B2002 and A2002: 200, B2008: 300, B2014: 400). The last four digits are the actual respondent's code numbers. All respondents keep their code number from the first survey for all upcoming surveys. By using the ID-variable *fallnum* the different datasets of a person can be combined longitudinally.

### 7.2 Sample

The variable *stich* marks the sample's origin and the year of the first interview. Possible values are 1 to 4 (1 = person origins in baseline survey 1996; 2 = from baseline 2002; 3 = from baseline 2008; 4 = from baseline 2014).

### 7.3 Weighting

The variable *qsps\_20\_u91* contains the post-stratification cross-sectional weighting for all interviewees up to the age of 90. The weighting is normed by the number of cases (arithmetic mean=1). The basis of the poststratification is a special evaluation of the microcensus on the population at the place of main residence. It is differentiated according to birth cohort groups, gender and part of the country (west, east). The use of cross-sectional weightings are provided for descriptive analysis.

More Information on constructing the panel weights is available in chapter 2.

## 7.4 Longitudinal participation

The variables *part\_96*, *part\_02*, *part\_08*, *part\_11*, *part\_14* and *part\_17* show if a respondent of the year 2017 has also participated in an interview in 1996, 2002, 2008, 2011 and/or 2017 and if the participation in a previous wave has been the first interview (code 1) or a follow-up survey (code 2).

## 7.5 Nationality

The variable *natdeutsch\_20* informs about the nationality of interviewees of the baseline sample; it shows whether the person owns the German nationality. The information dated back from the self-reported data of the interviewees to their nationality which is recorded only for the baseline sample. The nationality of the panel participants, if required, is to be taken from their first measuring time. Up to baseline 2008 information about the citizenships were given by the registration office.

## 7.6 Migration background

The DEAS-generated variable *migrat\_20* covers the migration background of interviewees of the baseline sample. Three different groups are distinguished: People without migration background, people with migration background and an own migration experience (i.e. migration to Germany) as well as people with migration background but without an own migration experience (i.e. born and grew up in Germany). Therefore the details of the first interview about nationality, place of birth, year of immigration, possession and year of acquisition of the German or a foreign nationality or the migration experience was used. Immigration before 1950 does not count as migration background. Those, who are born in the former eastern regions or the 'German Reich', immigrating to the FRG or GDR after 1949 are counted as people with migration background.

## 7.7 East-West allocation and Federal States

Based on the current residential address infas carried out an assignment to the region of the former federal territory (before German re-unification including the western parts of Berlin) or the former East Germany (including the eastern parts of Berlin) in variable *westost\_20*. In the variable *westost\_20neu*, all respondents living in Berlin have been assigned to the eastern part of the country.

The variable *bland\_20* shows in which federal state the respondent's place of residence is located.



## 7.8 District types

Variable *bbsr\_kreistyp\_20* contains the urban-rural type of district, the interviewees live at the time of the interview. The typology is provided by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR 2012). Based on several structural characteristics of the settlements four district types are distinguished (see BBSR 2012 and <https://www.inkar.de/>).

## 7.9 Age

The variable *alter\_20* contains the age reached in the year of data collection as a difference between year of birth and year of the survey. The variable *altervoll\_20* derived from the date of birth indicates the completed year of age on the day of interview.

## 7.10 Education

The Scientific Use File contains two variables to the educational level. Based on information to the general and professional education at school and vocational training, especially for the achieved level, a 4-stage variable about the educational level are offered (*bildung4\_20*). In addition, a 3-stage educational construct is made (*isced\_20*), referring to the ISCED categories (Internationally Standard Classification of Education). Kind of educational information collected depends on the place of education (in Germany or abroad).

### *4-stage level of education*

The allocation to variable *bildung4\_20* follows this systematic:

Level 1 (low)	Respondents without completed vocational qualification and up to a maximum of a graduation degree, which qualifies for a professional qualification
Level 2 (medium)	Respondents with vocational qualifications or qualifications for university or university of applied science entrance
Level 3 (sophisticated)	Respondents with finished upgrading training (professional, master craftsman or technical school, university of cooperative educations or academies)
Level 4 (high)	Respondents with completed university studies (university or university of applied science)

### 3-stage level of education following the ISCED-Scale

The allocation to variable *isced\_20* occurs following this systematic:

Level 1 (low)	ISCED 0-2; Respondents without completed vocational qualification and up to a maximum of a graduation degree, which qualifies for an professional qualification
Level 2 (medium)	ISCED 3-4; Respondents with vocational qualifications (including professional upgrading training) or qualifications for university or university of applied science entrance
Level 3 (high)	ISCED 5-6; Respondents with completed university studies (university or university of applied science)

### 7.11 Occupational status

Variable *erw\_20* distinguishes three groups:

- (1) Employees (without employed pensioners); these are people who, in question 50, answer that they are employed full-time or part-time or irregular, marginally employed or working in a secondary job (and not receiving a pension).
- (2) Retired people; these are people, who in question 49, answered to receive an old-age pension or a disability pension. The placement in this category follows, regardless of a possible gainful employment when retired (see question 60), since the main status is recorded in *erw\_20*.
- (3) Other non-employed people; these are people who are not in gainful employment but have not yet retired.

### 7.12 Partnership

Variable *partner\_20* informs about the type of household and partnership. Categories are having no partner, living with a partner in the same household and having a partner who does not live in the respondent's household (living apart together).

### 7.13 Depressiveness

We use the short form of the German translation of the CES-D (Center for Epidemiologic Studies Depression) Scale (Hautzinger & Bailer, 1993). The scale in the short survey is based

on 10 items. This scale deviates from the main DEAS survey (otherwise 15 items). The value of the scale is the sum over 10 items. First, a mean score is generated when at least 8 items have valid values. This mean score is then multiplied by 10 to get the sum score with a value range 0 to 30. High values of variable *depressiv\_20* indicate higher depressive symptoms

### **7.14 Loneliness**

We use the short version with 6 items (question 26 of the drop-off) of the original scale to measure loneliness (De Jong Gierveld & Van Tilburg, 2006). The value of the scale is the mean value of the six items. At least three of the six items must contain valid values. High values of variable *lone6\_20* indicate a high level of loneliness.

### **7.15 Life satisfaction**

The scale to measure life satisfaction is based on five items of question (Pavot & Diener, 1993). At least three of the five items require valid values to calculate the mean value. High values of variable *lz\_20* indicate a high level of life satisfaction.

### **7.16 Attitudes towards own ageing**

Basis for the scale variable *atoa\_20*, constructed according to Lawton (1975), are the five items highlighted in question 46. It contains the mean of the item values. Positive attitudes on own ageing are coded in a high value. At least three of the five items require valid values to calculate a scale value with a value range from 1 (negative) to 4 (positive).

## **8 OTHER**

### **8.1 Codebook DEAS2020**

The Codebook of the SUF DEAS 2020 containing all specifications, labels and frequencies of all variables as well as further documentation is available on the [website](#) of the FDZ-DZA.

## 8.2 Regional data

Information and characteristics on the level of countries and independent cities can be merged to the data. The Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) provides information on indicators of the regional level via its system called INKAR. An overview of all available characteristics is provided by the list of indicators of the [BBSR](#).

Registered users can get some selected indicators as data file that can be merged to the survey data after consulting the FDZ-DZA. Full indicators can only be merged to the data at a specifically protected computer workplace at the DZA. Please contact the [FDZ-DZA](#) for more information.

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