

NEPS SURVEY PAPERS

Melanie Olczyk and Gisela Will
MEASURING KNOWLEDGE ABOUT THE GERMAN EDUCATION SYSTEM IN NEPS

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# Measuring knowledge about the German education system in NEPS 

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# Measuring knowledge about the German education system in NEPS 


#### Abstract

A good understanding of the education system is a central precondition for navigating the school system effectively and giving children and teenagers the support and guidance they need. Hence, insufficient or incorrect knowledge could be one reason for social and ethnic disparities in academic achievement and attainment. To test this hypothesis, we developed items measuring knowledge about the German education system and implemented these in four NEPS Starting Cohorts. In this paper, we describe theoretical assumptions, present the knowledge measurements for each NEPS cohort, and report first empirical results such as univariate distributions and correlations.


## Keywords

Knowledge, education system, inequalities, immigrants

## 1. Introduction

Social and ethnic disparities in educational attainment and competence development continue to be pronounced throughout the educational career (e.g., Linberg, Schneider, Waldfogel, \& Wang, 2019; Olczyk, Seuring, Will, \& Zinn, 2016; Rözer \& van de Werfhorst, 2017). In this paper, we concentrate on one strand of explanation for these systematic differencesnamely, knowledge about the educational system. Knowledge about, for example, alternative pathways and regulations may vary between children and parents of different social as well as immigrant origin. This may lead to the observable systematic group differences in educational success.

Whereas wrong or missing information is often assumed to be one reason for social and ethnic educational differences, there are only a few empirical findings based on objective measurements of that knowledge. To close this gap, we worked together with colleagues in the research unit Educational Decisions and Social Inequality ${ }^{1}$ and developed several instruments measuring the knowledge of students and their parents. We then implemented these instruments in the first four NEPS Starting Cohorts. In this way, NEPS data offers an opportunity to study the impact of knowledge on the educational career and competence development even in the long term.

In the following, we start with a short introduction to the general theoretical assumptions underlying the item development process (see section 2 ). In the next two sections, we introduce the measurement of general strategic knowledge (section 3) and transition-specific knowledge (section 4). In both sections, we describe instruments and present empirical results from Scientific Use Files and, if available, from cognitive interviews and audio recordings. ${ }^{2}$ Finally, we outline possibilities for further developments (section 5 ).

## 2. Theoretical assumptions and basic considerations

### 2.1 Theoretical assumptions

There are several approaches to explaining educational inequalities between social and immigrant groups (see for overviews, e.g., Diehl, Hunkler, \& Kristen, 2016; Kristen \& Dollmann, 2012; Stocké, Blossfeld, Hoenig, \& Sixt, 2019). We focus on explanations highlighting the role of resources. Several resources such as economic, human, or social capital can be differentiated. The stock of knowledge about the educational system refers particularly to the concept of cultural capital (see, e.g., Bourdieu, 1983, 1986; Bourdieu \& Passeron, 1977; Lareau \& Weininger, 2003).

From the perspective of the resource approach, educational inequalities are the result of unequally distributed resources. Hence, individuals vary in the quantity and quality of the available resources that may be productive for education. Especially migrant families may lack knowledge about the educational system because they passed through the educational

[^0]system of their country of origin, and they lack experience of the education system in their receiving country (e.g., Kretschmer, 2019; Kristen \& Granato, 2007).

Linking the resource approach to a broader theory of action may help to explain systematic educational inequalities between ethnic and social groups by deriving precise predictions on how individuals will decide under certain conditions. Studies of educational inequalities often refer to a rational choice approach that can be applied to competence development and educational decisions at central transition points (see, e.g., Breen \& Goldthorpe, 1997; Dollmann, 2010; Erikson \& Jonsson, 1996; Esser, 1999, 2006; Kristen, 2005; Roth, 2014). We argue that individuals decide whether or not to invest in education and competence development. To arrive at concrete predictions, the mechanisms regarding how a specific knowledge influences the investment decisions of individuals and their families can be linked to the parameters of the theoretical model: namely, motivation, costs, and the probability of success. Specifying underlying mechanisms is essential when developing items with which to measure the respective knowledge.

We distinguish between general cultural knowledge and specific knowledge about the education system, also called strategic knowledge (see Pfeffer, 2008, p. 545). We focus particularly on strategic knowledge. Additionally, we differentiate between knowledge specific to certain transition points as well as general strategic knowledge that is relevant independently from specific transition points.

Because we wanted to implement our measurements of knowledge in the first four NEPS Starting Cohorts, we had to cover partly different knowledge aspects in line with the respective transition points. Different knowledge can then lead to different assessments of the alternatives and ultimately to different educational decisions at these transitions. Moreover, this knowledge can also be linked to differences in competence development: A lack of strategic knowledge regarding specific transitions can then be interpreted as indicating a lack of general cultural knowledge that may lead to varying learning environments and, hence, to differences in cognitive stimulation.

### 2.2 Basic considerations and measurement timepoints

We developed questions measuring objective knowledge in the first four NEPS Starting Cohorts, namely Starting Cohort 1 (newborn), Starting Cohort 2 (Kindergarten), Starting Cohort 3 (Grade 5), and Starting Cohort 4 (Grade 9). Table 1 gives an overview of the measurement timepoints and the person from whom information was gathered-namely, the parent, the target, or both (see last column).

In general, we measured the knowledge before central transition points in preschool and the school career to allow us to study the causal link between transition-specific knowledge and the final decisions. However, these measurements also allow links to the competence development of the children.

Because responsibility for education in Germany lies within the jurisdiction of each single federal state (Bundesland), regulations regarding the transitions (and the timepoint of transition itself) can differ widely. Nonetheless, we aimed to develop and implement questions that would be applicable nationwide and not just in certain federal states. This approach made it easier to determine which answer was correct or false. Sometimes it was not possible to develop questions that would be valid nationwide because of (substantial) differences
in alternatives and regulations between federal states. Such exceptions are named in each respective section.

Table 1
Overview of timing of knowledge measurements

| Starting <br> Cohort | Wave [Year] | Stage | Age/Grade of <br> target | Measured by: Par- <br> ent or Target |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $2[2013]$ | Newborn | 14 months | P |
| 2 | $5[2016]$ | Newborn | Elementary school | Grade 3 |

Notes. $P$ stands for parent and $T$ for target. Measurement timepoints are reported only for studies that have been carried out already. Planned measures are not displayed because of uncertainty.

## 3. Measuring general strategic knowledge

### 3.1 Instruments

We assume that a systematic over- or underestimation of the importance of certificates in the labor market should influence - via willingness and motivation - competence development, grades, finally reached certificate, and - in the early preschool cohort - the school type selection process. It is plausible to assume that this correlation should be valid at different strengths within each cohort.

We measured general strategic knowledge with questions referring to the knowledge about school-leaving and vocational qualifications required for selected jobs (see Table 2; for the original German versions, see Appendixes 5, 7, 8, 9, 10, 11, and 12). ${ }^{3}$ The introduction to these items can vary between cohorts as well as between target and parent interviews due to varying positions in the questionnaire and, thus, varying previous questions making it necessary to modify the introduction to the knowledge items.

[^1]
## Table 2

Knowledge about school-leaving and vocational qualifications required for selected jobs

| Question | Answer option | Correct answer |
| :---: | :---: | :---: |
| Different occupations or vocational trainings require different school-leaving qualifications. I am going to name various occupations. Please tell me which school-leaving qualification most people have who enter this occupation nowadays in Germany. If you don't know, you can also say so. |  |  |
| What school-leaving qualification do most people have nowadays who enter the occupation of a salesperson in Germany? | No school-leaving qualification <br> School-leaving certificate of the Hauptschule <br> School-leaving certificate of the Realschule/certificate of intermediate secondary education <br> Abitur <br> Don't know | School-leaving certificate of the Hauptschule |
| What school-leaving qualification do most people have nowadays who enter the occupation of a pharmacist in Germany? | No school-leaving qualification <br> School-leaving certificate of the Hauptschule <br> School-leaving certificate of the Realschule/certificate of intermediate secondary education <br> Abitur <br> Don't know | Abitur |
| And what about the occupation of a banker? | No school-leaving qualification <br> School-leaving certificate of the Hauptschule <br> School-leaving certificate of the Realschule/certificate of intermediate secondary education <br> Abitur <br> Don't know | Abitur |

$\left.\begin{array}{llll}\hline \text { And what about the occupation of an optician? } & \begin{array}{l}\text { No school-leaving quali- } \\ \text { fication }\end{array} & \begin{array}{l}\text { School-leaving certif- } \\ \text { icate of the Re- } \\ \text { alschule/certificate } \\ \text { School-leaving certifi- } \\ \text { cate of the Hauptschule } \\ \text { oftermediate sec- } \\ \text { ondary education }\end{array} \\ & \begin{array}{ll}\text { School-leaving certifi- } \\ \text { cate of the } R e-\end{array} & \\ & \text { alschule/certificate of } \\ \text { intermediate secondary } \\ \text { education }\end{array}\right]$

| And what about a tax consultant? | No vocational training | Completed vocation- <br> al training |
| :--- | :--- | :--- |
|  | Completed vocational |  |
| training |  |  |
|  | Tertiary education |  |
|  | Don't know |  |

Note. Questions based on the parent questionnaire for Starting Cohort 4, Wave 3.
When developing these questions, we followed the approach taken by two previous studies: the Immigrant's Children in the German and Israeli Educational Systems (e.g., Kilter, Kogan, Kristen, Levin-Epstein, \& Shavit, 2013; Roth, 2014) and the project Bildungsprozesse, Kompetenzentwicklung und Selektionsentscheidungen im Vor- und Grundschulalter (BiKS; educational processes, competence development and selection decisions in preschool- and school age) (Artelt, Blossfeld, Faust, Roßbach, \& Weinert 2013). ${ }^{4}$ In the study Immigrant's Children in the German and Israeli Educational System, information on this kind of knowledge is gathered from students in Grades 9 and 10 and their mothers as well as from mothers of students attending Grade 4. In the BiKS study, data on this kind of knowledge is gathered from parents (Wave 5, Grade 6; BiKS 8-14) and students (Wave 6, Grade 7, BiKS 8-14).

We modified the knowledge measurement of these studies in substantive ways:
(1) With respect to the stimulus, we referred to most people entering a specific job instead of the required degree. To avoid mixing up answers referring to the officially required degree and answers referring to the required degree that is empirically observable, we separated these two possibilities. In Germany, for example, a lower secondary education (Hauptschule) is officially sufficient for most occupations requiring a vocational training. In the case of dual training, employers are even free to hire persons without school leaving qualification. However, empirically, it can be the case that Abitur is the entrance standard for certain jobs. Because it is the actual condition that should be central to an individual decision, we preferred this aspect.
(2) Furthermore, we referred to persons who currently enter the selected job. This specification with respect to the timeframe was missing in the initial version. Thus, we gave a precise empirical reference and, hence, the possibility to decide whether the answer was right or wrong at this time.
(3) The third change addressed the response categories. In these questions, we referred to both school-leaving certificates and vocational qualifications. The initial version mentioned only vocational qualifications. Here, we assumed that variations in the stock of knowledge would pertain to both school and vocational qualifications.
The selected jobs had to meet several criteria: First, we wanted to attain a variety with respect to the required school and vocational degrees. Another important criterion in this context was that the training path on which an occupation can be acquired is uniquely clear (either only through vocational training or only through university studies). Furthermore, we considered only occupations practiced equally by male and female individuals and that receive relatively high attention. Finally, we also tried to make it possible to link up with the previously named other studies. That is why we also partially considered the same occupa-

[^2]tions. This led us to select five occupations: salesperson, pharmacist, banker, optician, and tax consultant.

In addition to common, traditional educational pathways in Germany, there are further ways to achieve certain qualifications through nontraditional paths such as a Fachhochschulreife, an entrance qualification for studies at a university of applied sciences. However, we chose traditional qualifications so that we could assign them to the empirical reference in the coding process and guarantee a certain level of discriminatory power. Therefore, we decided to use four school-leaving (including no qualification required) and three vocational degrees (including no qualification required).

We deliberately gave the interviewed persons the option to use the response category don't know to prevent them from guessing answers. Moreover, we did not want interviewed persons to feel uncomfortable about not knowing an answer. In a similar vein, parents who did not know an answer or refused to answer twice in a row were filtered to the next question block.

Besides gathering information on knowledge about selected occupations, we also collected data on knowledge about the school-leaving and vocational qualifications required for both the idealistic and the realistic career aspirations of the children in Starting Cohorts 3 and 4 (see Table 3; for the original German version, see Appendixes 8 and 11). When developing these questions, we again followed the approach taken by the BiKS study (Artelt, Blossfeld, Faust, Roßbach, \& Weinert, 2013b; student questionnaire, Waves 5, 6, and 7). However, we again have made key changes: Wheras in BiKS, the question was which school [vocational] qualification is required for the occupation named, in NEPS we asked which school [vocational] qualification most people have who enter the occupation.

Table 3
Knowledge about school-leaving and vocational qualifications required for idealistic and realistic career aspirations

| Question | Answer option |
| :---: | :---: |
| Imagine you could be whatever you want. What would be your favored occupation? |  |
| What school-leaving qualification do most of those people have, who enter the career specified by you in question $X$ [above] $X$ in Germany today? | No school-leaving qualification <br> School-leaving certificate of the Hauptschule <br> School-leaving certificate of the Realschule / certificate of intermediate secondary education <br> Abitur <br> Don't know |
| And what vocational qualification do most of those people have, who enter the career specified by you in question X[above]X in Germany today? | No vocational training <br> Tertiary education <br> Full-time school-based vocational training (e.g., attending a Fachschule [school for continuing vocational training]) <br> Apprenticeship/firm-based vocational training Don't know |


| Based on everything you currently know, what occupation will you most likely have later on? |  |
| :---: | :---: |
| What school-leaving qualification do most of those people have, who enter the career specified by you in question $X$ [above] $X$ in Germany today? | No school-leaving qualification <br> School-leaving certificate of the Hauptschule <br> School-leaving certificate of the Realschule / certificate of intermediate secondary education <br> Abitur <br> Don't know |
| And what vocational qualification do most of those people have, who enter the career specified by you in question $X$ [above] $X$ in Germany today? | No vocational training <br> Tertiary education <br> Full-time school-based vocational training (e.g., attending a Fachschule [school for continuing vocational training]) <br> Apprenticeship/firm-based vocational training Don't know |

Note. Questions based on the target questionnaire of Starting Cohort 4, wave 5.
In order to analyze the general knowledge measurements, it was essential to code whether the respondents gave the correct or wrong answer. This made it necessary to compare the respondents' answers with an adequate empirical benchmark for the distributions of school and vocational qualifications among entrants to these occupations. ${ }^{5}$

In the following, we briefly outline the approach for identifying correct answers. Determining the empirical reference for the vocational qualifications was relatively easy, because the vocational qualification corresponds to the type of training in which this occupation is learned (vocational training or university study). When selecting occupations, we ensured that they could be trained through only one of these forms of training to avoid blurring. It was also easy to determine the school-leaving qualification for an occupation that can be entered generally after university studies, because this requires a university entrance qualification. For occupations reached mainly through vocational training (dual vocational system or full-time schooling), the situation is more complex, because school-leaving qualifications can vary between different occupations and also over time within the same occupation. Thus, we needed information about the school-leaving or vocational qualification of most people who are currently enter this occupation in Germany separated for each occupation and for each year. The basis for this empirical reference was two official statistics documenting the school-leaving degrees of people starting a certain dual vocational training (provided by the Bundesinstitut für Berufsbildung, $B I B B$ ) or people beginning a training with full-time schooling (provided by Statistische Landesämter) in a specific (school) year. To gain access to data compiled by the Statistische Landesämter, we had to ask the permission of each of the 16 Statistischen Landesämter. At the end, we obtained no data from four Bundes/änder namely Bremen, Saarland, Saxony, and Saxony-Anhalt. The next step was to identify the (German-wide) modus of the school-leaving certificate in the relevant year for each occupation. When calculating the German-wide modus, we could not include the four federal states

[^3]without data access. By using the term currently, we were referring to the year when students were interviewed. Thus, for example, in Starting Cohort 3, we used the information on degrees from 2013; and in Starting Cohort 4, the information on degrees from 2012. However, the selected occupations revealed no differences in levels of degrees between the recognized years.

The last column of Table 2 already indicates the correct answer for the given occupation. A separate coding is planned for the far greater range of occupations included in the children's idealistic and realistic career aspirations (see Table 3). However, as the process of coding has not been completed, the values are not yet available in the Scientific Use Files.

Table 4 presents an overview about the timing of measurement of the knowledge about selected occupations. The last column shows whether the knowledge about the school-leaving and vocational qualifications required for the career aspirations of the children was measured additionally (marked by X).

Table 4
Overview of timing of items measuring school-leaving and vocational qualifications

| Starting Cohort | Wave [Year] | Stage | Age/Grade of target | Measured by: Parent or Target | Additionally measured for student's career aspirations |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5 [2016] | Newborn | 48 months | P |  |
| 2 | 7 [2017] | Lower secondary school | Grade 5 | P |  |
| 3 | 4 [2013/14] | Lower secondary school | Grade 8 | T, P | X |
|  | 6 [2015] | Lower secondary school | Grade 9 | T |  |
| 4 | 5 [2012/13] | Upper secondary school | Grade 11 | T, P, individually tracked T | X |
|  | 7 [2013/14] | Upper secondary school | Grade 12 | $P$, individually tracked T |  |
|  | 8 [2014/15] | Upper secondary school | Grade 11 | Individually tracked T |  |
|  | 9 [2015/16] | Upper secondary school | Grade 11 | Individually tracked T |  |

Note. $P$ stands for parent and $T$ for target. In Starting Cohort 2, Wave 7, we measured only the vocational qualifications for the selected jobs in interviewed parents due to time restrictions. There was a further variation between the parent and target instrument due to space restrictions: Namely, in Starting Cohort 3, the occupation tax consultant was present in the parents' instrument but deleted in the targets' PAPI questionnaires.

### 3.2 Empirical results

Before implementing the newly developed items in the main studies (the basis for the Scientific Use Files), we tested them in cognitive pretests and pilot studies.

## Results from cognitive pretests

We examined the original as well as the further developed items using cognitive pretests with not only students in the targeted age group but also adults with school-age children (for more details on cognitive pretests in general, see, e.g., Lenzner, Neuert, \& Otto, 2016).

One goal of cognitive pretesting is to find out whether the interviewed persons understand the questions and answer options in the intended way. Thus, the interviewed persons were requested to repeat parts of the test in their own words and to describe concrete activities carried out by persons in selected jobs such as tax consultant or pharmacist. To assess the reliability of answers, we asked whether questions and answer options are easy to use, whether the interviewed person feels (un-)certain with a given answer, and why she or he feels such uncertainty. Furthermore, we wanted to find out how the interviewed persons felt overall when answering the questions and, hence, whether they felt resentments or a rejectionist stance as a reaction to any of the questions. In addition, the interviewed persons were asked whether they had any (further) remarks to any of the questions, and the interviewers were instructed to notice their spontaneous reactions and comments.

We analyzed 41 interviews: 9 interviews with parents of 4- to 6 -year-old children, 8 with parents of school-age children, and 24 with secondary school students. Three of the eight interviewed adults with school-age children and four of the 24 students were of immigrant origin. Immigrant origin meant, in this case, that at least one parent or the respondent was born abroad.

Overall, the interviewed persons showed a high level of acceptance and even emphasized that answering these questions was fun because they were similar to a quiz.

There was some variance in the level of knowledge on the specific occupations, with respondents saying they felt either certain or uncertain about different named occupations.

Some respondents had problems noticing the difference between the questions asking for school-leaving qualifications and the questions asking for vocational qualifications. Thus, we emphasized the words school-leaving and vocational so that it would be easier for the interviewees to identify and notice which degrees were currently being surveyed: In the CATI/CAPI interview, interviewers were encouraged to emphasize these words; in the PAPI interview, these words were underlined. We also encouraged the interviewers to emphasize the words most people in the survey to set a strong anchor in the interviewed parent.

Finally, we added an interviewer instruction drawing attention to the fact that we were referring to the actual qualifications of most people who enter the occupation and not the formally specified qualifications. The second added interviewer instruction contained the note that we were interested in the current situation and not the situation in the past. In this respect, issues were raised by the cognitive pretests and the audio recordings of the pilot study that we shall present in the following section.

## Results from audio recordings (pilot study)

Pilot studies are studies that precede a main survey. They address the same age group but include fewer respondents. They serve to test the survey instrument so that both filtering and first distributions of the items can be evaluated in advance to ensure the quality of the survey instrument in the main study. Some parent interviews conducted in the pilot study were recorded, and a detailed analysis of these records (under the protection of privacy) helped to improve questions and interviewer quality.
We analyzed 50 interviews with parents whose children were attending 11th grade (Starting Cohort 4; data from the pilot study). Results again showed a high level of acceptance of the knowledge items and that the questions themselves were generally unproblematic for the respondents.

Some parents seemed uncertain when asked about the qualifications for the job cleaners (11 out of 50) and salesmen (6 out of 50). Therefore, the final instruments excluded the job cleaners due to time restrictions, difficulties of understanding, and missing variance.

Two parents were uncertain overall, and seemed to be tense while answering these questions. To avoid such reactions, we decided to address such problems offensively. Thus, we added the answer option don't know in the introduction for the knowledge items and directly pointed out that "If you don't know, you can also say so." Furthermore, the option don't know was a separate answer category that the interviewer in the CATI/CAPI interview had to read aloud. Again, we wanted to prevent interviewed parents from starting to guess the answers.

Furthermore, we analyzed 40 audio recordings of parents whose children were attending 8th grade (Starting Cohort 3, Wave 4). Again, we observed a high level of acceptance for the items. However, we did find problems on the side of the interviewers that made it necessary to provide explicit guidelines on the procedure in order to standardize the situation more strongly. Among other things, these guidelines concerned cases in which the interviewee already gave an answer before the interviewer had finished reading out all the given answer options (some interviewers still read everything and then recorded the answer, whereas others accepted it immediately). Another problem was the procedure used when the interviewed parent gave several answers, but only one could be recorded. Some interviewers did not ask the interviewed parents to decide between different answer options. As a result, it was unclear what was finally recorded. Another problem was dealing with cases in which, for example, the answer was "second." Whereas some interviewers read the corresponding response to confirm what was meant in these cases, others did not. On the basis of these findings, interviewer instructions were augmented and interviewers were given special trainings to sensitize them for these issues.

## Results from Scientific Use Files

At first, we present results from univariate analyses of the SUF data of all Starting Cohorts, where the specific items were used (for an overview of Starting Cohorts and timing of measurement see table 4). Distributions are reported in Tables 5 and 6 . Beside the distributions of correct/incorrect answers, we also considered whether respondents more often either underrated or overestimated the necessary qualifications. Underestimating means, for example, that the interviewed person choses a lower qualification than that which can be observed empirically for most people and vice versa. Please note that we consider over- or un-
derestimation in the tables only when both are possible: if the empirical reference is the highest value such as Abitur or tertiary education, only underestimation is possible. In Starting Cohort 3, we had a repeat measurement with the whole sample, so we present results for both measurement time points. For Starting Cohort 4, we consider only Wave 5.

The descriptive results in Table 5 show that there was variance between the selected occupations. Whereas some occupations such as pharmacist seemed to be easier, as indicated by the percentage of correct and don't know answers, others such as tax consultant or optician seemed to be more difficult. With respect to the over- or underestimation of school-leaving certificates, we more often observed an overestimation. In other words, respondents assumed that more people in these occupations have a higher education than the empirical reference would indicate. Here, it was mostly the case that fewer targets than parents knew the correct answer.

Table 5
Knowledge about school-leaving qualifications: Descriptive results

| School-leaving qualifications | SC1 |  | SC3 |  | SC4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wave 5 Parents |  | Wave 4 <br> Parents |  | Wave 4 <br> Targets |  | Wave 6 <br> Targets |  | Wave 5 Parents |  | Wave 5 <br> Targets |  |
|  | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ |
| Salesperson |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 43.3 | 1,032 | 54.0 | 2,262 | 53.3 | 3,522 | 59.8 | 3,276 | 51.4 | 1,848 | 58.2 | 3,819 |
| Incorrect | 51.2 | 1,219 | 40.8 | 1,706 | 33.7 | 2,227 | 33.0 | 1,810 | 45.6 | 1,639 | 37.2 | 2,439 |
| Don't know | 5.5 | 130 | 5.2 | 216 | 7.6 | 504 | 4.7 | 258 | 3.0 | 109 | 3.0 | 198 |
| Refused | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 0 | 5.5 | 361 | 2.5 | 136 | 0.0 | 0 | 1.6 | 107 |
| Total | 100.0 | 2,381 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 98.4 | 1,199 | 98.6 | 1,682 | 73.3 | 1,633 | 78.8 | 1,427 | 99.0 | 1,623 | 75.4 | 1,840 |
| Underestimation | 1.6 | 20 | 1.4 | 24 | 26.7 | 594 | 21.2 | 383 | 1.0 | 16 | 24.6 | 599 |
| Total | 100.0 | 1,219 | 100.0 | 1,706 | 100.0 | 2,227 | 100.0 | 1,810 | 100.0 | 1,639 | 100.0 | 2,439 |
| Pharmacist |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 80.7 | 1,922 | 77.6 | 3,248 | 38.0 | 2,515 | 44.8 | 2,453 | 87.5 | 3,146 | 51.4 | 3,372 |
| Incorrect | 15.2 | 362 | 18.9 | 792 | 47.6 | 3,148 | 48.3 | 2,647 | 10.7 | 384 | 44.3 | 2,906 |
| Don't know | 4.1 | 97 | 3.3 | 140 | 8.8 | 579 | 4.7 | 255 | 1.8 | 66 | 2.8 | 187 |
| Refused | 0.0 | 0 | 0.1 | 6 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 0 | 5.6 | 372 | 2.3 | 125 | 0.0 | 0 | 1.5 | 98 |
| Total | 100.0 | 2,381 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Banker |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 61.1 | 1,454 | 59.5 | 2,489 | 58.3 | 3,859 | 56.2 | 3,078 | 65.0 | 2,339 | 50.6 | 3,323 |
| Incorrect | 35.3 | 841 | 37.5 | 1,568 | 29.1 | 1,927 | 38.2 | 2,093 | 33.1 | 1,192 | 46.0 | 3,021 |
| Don't know | 3.6 | 86 | 3.0 | 126 | 6.9 | 455 | 3.1 | 170 | 1.8 | 66 | 1.6 | 105 |
| Refused | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 2 | 5.6 | 373 | 2.5 | 139 | 0.0 | 0 | 1.7 | 114 |
| Total | 100.0 | 2,381 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Optician |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 49.1 | 1,170 | 50.3 | 2,105 | 23.4 | 1,548 | 26.7 | 1,464 | 49.7 | 1,788 | 43.5 | 2,856 |
| Incorrect | 36.9 | 879 | 38.1 | 1,594 | 60.4 | 3,997 | 64.1 | 3,512 | 41.2 | 1,481 | 49.6 | 3,252 |
| Don't know | 13.9 | 332 | 11.6 | 485 | 10.6 | 703 | 6.9 | 378 | 9.1 | 327 | 5.6 | 367 |
| Refused | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 2 | 5.5 | 366 | 2.3 | 126 | 0.0 | 0 | 1.3 | 88 |
| Total | 100.0 | 2,381 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 95.4 | 839 | 98.1 | 1,563 | 96.0 | 3,836 | 97.3 | 3,417 | 98.6 | 1,461 | 95.6 | 3,108 |
| Underestimation | 4.6 | 40 | 1.9 | 31 | 4.0 | 161 | 2.7 | 95 | 1.4 | 20 | 4.4 | 144 |
| Total | 100.0 | 879 | 100.0 | 1,594 | 100.0 | 3,997 | 100.0 | 3,512 | 100.0 | 1,481 | 100.0 | 3,252 |
| Tax consultant |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 34.3 | 816 | 26.7 | 1,116 | n.c. |  | n.c. |  | 24.3 | 875 | 54.7 | 3,588 |
| Incorrect | 57.9 | 1,378 | 65.9 | 2,759 |  |  |  |  | 70.8 | 2,548 | 37.6 | 2,470 |
| Don't know | 7.9 | 187 | 7.4 | 309 |  |  |  |  | 4.8 | 172 | 6.2 | 410 |
| Refused | 0.0 | 0 | 0.0 | 0 |  |  |  |  | 0.1 | 2 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 2 |  |  |  |  | 0.0 | 0 | 1.4 | 95 |
| Total | 100.0 | 2,381 | 100.0 | 4,186 |  |  |  |  | 100.0 | 3,597 | 100.0 | 6,563 |

Source. SC 1: doi:10.5157/NEPS:SC1:5.0.0; SC 3: doi:10.5157/NEPS:SC3:8.0.0; SC 4: doi:10.5157/NEPS:SC4:9.1.1 . Own calculations.
Notes. n.c. (not collected) means that an item was excluded in a specific survey.
Refusals could be identified only in CATI surveys but not in paper-and-pencil questionnaires. Missing values in the parent survey indicate that the interviewed parent refused to answer twice in succession, was subsequently filtered out of the question block, and assigned a system missing.
In Starting Cohort 3 (parent interview), we excluded one case with complete missing values.

Table 6
Knowledge about vocational qualifications: Descriptive results

| Vocational | SC1 |  | SC2 |  | SC3 |  |  |  |  |  | SC4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| qualifications | Wave Parent |  | Wave <br> Parent |  | Wave <br> Parent |  | Wave <br> Target |  | Wave <br> Targe |  | Wave |  | Wave |  |
|  | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ | \% | $N$ |
| Salesperson |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 81.3 | 1,935 | 84.7 | 3,689 | 77.7 | 3,254 | 46.4 | 3,070 | 58.1 | 3,186 | 80.3 | 2,890 | 56.3 | 3,695 |
| Incorrect | 13.2 | 314 | 7.4 | 323 | 10.6 | 444 | 34.5 | 2,285 | 32.4 | 1,774 | 9.8 | 354 | 37.9 | 2,486 |
| Don't know | 5.5 | 132 | 7.9 | 343 | 11.6 | 485 | 13.8 | 915 | 6.7 | 369 | 9.8 | 351 | 3.9 | 254 |
| Refused | 0.0 | 0 | 0.0 | 1 | 0.1 | 3 | 0.0 | 0 | 0.0 | 0 | 0.1 | 2 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 5.2 | 344 | 2.8 | 151 | 0.0 | 0 | 2.0 | 128 |
| Total | 100.0 | 2,381 | 100.0 | 4,356 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 1.0 | 3 | 3.7 | 12 | 1.8 | 8 | 4.4 | 101 | 2.1 | 37 | 1.1 | 4 | 1.1 | 28 |
| Underestimation | 99.0 | 311 | 96.3 | 311 | 98.2 | 436 | 95.6 | 2,184 | 97.9 | 1,737 | 98.9 | 350 | 98.9 | 2,458 |
| Total | 100.0 | 314 | 100.0 | 323 | 100.0 | 444 | 100.0 | 2,285 | 100.0 | 1,774 | 100.0 | 354 | 100.0 | 2,486 |
| Pharmacist |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 65.5 | 1,560 | 72.9 | 3,176 | 60.5 | 2,534 | 36.6 | 2,418 | 41.6 | 2,281 | 74.2 | 2,668 | 44.2 | 2,902 |
| Incorrect | 30.6 | 729 | 23.4 | 1,020 | 33.7 | 1,412 | 44.1 | 2,916 | 48.1 | 2,634 | 22.1 | 795 | 49.7 | 3,259 |
| Don't know | 3.9 | 92 | 3.7 | 159 | 5.7 | 238 | 13.9 | 917 | 7.6 | 416 | 3.7 | 132 | 4.3 | 279 |
| Refused | 0.0 | 0 | 0.0 | 1 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.1 | 2 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 5.5 | 363 | 2.7 | 149 | 0.0 | 0 | 1.9 | 123 |
| Total | 100.0 | 2,381 | 100.0 | 4,356 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Banker |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 87.8 | 2,090 | 87.0 | 3,788 | 87.2 | 3,650 | 32.3 | 2,136 | 48.7 | 2,671 | 91.0 | 3,275 | 64.1 | 4,205 |
| Incorrect | 9.2 | 218 | 10.1 | 442 | 8.5 | 356 | 49.5 | 3,274 | 42.0 | 2,300 | 6.9 | 249 | 30.7 | 2,015 |
| Don't know | 3.1 | 73 | 2.8 | 124 | 4.3 | 178 | 12.9 | 851 | 6.5 | 356 | 2.0 | 72 | 3.3 | 217 |
| Refused | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 1 | 0.0 | 2 | 5.3 | 353 | 2.8 | 153 | 0.0 | 1 | 1.9 | 126 |
| Total | 100.0 | 2,381 | 100.0 | 4,356 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 99.1 | 216 | 98.9 | 437 | 96.9 | 345 | 98.8 | 3,234 | 99.0 | 2,278 | 97.6 | 243 | 98.6 | 1,987 |
| Underestimation | 0.9 | 2 | 1.1 | 5 | 3.1 | 11 | 1.2 | 40 | 1.0 | 22 | 2.4 | 6 | 1.4 | 28 |
| Total | 100.0 | 218 | 100.0 | 442 | 100.0 | 356 | 100.0 | 3,274 | 100.0 | 2,300 | 100.0 | 249 | 100.0 | 2,015 |
| Optician |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 80.8 | 1,924 | 78.5 | 3,420 | 78.0 | 3,266 | 21.8 | 1,441 | 28.4 | 1,555 | 81.3 | 2,923 | 51.1 | 3,355 |
| Incorrect | 11.1 | 265 | 13.2 | 573 | 12.8 | 535 | 57.3 | 3,791 | 60.4 | 3,309 | 12.6 | 452 | 40.6 | 2,663 |
| Don't know | 8.1 | 192 | 8.3 | 361 | 9.1 | 383 | 15.4 | 1,018 | 8.7 | 476 | 6.1 | 221 | 6.4 | 420 |
| Refused | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 1 | 0.0 | 2 | 5.5 | 364 | 2.6 | 140 | 0.0 | 1 | 1.9 | 125 |
| Total | 100.0 | 2,381 | 100.0 | 4,356 | 100.0 | 4,186 | 100.0 | 6,614 | 100.0 | 5,480 | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 97.4 | 258 | 98.8 | 566 | 97.9 | 524 | 98.5 | 3,736 | 99.0 | 3,277 | 99.1 | 448 | 97.7 | 2,603 |
| Underestimation | 2.6 | 7 | 1.2 | 7 | 2.1 | 11 | 1.5 | 55 | 1.0 | 32 | 0.9 | 4 | 2.3 | 60 |
| Total | 100.0 | 265 | 100.0 | 573 | 100.0 | 535 | 100.0 | 3,791 | 100.0 | 3,309 | 100.0 | 452 | 100.0 | 2,663 |
| Tax consultant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Correct | 85.5 | 2,035 | 86.1 | 3,751 | 86.5 | 3,622 | n.c. |  | n.c. |  | 90.9 | 3,268 | 47.6 | 3,127 |
| Incorrect | 9.1 | 217 | 9.0 | 394 | 7.0 | 294 |  |  |  |  | 5.7 | 206 | 42.5 | 2,789 |
| Don't know | 5.4 | 129 | 4.8 | 210 | 6.4 | 268 |  |  |  |  | 3.4 | 122 | 8.0 | 522 |
| Refused | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |  |  |  |  | 0.0 | 0 | 0.0 | 0 |
| Missing | 0.0 | 0 | 0.0 | 1 | 0.0 | 2 |  |  |  |  | 0.0 | 1 | 1.9 | 125 |
| Total | 100.0 | 2,381 | 100.0 | 4,356 | 100.0 | 4,186 |  |  |  |  | 100.0 | 3,597 | 100.0 | 6,563 |
| Overestimation | 97.7 | 212 | 99.2 | 391 | 97.3 | 286 |  |  |  |  | 96.1 | 198 | 99.1 | 2,763 |
| Underestimation | 2.3 | 5 | 0.8 | 3 | 2.7 | 8 |  |  |  |  | 3.9 | 8 | 0.9 | 26 |
| Total | 100.0 | 217 | 100.0 | 394 | 100.0 | 294 |  |  |  |  | 100.0 | 206 | 100.0 | 2,789 |

Source. SC 1: doi:10.5157/NEPS:SC1:5.0.0; SC 2: doi:10.5157/NEPS:SC2:7.0.0; SC 3: doi:10.5157/NEPS:SC3:8.0.0; SC 4 : doi:10.5157/NEPS:SC4:9.1.1. Own calculations.
Notes. n.c. (not collected) means that an item was excluded in a specific survey.
Refusals could be identified only in CATI surveys but not in paper-and-pencil questionnaires. Missing values in the parent survey indicate that the interviewed parent refused to answer twice in succession, was subsequently filtered out of the question block, and assigned a system missing.
In Starting Cohort 3 (parent interview), we excluded one case with complete missing values.

Vocational qualifications seemed to be easier than school-leaving qualifications, because there were more correct answers here (see Table 6). However, again we sometimes found large differences between targets and parents with students more often not knowing the correct answer.

In Starting Cohort 3, it was interesting to see that the share of students giving correct answers grew in the second measurement (see Tables 5 and 6). This increase is likely mainly due to the imminent transition and children's learning about career opportunities and their needs. Furthermore, the increase could indicate selective panel attrition, with committed children in particular taking part in further surveys. However, it cannot be completely ruled out that after the first interview, the children became curious and informed themselves about the occupations we surveyed.

In the majority of parent surveys, there were no refusals; and if there were any, they were very few. In the paper-and-pencil questionnaires given to students, there were slightly higher missing values.

In the next step, we take a closer look at the differences in knowledge with respect to ethnic origin (see Olczyk, Will, \& Kristen, 2016) and social origin operationalized through the highest education of the parents. In Table 7, we present significant results from logistic regressions for each occupation and both social and ethnic origin. The dependent variable distinguishes between correct and incorrect answers. Respondents who stated that they did not know the answer are coded as incorrect. Refusals are coded as system missing. Significant effects are marked by ${ }^{*}$. Furthermore, we add the direction of effects: A positive effect, marked by a + , indicates that, for example, families with higher education or targets of immigrant origin have a higher probability of knowing the correct answer and vice versa.

Table 7
Knowledge about qualifications: Multivariate results (logit regressions with social and ethnic origin; dependent variable $1=$ correct and $0=$ incorrect answer)


Whereas for the univariate analyses shown in Tables 5 and 6, we considered all cases in the survey for whom we had measured knowledge in the respective wave, the number of cases now vary depending on whether information was available on social and ethnic origin. Furthermore, we did not restrict the analyzed sample to respondents who answered all knowledge questions. Thus, the sample analyzed can also vary between items.

Overall, we found the expected effects: Families with higher education and families belonging to the majority population were more likely to know the correct answers. The differences in knowledge regarding vocational qualifications are particularly pronounced. We observed a reverse picture regarding the school-leaving certificate for salesperson and tax consultant. Furthermore, there were more significant effects for parents than for targets.

Additionally, results from factor analysis show no single dimension (results on request). In contrast, the items asking for school and vocational certificates for selected occupations loaded on at least three factors in each cohort, while the patterns between cohorts are not identical (results on request). However, there is slight evidence that the desired educational pathways and / or the already attended school track affect the existing knowledge.

## 4. Transition-specific knowledge

Besides more general strategic knowledge presented in the previous section, we also measured detailed knowledge regarding specific transitions. These are described in the following sections. We start in early childhood and describe the transitions as they occur over the course of a traditional educational trajectory.

### 4.1 Starting Cohort 1

In Starting Cohort 1, the newborn cohort, we covered two important transitions and developed items measuring knowledge about Kindergartens and elementary schools.

### 4.1.1 Instruments

## Knowledge about Kindergartens (Wave 2)

Empirically, it is often shown that whether a child attends Kindergarten at all, when a child starts attending Kindergarten (and, thus, the duration of being stimulated by this learning environment), and the quality of the institution vary systematically between social and ethnic groups (e.g., Becker, 2009; Jehles \& Meiner-Teubner, 2016). In the long run, these different patterns may lead to the observable educational inequalities between social and ethnic groups due to the beneficial influences accompanying Kindergarten attendance.

However, the reason for these different patterns in starting Kindergarten attendance or attending Kindergarten at all may be variations in the stock of knowledge about Kindergartens (e.g., Becker 2009). It could be assumed, for example, that better informed parents will select an institution more thoroughly with respect to its concept and staffing conditions. Furthermore, families with a low social status may be hindered by Kindergarten fees-especially when they are not aware that financial support is available.

When developing questions measuring knowledge about Kindergarten, we concentrated on the decision competence of parents, support possibilities, and the perceived alternatives. Parents were asked whether different statements were correct or not correct. Table 8 presents the final questions, the answer categories, and whether a statement was correct or not (for the original German version, see Appendix 4).

Table 8
Knowledge about kindergarten

| Question | Answer option | Correct/incorrect |
| :--- | :--- | :--- |
| On the topic of Kindergarten, there are many <br> areas that are not always known to the public. I <br> will now read out some statements. Please tell <br> me if each statement is correct, incorrect, or if <br> you don't know. |  |  |
| The parents are obligated by law to always <br> choose the nearest Kindergarten for their child. | Correct <br> Incorrect <br> Don't know | Incorrect |
| If fees are charged for attending the Kindergar- <br> ten, low-income families receive financial support <br> from the government to pay for the Kindergarten <br> place. | Correct <br> Incorrect | Don't know |

When developing these items, we followed the approach taken in the study Preschool Education and Educational Careers among Migrant Children (Erwerb von sprachlichen und kulturellen Kompetenzen von Migrantenkindern; e.g., Becker, Biedinger, Klein, \& Schmidt, 2017; Becker, Klein, \& Biedinger, 2013) in which parents of 3- or 4-year-old children answer similar questions). ${ }^{6}$ Except for the last item (religious community), we changed the wording of the originally items from this study so that we could apply them nationwide. Particularly the item on financial support was modified due to the varying forms of support and the varying labels of support givers in each federal state. However, the stimulus of this item still has potential for further development: In the current formulation, parents could think of the possibility that the financial support will be provided automatically with the enrollment of the children. To avoid this, for example, it could also be asked for the possibility for financial support: If fees are charged for attending the Kindergarten, low-income families have the possibility to receive financial support from the government to pay for the Kindergarten place.

[^4]
## Knowledge about the transition into elementary school (Wave 5)

The second important transition in this cohort is elementary school entrance. With respect to knowledge specific to this transition, we concentrated particularly on the selection of the elementary school and the date of school enrollment. The idea was that better informed parents will select the institution the child should attend more thoroughly. Furthermore, they will more often prefer an earlier (or later) school enrollment when they are aware of these possibilities.

Our aim was to develop items that were as region-unspecific as possible, so that it would be easier for respondents to answer these questions and easier for us to carry out the coding process afterwards. The final items and the correct answers are presented in Table 9 (for the German version, see Appendix 5).

Table 9
Knowledge about the transition into elementary school

| Question | Answer option | Correct answer [fed- <br> eral state] |
| :--- | :--- | :--- |
| Now, I'd like to ask you some concrete questions <br> about the topic school enrollment. Please consid- <br> er the regulations in the federal state that you <br> are currently living in. If you don't know the an- <br> swer, please state don't know! |  |  |
| For long time, every federal state had so-called <br> school districts. This means that the state assigns <br> every child to a public elementary school accord- <br> ing to its place of residence. How is it nowadays <br> in your federal state? Are there any school dis- | Nos't know | No [HH; NW; SH] |
| tricts? |  | Yes [else] |
| [If yes:] May parents choose a public elementary | Yes, unconditionally | Yes, under certain |
| school for their child that is outside their school | Yes, under certain | conditions [all] |
| district? | conditions |  |
|  | No |  |
| May parents enroll their child in a school earlier Yes, unconditionally | Yes, under certain <br> than regularly intended? | Yes, under certain |


| Can you name me a target day for the regular | DD.MM. |
| :--- | :--- |
| school enrollment of a child in your federal state? |  |
|  |  |
|  |  |
|  | SL; SN; ST; SH] |
|  | $01.07 .[\mathrm{HH}]$ |
|  | $01.08 .[\mathrm{TH}]$ |
|  | $31.08 .[\mathrm{RP}]$ |
|  | $30.09 .[\mathrm{BW} ; \mathrm{BY} ; \mathrm{BE} ;$ |
|  | $\mathrm{BB} ; \mathrm{NI} ; \mathrm{NW}]$ |
|  | $31.12 .[\mathrm{BE}]$ |

Note. Abbreviations for the federal states are Baden Wurttemberg (BW); Bavaria (BY); Berlin (BE); Brandenburg (BB); Bremen (HB); Hamburg (HH); Hesse (HE); Mecklenburg-Western Pomerania (MV); Lower Saxony (NI); North Rhine-Westphalia (NW); Rhineland Palatinate (RP); Saarland (SL); Saxony (SN); Saxony-Anhalt (ST); Schleswig-Holstein (SH); Thuringia (TH).

To identify the correct answer, it was necessary to consider the regulations in each of the 16 German federal states in the year the survey took place, namely 2016 (see last column in Table 9; see also Appendix 1 for an overview of regulations and Appendix 2 for a coding suggestion in Stata for the approach presented here). Because we used the term currently in the instrument and did not differentiate explicitly between the present and the next school year, we considered regulations from both school years, namely 2015/2016 and 2016/2017. By taking into account the survey month and survey year, even more precise codes would have been possible. However, because there is only minimal variation in the regulations between the years, we did not use such a detailed variable. In the rare cases in which a relevant change occurred, all answers corresponding to one of these rules were encoded as correct. Furthermore, the regulations of the German federal states offer some scope for interpretation. In the following, we outline how decisions might look. ${ }^{7}$

With respect to the first question about school districts, there are two federal statesnamely Schleswig-Holstein and North Rhine-Westphalia-with schools that are responsible for a catchment area and with no school districts in the classic sense. Respondents in these areas could keep such schools in mind when answering the question. Whereas we opted for a conservative approach, and coded answers indicating that there are school districts from interviewees living in one of the two federal states without school districts as incorrect, it would be quite possible to deal with these cases differently.

Furthermore, for respondents who stated that their federal state had school districts, we asked whether parents may choose a public elementary school outside of the school district. Exceptions are possible in all federal states, and various circumstances are described that justify attendance of a school outside the district such as pedagogical reasons or transport issues. Hence, we coded Yes, under certain conditions as the correct answer.

With respect to the item on the early school enrollment of children, an application is necessary and in some federal states an assessment of the child's aptitude. Thus, the correct answer for all federal states is Yes, under certain conditions. The extent of effort varies between federal states, namely from an informal letter up to an application with assessment. In studies concentrating on only one or a few federal states or studying knowledge about the education system as their main object, it would be conceivable to ask even more differentiated questions or to use more differentiated answers. Furthermore, in some federal states, regulations and requirements vary partly depending on how young the child is. In these cases, requirements tend to increase the younger the child and the more distant in time the

[^5]application is from the so-called Stichtag (i.e., the date when children reach the age of compulsory school attendance). Here we referred to the often more demanding regulations pertaining to younger children. Future studies should specify which age group the question is addressing.

To delay a school-age child's enrollment for one year, parents have to prove that the child's level of development would make her or him unable to keep pace with peers either socially, physically, and/or cognitively. Thus, the correct answer is again Yes, under certain conditions.

The date of school enrollment (Stichtag) also varies across the 16 German states. When more than one date is possible (due to changes in the law during the period of interest), both dates were coded as correct. In these cases, it is not obvious whether parents had regulations for the current or coming school year in mind when answering our question. Future surveys should add a concrete description of the deadline to ensure a common understanding.

### 4.1.2 Empirical findings

## Knowledge about Kindergarten (Wave 2)

We tested these items in 13 cognitive pretests with adults with 9 -month- to 15 -month-old children (one of the 13 interviewed adults of immigrant origin; see section 3.2 for general remarks on the procedure for cognitive pretests). The findings showed that respondents had no problems of comprehension or problems to answer the questions. Overall, the questions received high interest and the interviewed person stated that they felt at least good when answering these questions. In the case of uncertainty with a specific item, the respondents felt a bit uncomfortable with it.

As part of the cognitive pretests originally six items were tested for kindergarten choice. Two of the six items were excluded from further surveys based on the results of the pilot study because they produced only marginal variance. Therefore, the final instrument for measuring the knowledge of kindergarten choice considers only the four items already presented.

Descriptive results from the Scientific Use Files show that there was a variation between items in the correctness of answers (see Table 10). The highest share of correct answers ( $81.1 \%$ ) was for the item on the religious confession of Kindergartens; the lowest share (41.4\%), for the item on whether children have to attend a Kindergarten one year before starting school.

Table 10
Knowledge about Kindergartens:
Descriptive results

|  | SC1 |  |
| :---: | :---: | :---: |
|  | Wave 2 <br> Parents |  |
|  |  |  |
|  | \% | $N$ |
| Location/proximity |  |  |
| Correct | 68.7 | 1,957 |
| Incorrect | 11.5 | 329 |
| Don't know | 19.7 | 562 |
| Refused | 0.0 | 1 |
| Total | 100.0 | 2,849 |
| Financial support |  |  |
| Correct | 77.1 | 2,197 |
| Incorrect | 4.1 | 116 |
| Don't know | 18.7 | 534 |
| Refused | 0.1 | 2 |
| Total | 100.0 | 2,849 |
| Obligation before school |  |  |
| Correct | 41.4 | 1,180 |
| Incorrect | 28.3 | 806 |
| Don't know | 30.3 | 862 |
| Refused | 0.0 | 1 |
| Total | 100.0 | 2,849 |
| Denomination |  |  |
| Correct | 81.1 | 2,311 |
| Incorrect | 6.2 | 176 |
| Don't know | 12.6 | 359 |
| Refused | 0.1 | 3 |
| Total | 100.0 | 2,849 |

Source. SC 1: doi:10.5157/NEPS:SC1:5.0.0. Own calculations.

Table 11 reports the variance according to social and ethnic origin. As described in section 3.2 , we calculated a logistic regression for each item. We found the expected relationships for both social and ethnic origin: Higher educated parents as well as parents of the majority population had a higher probability of knowing the correct answers.

Finally, results from factor analyses confirm that the items about the transitions into kindergarten load on one factor (results on request). As there are relatively few items, which lower in consequence Cronbach's alpha substantively, we do not report results of reliability analyses.
Please note that we developed these items to explain social and ethnic differences in attending Kindergarten. With the exception of the third item, the obligation to attend Kindergarten, all items imply that wrong knowledge would lead to an observable underrepresentation of a specific (social or ethnic) group in Kindergarten. Nevertheless, the obligation item also measures knowledge about Kindergartens and, thus, could help to clarify the role of knowledge when explaining group differences in a more general sense.

## Table 11

Knowledge about Kindergartens: Multivariate results (logit regressions with social and ethnic origin; dependent variable $1=$ correct and $0=$ incorrect answer)

|  | SC1 |  |
| :--- | :--- | :--- |
|  | Wave 2 |  |
|  | Parents |  |
|  | ${ }^{\text {Edu }}$ | Mig |
| Location/proximity | $*_{-}$ |  |
| Financial support | $*_{+}$ | $*_{-}$ |
| Obligation before school | $*_{+}$ | $*_{-}$ |
| Denomination | $*_{+}$ | $*_{-}$ |

Source. SC 1: doi:10.5157/NEPS:SC1:5.0.0. Own calculations.
Notes. * p > .05; +/- indicate the effect direction.
The category don't know was coded as wrong; refused was coded as system missing. Education (edu) was defined as highest school-leaving certificate of parents; it distinguished between parents with no or low, medium, and high education. The immigrant status (mig) was based on a generated variable of the immigrant status of the children (see Olczyk, Will, \& Kristen, 2016); the final variable differentiated between children of immigrant origin (up to the 3.75th generation) and of the majority.

## Knowledge about the transition into elementary school (Wave 5)

Items measuring knowledge about the transition to elementary school went through several changes during the development process. We tested a trial version in cognitive pretests with nine adults with 4 - to 6 -year-old children (see section 3.2 for general remarks on the procedure for cognitive interviews). The majority of adults was confident in their answers and showed a high level of acceptance for the items.

Empirical results from the Scientific Use Files are presented in Table 12. The share of correct answers ranged from $24.3 \%$ (deadline for school enrollment), over 64.8\% (early school enrollment), up to $79.4 \%$ (school outside the school district). Please note that we excluded respondents living in federal states without school districts when analyzing the item asking whether it is possible to attend a school outside the school district. The item addressing the deadline seemed to be especially difficult, as illustrated by the low share of correct answers and the comparatively high share of don't know answers. Whereas the expression Stichtag is actually quite well known, it is possible that respondents mixed it up with the date of school start. Further research should confirm this explanation for the low share of correct answers and add a definition of Stichtag to the survey or use a description of the term instead of the specific expression.

## Table 12

Knowledge about the transition into elementary school: Descriptive results

|  | SC1 |  |
| :---: | :---: | :---: |
|  | Wave 5 <br> Parents |  |
|  |  |  |
|  | \% | $N$ |
| School district |  |  |
| Correct | 62.2 | 1,480 |
| Incorrect | 18.5 | 441 |
| Don't know | 19.2 | 456 |
| Refused | 0.1 | 2 |
| Total | 100.0 | 2,379 |
| School outside district |  |  |
| Correct | 79.4 | 930 |
| Incorrect | 11.9 | 139 |
| Don't know | 8.8 | 103 |
| Refused | 0.0 | 0 |
| Total | 100.0 | 1,172 |
| Early school enrollment |  |  |
| Correct | 64.8 | 1,542 |
| Incorrect | 11.8 | 282 |
| Don't know | 23.3 | 554 |
| Refused | 0.1 | 3 |
| Total | 100.0 | 2,381 |
| Later school enrollment |  |  |
| Correct | 71.9 | 1,713 |
| Incorrect | 13.0 | 310 |
| Don't know | 15.0 | 356 |
| Refused | 0.1 | 2 |
| Total | 100.0 | 2,381 |
| Deadline school enenrollment (Stichtag) |  |  |
| Correct | 24.9 | 594 |
| Incorrect | 29.8 | 710 |
| Don't know | 44.9 | 1,070 |
| Refused | 0.2 | 5 |
| Total | 99.9 | 2,379 |
| Source. SC 1: doi:10.5157/NEPS:SC1:5.0.0. Own calculations. <br> Note. Two cases that could not be assigned to a federal state were excluded from the federal-state-specific analysis. |  |  |

Results from logistic regressions highlighting the link between correct answers and social and ethnic origin are presented in Table 13. We observed a similar pattern to that found in the results from the previous section: Higher educated parents as well as parents from the majority population were more informed. One exception was answers to the item school outside district that showed no significant link to ethnic origin.

Furthermore, factor analyzes confirms that these items load on one factor (results on request). Again, due to a low number of items, we do not present results of reliability analyses.

## Table 13

Knowledge about the transition to elementary school: Multivariate results (logit regressions with social and ethnic origin; dependent variable 1 = correct and 0 = incorrect answer)

|  | SC1 |  |
| :--- | :--- | :--- |
|  | Wave 5 |  |
|  | Parents |  |

### 4.2 Starting Cohort 2

In the Kindergarten cohort, we measured knowledge for the first time in Wave 5 when students were attending Grade 3. Accordingly, we developed items measuring knowledge about the regulations and conditions of the transition into secondary schooling. In addition, we implemented items measuring knowledge about options after secondary school in Waves 5 and 7 (see Table 14; for the German version, see Appendix 6 and 7).

### 4.2.1 Instruments

The transition-specific items ask for responsibilities in a broader sense, namely: first, the option to reject the tracking recommendation at the end of elementary school; and second, the entry requirements for schools leading to Abitur-namely, grades in the subjects German and math. ${ }^{8}$ Both aspects were formulated as statements, and respondents could state whether the statement was true or not true.

The development of the second item about entry requirements followed the approach taken in two other studies, namely, the project Immigrant's Children in the German and Israeli Educational Systems (e.g., Kalter et al., 2013; Roth, 2014) and its questionnaire for parents with children attending Grades 4 and 10; and the project Educational Decisions in Immigrant Families (e.g., Dollmann, 2010) in which parents with children attending 4th grade answered

[^6]a similar question. ${ }^{9}$ To allow a more differentiated coding and consider why respondents thought the statement was wrong, in a next step, we asked for their reasons.

Identifying the right answers to these questions makes it necessary to consider regulations for the German federal states in the year(s) in which the survey (in this case, the parent interviews) was conducted, namely 2015 (see Appendix 1 for an overview of varying regulations between federal states and Appendix 3 for a coding suggestion in Stata for the approach presented in this working paper). Similar to the approach in Starting Cohort 1, we considered more than one school year, namely 2014/2015 and 2015/2016, due to the fact that the survey did not differentiate between the current and the next school year. Furthermore, the regulations of the German federal states partially imply some scope for interpretation. In the following, we outline how decisions may look. ${ }^{10}$

With respect to the tracking recommendation, in the majority of German states, this is a recommendation and not an obligation. It should be noted that some states such as Lower Saxony make no recommendation after elementary school. For respondents living in such a state who state no, it is, thus, not clear whether their answer refers to the obligatory nature of a recommendation or to the fact that there is no recommendation. However, both possibilities indicate that the respondents are informed.

With respect to the item asking about concrete requirements for attending a Gymnasium, the answer not true is correct for all 16 German states. However, the reason(s) why it is not true vary between states. Thus, the item asking why respondents think the statement is not true listed various reasons (multiple answers were possible) and allowed a more differentiated coding (Table 14 and Appendix 3).

Following the knowledge measurements in the project Educational Decisions in Immigrant Families (e.g., Dollmann, 2010) in which parents of children attending Grade 3 were asked about the length of time required to obtain various degrees, we implemented similar questions in Wave 5 of Starting Cohort 2. The length of educational qualifications can be relevant to decisions, especially if they result in loss of income. In addition, this measurement can also serve as an indicator of general knowledge. Whereas the answers on the qualification for Realschule are uniform, namely 10 years including primary education, there is some variation between federal states for Hauptschule or Berufsbildungsreife and Abitur. In general, Hauptschule or Berufsbildungsreife qualification has a duration of 9 years but in some German states it could take longer due to a longer compulsory education of 10 years instead of 9 years (e.g., Helbig and Nikolai, 2015, pp. 64f.). This is the case in Berlin, Brandenburg, Bremen, and North Rhine-Westphalia where the qualification Hauptschulabschluss or Berufsbildungsreife could be reached with the final grades at the end of the ninth class or the successful transition into the 10th Grade. However, only in exceptional cases young people could leave the school after the 9th grade, e.g., when they could prove that they will start a vocational training. In consequence, we decided to code the answers 9 and 10 years as correct for parents living in these states. Much more variation between federal states had to be considered for Abitur due to the so-called G8-Reform-a reduction of the number of years needed to obtain Abitur to 12 years in total (see also Appendix 1). However, the federal states vary with respect to the year of implementation, the chosen approach, and the

[^7]pace of introducing this reform (e.g., Helbig \& Nikolai, 2015, p. 69-70; Homuth, 2017, p. 2226; Kühn, van Ackeren, Bellenberg, Reintjes, \& im Brahm, 2013). Some states have even skipped (or plan to skip the reform) and returned to the longer duration of 13 years (e.g., Lower Saxony, Bavaria, and Schleswig-Holstein). In other states, it is up to schools whether they implement G8, and/or G9, or there is only a certain school type offering a 12-year duration (e.g., Helbig \& Nikolai, 2015, p. 70; Homuth, 2017, p. 26). Thus, a coding decision is necessary for states in which the G8 is implemented, but selected schools also offer the opportunity to reach the Abitur after 13 years (and vice versa). Due to the fact that it is not clear which school type respondents had in mind when answering our question about the duration, the answers 12 and 13 years were both coded as correct. Exceptions were made for respondents living in Bavaria, Mecklenburg-Western Pomerania, and Saxony for whom 12 years was coded as the correct answer. In these states, the G8 had already been implemented in the time between 2014 and 2016. With respect to the items on the duration to obtain different qualifications, we need to think about a more concrete wording and a specific school type.

Finally, in Waves 5 and 7, we measured whether parents are informed about options after school, namely the dual vocational system and the so-called Fachhochschulreife, an entrance qualification for studies at a university of applied sciences. Both items refer to options that gain in importance over the course of secondary education. Nonetheless, knowledge about these options may influence the trajectory within secondary education and maybe even the transition into secondary school.

The item on the dual vocational system was taken from two studies: (1) Immigrant's Children in the German and Israeli Educational Systems (e.g., Kalter et al., 2013; Kretschmer, 2019; Roth, 2014) and its student questionnaire in Grades 9 and 10 and parent questionnaire in Grades 4, 9, and 10; and (2) the project Educational Decisions in Immigrant Families (e.g., Dollmann, 2010) and here the parent questionnaire (Grade 4).

The question on the Fachhochschulreife was likewise measured in two projects, namely Immigrant's Children in the German and Israeli Educational Systems, in the student questionnaire Grades 9 and 10 as well as in the parent questionnaire from parents with children attending Grades 4, 9, and 10 (e.g., Kalter et al., 2013; Kretschmer, 2019; Roth, 2014); and in the BiKS study in which data on this kind of knowledge was gathered from parents (Wave 5, Grade 6; BiKS 8-14).

Table 14 gives an overview of the items used in Waves 5 and 7 together with the correct answers in each specific federal state (for the original German versions, see Appendixes 6 and 7 ).

## Table 14

Knowledge about the transition into secondary schooling and general knowledge

| Question | Answer option | Correct answer [federal state] |
| :---: | :---: | :---: |
| The issue education and especially the transition from the end of the elementary school period has many aspects that are not always known to the general public. I will now read some statements to you. Please indicate for each statement whether it is true, not true, or if you don't know. |  |  |
| The child has to attend the school type that is recommended at the end of elementary school in every case. | True <br> Not true <br> Don't know | Not true [all] |
| In order to attend the Gymnasium [type of school leading to upper secondary education and Abitur], the child needs a grade average of at least 2 in the subjects Math and German. | True <br> Not true <br> Don't know | Not true [all] |
| Why do you think this statement is not true? I will now read out different possible reasons. You can also give me more than of these reasons. | (a) Because the grades have to be better <br> (b) Because the grades could be worse <br> (c) Because the grades in other subjects are equally as important or more important <br> (d) Because there is no defined grade average <br> (e) Because the wish of the parents is decisive, not the grades <br> (f) Because other skills are important, such as the social behavior <br> (g) Because of another reason | (b) [BW] <br> (b) and (c) [BB; $B E$; $B Y ; M V ; R P ; S T]$ <br> (c) $[\mathrm{TH}]$ <br> (c) and (f) [SN] <br> (d) $[\mathrm{HB} ; \mathrm{HH} ; \mathrm{HE} ; \mathrm{NI}$; NW; SH; SL] |
| Now I have some questions about the duration of the school attendance. |  |  |
| Could you please tell me how many years one has to attend school in order to obtain the leaving certificate of the Hauptschule? Please include the time spent in elementary school. | Number [1 up to 18] | 9 years [all] 10 years [BB; BE; HB; NRW] |
| And can you tell me how many years one has to attend school in order to obtain the leaving certificate of the Realschule? Please include the time spent in elementary school again. | Number [1 up to 18] | 10 years |
| And how many years does one have to attend school in order to obtain the Abitur [university | Number [1 up to 18] | 12 and 13 years [all with exception of $B Y$; |


| entrance qualification]? Please include the time spent in elementary school again. |  | $\begin{aligned} & \mathrm{MV} ; \mathrm{SN}] \\ & 12 \text { years [BY; MV; } \\ & \mathrm{SN}] \end{aligned}$ |
| :---: | :---: | :---: |
| There are different school and vocational training systems in Germany. I have some questions related to this for you. |  |  |
| Can you tell me what is meant by "Dual vocational system" in Germany? | Having two vocational training qualifications The fact that someone completes vocational training first and studies afterwards | The combination of school education in a vocational school [Berufsschule] and practical training in the firm |
|  | The combination of school education in a vocational school [Berufsschule] and practical training in the firm |  |
|  | The distinction between the first and second year of apprenticeship |  |
|  | Don't know |  |
| Can you tell me what the term "Fachhochschulreife" means? | The completion of a craftsman master qualification | A qualification entitling tertiary education at a university of |
|  | A degree from a university of applied sciences | applied sciences |
|  | A qualification entitling tertiary education at a university of applied sciences |  |
|  | A different word for Abitur |  |
|  | Don't know |  |

Note. The abbreviations for the federal states are Baden Wurttemberg (BW); Bavaria (BY); Berlin (BE); Brandenburg (BB); Bremen (HB); Hamburg (HH); Hessen (HE); Mecklenburg-Western Pomerania (MV); Lower Saxony (NI); North Rhine-Westphalia (NW); Rhineland Palatinate (RP); Saarland (SL); Saxony (SN); Saxony-Anhalt (ST); Schleswig-Holstein (SH); Thuringia (TH).

### 4.2.2 Empirical results

## Results of cognitive pretests

The transition-specific items as well as the items on the duration were cognitively pretested on six parents including one parent of immigrant origin (see section 3.2 for general remarks on the procedure for cognitive interviews). Overall, there were no understanding problems when answering the items and subsequent questions.

We also tested the items asking for the expression Fachhochschulreife and dual vocational training. Based on the cognitive pretests with the six parents, five of which were telephone
interviews, we found that answering these items seemed to be more difficult. This was probably due to the comprehensive answer categories that partly contained specific technical terms. This could be especially critical in CATI interviews when the answer categories are read out by the interviewer and are not visually available to the interviewees. This result was also observable in further cognitive pretests conducted with other parents and students already mentioned in section 3.2. As a consequence, we shortened the answer options as far as possible. In general, a good strategy could be to mix these questions with easier questions to avoid strain on the interviewees.

## Results from audio recordings (pilot study)

Based on 50 audio recordings of parent interviews (parents whose children were attending 11th grade) from the pilot study, we can state that the items asking for the dual vocational training and Fachhochschulreife were more demanding (see section 3.2 for general remarks on this pilot study): The interviewer had to repeat the answer options in 13 respectively 14 cases. Hence, a further consequence is that these items are more time consuming. This should be kept in mind when using these items in future surveys.

On the basis of the recordings from the other pilot study (Starting Cohort 3, parents with children attending Grade 8) we also augmented the interviewer instructions to further standardize the interview situation (see section 3.2).

Furthermore, for the transition-specific items and the items asking for the duration, we could analyze 50 audio recording from the pilot study (Starting Cohort 3, Wave 5). These appraisals revealed a relatively high level of positive feedback. With respect to the item asking why the previous statement is wrong, it was, in some cases, unclear that more answers were possible. Interviewers responded differently in these cases. In order to standardize the approach more strongly, an interviewer instruction was added specifying that all answer options should be read out.

## Results from Scientific Use Files

In Table 15 we first present descriptive results based on the SUF data.
With respect to the transition-specific items, we observed that $74.2 \%$ of parents knew whether the tracking recommendation was mandatory, whereas only $43.6 \%$ knew the correct answer to the item on the specific requirement for attending a Gymnasium. Furthermore, $22.2 \%$ of respondents said that they did not know the answer. Thus, this item seemed to be more difficult. One explanation could be that the respondents were not sure how far the item addressed the empirical reality or the concrete (legal) regulations. A concrete term stating what is being requested might be helpful here. In addition, strikingly few respondents gave correct answers to the question why this statement was wrong (only 7.6\%). This low share could be attributed to the fact that the open entry was (still) not taken into account. In addition, currently only those cases were considered as correct that named the (federal-state-specific) answers listed in Table 14. If additional answers were selected or if the parent said don't know for at least one of the other answer options, the parent was assigned to incorrect. Overall, this approach is rather conservative. Another explanation for the low share of right answers could be, as already mentioned above, that it is not clear how far the question relates to the empirical reality or the legal stipulation. A corresponding modification might be appropriate.

The items asking for the years needed to obtain different degrees seemed to be a bit easier in general: The proportion of correct answers varied between $80.9 \%$ (Hauptschulabschluss) and $89.8 \%$ (Realschulabschluss), whereas the share of don't know answers was comparably small (see Table 15).

In contrast to these items, however, the last two items on the dual vocational system and Fachhochschulreife appeared to be somewhat more demanding. This was shown by the share of just $67.0 \%$ (dual vocational system) and $60.2 \%$ (Fachhochschulreife) correct answers and a comparably high share of don't know answers (see Table 15). A similar picture emerged in Starting Cohorts 3 and 4 (see section 4.3.2).

Table 15
Knowledge about the transition into secondary schooling and general knowledge: Descriptive results


|  | SC2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Wave |  | Wave |  |
|  | Parent |  | Parent |  |
|  | \% | $N$ | \% | $N$ |
| Duration to obta |  |  |  |  |
| Correct | 85.1 | 4,506 | n.c. |  |
| Incorrect | 12.1 | 642 |  |  |
| Don't know | 2.8 | 148 |  |  |
| Refused | 0.0 | 2 |  |  |
| Total | 100.0 | 5,298 |  |  |
| Dual vocational | (duale | usbildu |  |  |
| Correct | 67.0 | 3,549 | 72.7 | 3,168 |
| Incorrect | 10.8 | 573 | 13.9 | 604 |
| Don't know | 22.1 | 1,169 | 13.3 | 578 |
| Refused | 0.1 | 7 | 0.1 | 6 |
| Total | 100.0 | 5,298 | 100.0 | 4,356 |
| Entrance qualifi (Fachhochschul | or unive | sities of | applied | iences |
| Correct | 60.2 | 3,187 | 72.7 | 3,168 |
| Incorrect | 27.9 | 1,479 | 13.9 | 604 |
| Don't know | 11.9 | 630 | 13.3 | 578 |
| Refused | 0.0 | 2 | 0.1 | 6 |
| Total | 100.0 | 5,298 | 100.0 | 4,356 |
| Source. SC 2: doi:10. Note. n.c. (not colle survey. | PS:SC2:7.1 <br> ans that | 0. Own c item wa | culations. excluded | a specifi |

Table 16 presents the results of logistic regressions. Overall, relationships were as expected: Higher educated parents and parents of the majority had a higher probability of knowing the correct answer. There were no significant results with respect to education and immigrant origin for the third item measuring the reasons why the requirements to attend a Gymnasium are wrong.

## Table 16

Knowledge about the transition into secondary schooling and general knowledge: Multivariate results (logit regressions with social and ethnic origin; dependent variable 1 = correct and $0=$ incorrect answer)

|  | SC2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Wave 5 <br> Parents |  | Wave 7 <br> Parents |  |
|  | Edu | Mig | Edu | Mig |
| Tracking recommendation mandatory | ${ }_{+}$ | *- | n.c. | n.c. |
| Requirement to attend Gymnasium | ${ }^{+}$ | *- | n.c. | n.c. |
| Reason why wrong |  |  | n.c. | n.c. |
| Duration to obtain Hauptschulabschluss |  | *- | n.c. | n.c. |
| Duration to obtain Realschulabschluss | ${ }^{+}$ | *- | n.c. | n.c. |
| Duration to obtain Abitur | ${ }_{+}$ | *- | n.c. | n.c. |
| Dual vocational system (duale Ausbildung) | ${ }_{+}$ |  | ${ }^{+}$ | *- |
| Fachhochschulreife | ${ }^{+}$ | *- | ${ }^{+}$ | *- |

Source. SC 2: doi:10.5157/NEPS:SC2:7.0.0. Own calculations.
Notes. n.c. (not collected) means that an item was excluded in a specific survey.

* $p>.05$; +/- indicate the effect direction.

The category don't know was coded as wrong; refused was coded as system missing. Education (edu) was defined as highest schoolleaving certificate of parents; it distinguished between parents with no or low, medium, and high education. The immigrant status (mig) was based on a generated variable of the immigrant status of the children (see Olczyk, Will, \& Kristen, 2016); the final variable differentiated between children of immigrant origin (up to the 3.75th generation) and of the majority.

Finally, results from factor analysis show that the item for dual vocational training and Fachhochschulreife load on one factor. The other items on the transition into lower secondary education have two dimensions (results on request): the questions about the educational tracks within secondary education, which are more likely to lead to vocational training (Hauptschule or Realschule), and the questions that ask for knowledge about the transition into the upper secondary level and, thus, to the academic track, load on different factors (results on request). Hence, knowledge stocks may vary in dependency to the desired further educational path. Due to a low number of items, we do not present results of reliability analyses.

### 4.3 Starting Cohort 3 and Starting Cohort 4

### 4.3.1 Instruments

In Starting Cohorts 3 and 4, we concentrated on the knowledge about options after finishing secondary school. Hence, we asked students and parents about the dual vocational system,
the entrance qualification for universities of applied sciences (Fachhochschulreife), and vocational school.

The first two questions are from studies already mentioned in section 4.2.1 and 4.2.2 (Starting Cohort 2). The question about vocational school is likewise from the BiKS study, namely the parent questionnaire (Wave 5, Grade 6; BiKS 8-14) and student questionnaire (Wave 6, Grade 7, BiKS 8-14). In NEPS, we implemented this item only in Starting Cohort 3 (the target interview) due to place restrictions as well as empirical results from parent interviews in the pilot studies of Starting Cohorts 3 and 4 showing only minimal variance with $96 \%$ (SC3, parents) and $100 \%$ (SC4, parents) answering correctly (results not presented).

Table 17 gives an overview of the items and the correct answers (for the original German version, see Appendix 8 to 12 ).

Table 17
Knowledge about the German training system

| Question | Answer option | Correct answer |
| :---: | :---: | :---: |
| There are different school and vocational training systems in Germany. Can you tell me what is meant by "Dual vocational system" in Germany? | Having two vocational training qualifications <br> The fact that someone completes vocational training first and studies afterwards <br> The combination of school education in a vocational school [Berufsschule] and practical training in the firm <br> The distinction between the first and second year of apprenticeship <br> Don't know | The combination of school education in a vocational school [Berufsschule] and practical training in the firm |
| And do you know what is meant by "Fachhochschulreife" [entrance qualification for universities of applied sciences]? | The completion of a master qualification <br> A degree from a university of applied sciences <br> A qualification entitling studies at a university of applied sciences <br> Another word for Abitur <br> Don't know | A qualification entitling studies at a university of applied sciences |


| And do you know what is meant by <br> "vocational school" in Germany? | The vocational school trains <br> career counselors. | Students attend vo- <br> cational school while |
| :--- | :--- | :--- |
|  | Students attend vocational | doing a vocational <br> school while doing a vocational <br> training program. |
|  | training program. |  |
|  | Senior citizens who want to gain |  |
| more qualifications during re- |  |  |
|  | tirement attend vocational |  |
|  | school. |  |
|  | The only purpose of vocational |  |
|  | school is to offer students con- |  |
|  | tinuing education following |  |
|  | their vocational training pro- |  |
|  | gram. |  |
|  | Don't know |  |
|  |  |  |

Note. Questions based on the target questionnaire in Starting Cohort 3, Wave 4.

### 4.3.2 Empirical results

## Results from cognitive pretests

Findings from cognitive pretests and audio recordings of the pilot study have been presented already for the items Fachhochschulreife and dual vocational system (see section 4.2.2; see section 3.2 for general remarks on the conducted cognitive interviews).

With respect to the item asking for the vocational school, we also had results from cognitive pretests with three students and two parents (all of immigrant origin). Although it was already observable for the other two items, this item also proved to be challenging: Respondents needed time to answer, and they were not always certain about their answer. Overall, however, there were no problems of comprehension.

## Results from Scientific Use Files

Table 18 presents results from a univariate analysis. Compared to the previously described items, these items were clearly a bit more difficult, as indicated by the share of correct answers and don't know answers. In total, parents and older targets from Starting Cohort 4 revealed a higher share of correct answers.

## Table 18

Knowledge about the German training system: Descriptive results


Source. SC 3: doi:10.5157/NEPS:SC3:8.0.0; SC 4: doi:10.5157/NEPS:SC4:9.1.1 . Own calculations.
Notes. n.c. (not collected) means that an item was excluded in a specific survey.
The category missing included system missing as well as -90 and -95 .
Refusals could be identified only in CATI surveys but not in paper-and-pencil questionnaires. Missing values in the parent survey indicated that the interviewed parent had twice refused the answer, was then filtered out of the question block, and given a system missing. In Starting Cohort 3 (parent interview), we excluded one case with complete missing values.

Results from logistic regressions for each item outlined again that particularly higher educated families and families belonging to the majority population knew the correct answer (see Table 19). This pattern applied especially to parents but only partly to students.

Furthermore, factor analysis confirms that the items load on one factor (results on request). Due to a low number of items, we do not report results of reliability analyses.

Table 19
Knowledge about the German training system: Multivariate results (logit regressions with social and ethnic origin; dependent variable $1=$ correct and $0=$ incorrect answer)

|  | SC3 |  |  |  | SC4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wave 4 Parents |  | Wave 4 Targets |  | Wave 6 <br> Targets |  | Wave 5 Parents |  | Wave 5 Targets |  |
|  | Edu | Mig | Edu | Mig | Edu | Mig | Edu | Mig | Edu | Mig |
| Dual vocational system (duale Ausbildung) | ${ }^{+}$ | *- |  |  | ${ }^{+}$ | *- | ${ }^{+}$ | *- | ${ }_{+}$ | *- |
| Entrance qualification for universities of applied sciences (Fachhochschulreife) | ${ }^{+}$ | *- | ${ }_{+}$ |  | ${ }^{+}$ |  | ${ }^{+}$ | *- | ${ }^{+}$ | *- |
| Vocational school (Berufsschule) | n.c. | n.c. |  | *- | n.c. | n.c. | n.c. | n.c. | n.c. | n.c. |

Source. SC 3: doi:10.5157/NEPS:SC3:8.0.0; SC 4: doi:10.5157/NEPS:SC4:9.1.1 . Own calculations.
Notes. n.c. (not collected) means that an item was excluded in a specific survey.

* $p>.05 ;+/$ - indicate the effect direction.

The category don't know was coded as wrong; refused was coded as system missing. Education (edu) was defined as highest school-leaving certificate of parents; it distinguished between parents with no or low, medium, and high education. The immigrant status (mig) was based on a generated variable of the immigrant status of the children (see Olczyk, Will, \& Kristen, 2016); the final variable differentiated between children of immigrant origin (up to the 3.75th generation) and of the majority. When analyzing the knowledge measurement of the students, we used the sociodemographic information gathered from the parent interview.

## 5. Possibilities for further development

The descriptive results show significant differences in the stock of knowledge in dependency to social origin and immigration status. This result suggests that the construct knowledge about the education system contributes to explain social and ethnic educational inequality. First analyzes for Starting Cohort 3 and 4 show that children's knowledge about the education system positively affect at least reading competencies (e.g., Olczyk, 2018, p. 197). However, further analyzes are still pending. Effects of knowledge may be conceivable not only for competence development and educational decisions, but also, for example, for educational aspirations (e.g., Kretschmer, 2019; Salikutluk, 2016). Further use of these measurements within NEPS - taking into account the modifications partly proposed here - is therefore recommended. However, it must be noted that both the items and the coding of the correct answers must be updated and adjusted for each survey due to the constant change in the German school system as well as changes of the empirical reality on the training market.

In addition, there is potential for general improvements or additions to the existing items:
With respect to the measurement of a more general strategic knowledge through questions on the qualifications for (selected) occupations, it would be desirable to consider both more and a higher variety of occupations. One could also think about questions on knowledge about the duration of the different vocational training programs.

With regard to the measurement of the knowledge about specific educational pathways, it is desirable to develop more fine-graded measures of options after secondary education that also consider paths such as university studies. In particular, knowledge about alternative ways to obtain certain educational qualifications or the knowledge about possibilities to catch up on educational certificates could be relevant and may help explain social and ethnic educational inequality.

## Appendix

Appendix 1: Overview of regulations: Enrollment in elementary school and transition to secondary school

Appendix 2: Coding do-File SC1, Wave 5
Appendix 3: Coding do-File SC2, Wave 5
Appendix 4: SC1, Wave 2: Original instrument in German language
Appendix 5: SC1, Wave 5: Original instrument in German language
Appendix 6: SC2, Wave 5: Original instrument in German language
Appendix 7: SC2, Wave 7: Original instrument in German language
Appendix 8: SC3, Wave 4, target: Original instrument in German language
Appendix 9: SC 3, Wave 4, parent: Original instrument in German language
Appendix 10: SC3, Wave 6, target: Original instrument in German language
Appendix 11: SC 4, Wave 5, target: Original instrument in German language
Appendix 12: SC4, Wave 5, parent: Original instrument in German language

## Appendix 1: Overview of regulations: Enrollment in elementary school and transition to secondary school

Regulations concerning enrollment in elementary school (2015/2016 and 2016/2017)

| Federal state | School districts | Elementary school outside school district | Early enrollment | Delaying school enrollment for one year | Stichtag |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BB | Yes | Application justifying the wish is necessary (e.g., if the responsible school can be reached only with difficulty, educational reasons, social reasons) | Application and proof of the corresponding level of development is necessary. | Decision of school management after application and on the basis of an assessment by the health department. Positive decision when it is expected that the child will not be able to attend classes successfully. | 30.09. |
| BE | Yes | Application justifying the wish is necessary (e.g., ties to other children, a specific school program, foreign language courses, or all-day school). | Parents register their child at the responsible elementary school. Admission requires only that the child does not have any language support needs. <br> The need for language support is determined in Kindergarten. | Decision of school authority after application. Positive decision if better promotion in Kindergarten. | $\begin{aligned} & 31.12 . \\ & (2015 / 16) \\ & \text { and later: } \\ & 30.09 \text {. } \end{aligned}$ |
| BW | Yes | Only in reasonable, exceptional cases (application necessary) | Early enrollment of noncompulsory children is possible when their mental and physical development indicates that they can be expected to attend classes successfully (school management decides on application). | Decision of school management based on an assessment by the health department. | 30.09. |
| BY | Yes | Only for compelling personal reasons (application necessary) | School management decides on school enrollment at the request of parents. | Decision of school management after careful assessment of parents and the result of the school entrance examination and-with the consent of parent or legal guardian-assessment by the Kindergarten. Furthermore, observations made by the teacher in the so-called Schulspiel (playing school) at school registration are important. In cases of doubt, an advisory teacher, a school psychologist, or other counseling services may be brought in. | 30.09. |
| HB | Yes | On informal request, especially if no full-time provision is available at the responsible school and other reasons such as siblings attending the desired school. | Assessment by the health department is necessary. | Assessment by the health department is necessary. | 30.06. |


| Federal state | School districts | Elementary school outside school district | Early enrollment | Delaying school enrollment for one year | Stichtag |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HE | Yes | Only for important reasons by application | School management decides on school enrollment on application while considering the school medical report. | School-age children who do not yet have the level of physical, mental, and emotional development required for attending school can, with the consent of their parents, attend a one-year preschool class instead. This year is not taken into account as compulsory education. | 30.06. |
| HH | No | No school district | On application taking into account the child's mental, psychological, physical, and linguistic development status. | Only if successful participation in Grade 1 lessons appears to be ruled out, taking into account the mental, emotional, physical or linguistic development status of the child and if it is to be expected that attending the one-year preschool class will deal with the identified deficits. | 01.07. |
| MV | Yes | Only for important reasons: Due to traffic conditions, the responsible school can be reached only with considerable difficulty; attending another school would greatly assist the children in promoting special interests or abilities or facilitating the professional or employment relationship; or special social circumstances. | On application if the child meets the physical, mental, and behavioral requirements. | On application; assessment by school psychological service and health department necessary. | 30.06. |
| NI | Yes | Only if attending the responsible school would lead to undue hardship for the students or their families, or attending the other school seems necessary for pedagogical reasons. | On application if the child meets the physical and mental requirements, and has sufficiently developed social behavior. | Only if child is not sufficiently developed physically, mentally, or in social behavior. | 30.09. |
| NW | No | No school district | Yes, if the child meets the physical and mental requirements, and has sufficiently developed social behavior. Decision by school management on the basis of assessment by the health department. | Decision of the school management based on an assessment by the health department. Furthermore, an application by parents is possible. | 30.09. |


| Federal <br> state | School <br> districts | Elementary school <br> outside school <br> district | Early enrollment | Delaying school enrollment <br> for one year |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| RP | Yes | Only for important <br> reasons such as <br> wanting to attend <br> an all-day school <br> (application neces- <br> sary). | On application. | On application due to health <br> grounds. | 31.08. |

## Notes. Own compilation.

The abbreviations for the federal states are Baden Wurttemberg (BW); Bavaria (BY); Berlin (BE); Brandenburg (BB); Bremen (HB); Hamburg (HH); Hessen (HE); Mecklenburg-Western Pomerania (MV); Lower Saxony (NI); North Rhine-Westphalia (NW); Rhineland Palatinate (RP); Saarland (SL); Saxony (SN); Saxony-Anhalt (ST); Schleswig-Holstein (SH); Thuringia (TH).
Source: Information provided by the ministries of the federal states through direct contact as well as available school laws.

Regulations concerning the transition to secondary school (2014/2015 and 2015/2016)

| Federal state | Tracking recommendation mandatory? | Requirements for attending a Gymnasium? | Years to obtain Abitur? |
| :---: | :---: | :---: | :---: |
| BB | No | Suitability of a child for the 6-year course of study at a Gymnasium has to be proven by passing an aptitude test. This test is not necessary if the elementary school report recommends Abitur and in the half-year report for Grade 6, the sum of grades in mathematics, German, and first foreign language is not higher than seven. | 12 and 13 years, flexibles, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132): Gymnasium offers only 8 years of education. In cooperative or integrated school types, 9-year courses are generally offered, but 8-year courses are also possible upon application (Homuth 2017, p. 26). |
| BE | No | An average grade of 3.0 or more requires parents to participate in a counseling interview at a Gymnasium in advance. | 12 and 13 years, flexibles, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132) |
| BW | No | Requirements of the Gymnasium are generally met if average grades in German and mathematics are at least 2 to 3. <br> When enrolling in secondary school, the elementary school recommendation must be presented. If there is a different elementary school recommendation, the school administration can offer parents a counseling session. The half-year information for 4th grade does not have to be submitted when registering. | 12 and 13 years, optionales G8/G9-neu Modell (Kühn et al. 2013, p. 132-133): Gymnasium is generally geared toward G8, but can sometimes offer its own parallel or exclusively G9 option. In addition, a G9 branch is offered at comprehensive schools (Homuth 2017, p. 26). |
| BY | No | Transition-relevant factors: certificate of completion with school tracking recommendation, possibility of attending the rehearsal lessons at the receiving school type, and parents' approval. <br> Transition to the Gymnasium is possible with the appropriate recommendation based on overall 4th-grade score across German, mathematics, and so-called Heimat- and Sachunterricht (preparatory form of subjects such as geography, biology, social studies, economics, physics, chemistry taught in secondary school). Transition to Gymnasium requires an average grade of at least 2.33. <br> Transition to Gymnasium also possible if the Probeunterricht (trial lesson) at the receiving school type is passed successfully. Written tasks in German and mathematics are assigned centrally in a three-day Probeunterricht. Both subjects are also graded orally. At least Grade 3 in one subject and at least Grade 4 in the other subject are needed to pass. The parents can decide to transfer their child if Grade 4 has been reached in both subjects in the test lesson. | 12 years, konkurrenzloses G8Modell (Kühn et al. 2013, p. 132). |
| HB | No | Children whose achievements in German and mathematics are above the standard are preferred. | 12 and 13 years, flexibles, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132). |
| HE | No | No concrete requirements [found]. | 12 and 13 years, optionales G8/G9-neu Modell (Kühn et al. 2013, p. 132). |
| HH | No | For the transition to Grade 7 of, amongst others, the Gymnasium, the student has to fulfill the conditions for successful participation in the chosen school level or type of school. The so-called Zeugniskonferenz (a special meeting of teachers to discuss the performance of each student in a class and its consequences) will determine if conditions for the transition exist. If the | 12 and 13 years, starres, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132): Length of secondary school education in the general education area varies according to school type, with the Gymna- |


| Federal state | Tracking recommendation mandatory? | Requirements for attending a Gymnasium? | Years to obtain Abitur? |
| :---: | :---: | :---: | :---: |
|  |  | student is not expected to be able to cope with the requirements of the 8 -year Gymnasium program, the student switches to Grade 7 of the so-called Stadtteilschule (district school). | sium as G8 and the Gymnasium tracks at comprehensive schools as G9 (Homuth 2017, p. 26). |
| MV | No | Requirements after Grade 6 to attend Gymnasium: All subjects graded with at least satisfactory or-in case of insufficient performance-successful performance should be expected taking into account learning development throughout the evaluation period. | 12 years, konkurrenzloses G8Modell (Kühn et al. 2013, p. 132). |
| NI | No <br> [tracking recommendation only until 07/2015] | No concrete requirements [found]. | 12 and 13 years, flexibles, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132). |
| NW | No | No concrete requirements [found]. | 12 and 13 years, optionales G8/G9-neu Modell (Kühn et al. 2013, p. 132). |
| RP | No | A recommendation for the Gymnasium can be pronounced only if justified by general learning and working behavior and achievements in German, mathematics, and so-called Sachunterricht (preparatory form of subjects such as geography, biology, social studies, economics, physics, and chemistry taught in secondary school) are generally at least satisfactory and in the remaining subjects, mostly satisfactory. | 12 and 13 years, (Homuth 2017, p. 23; Kühn et al. 2013, p. 121). |
| SH | No | The basis is a development report with a forecast of potential achievement. | 12 and 13 years, optionales G8/G9-neu Modell (Kühn et al. 2013, p. 132-133). |
| SL | No | The section development report of the Grade 4 halfyear report contains references to the student's previous learning and achievement development, working attitude, way of working and learning, social behavior, ability to think, and linguistic expressiveness. It also includes references to specific performance issues in areas such as reading. The development report is to be completed as a summary assessment with a statement on the further education of the student. | 12 and 13 years, starres, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132). |
| SN | No | Recommendation for the Gymnasium is given if the student has achieved a grade point average of 2.0 or better in German, mathematics, and so-called Sachunterricht (preparatory form of subjects such as geography, biology, social studies, economics, physics, and chemistry taught in secondary school) in the half-year information or at the end of the school year and none of these subjects is graded satisfactory or worse. The student's learning and working behavior, academic achievement, and previous development should also be expected to meet the requirements of the Gymnasium. <br> Even parents of Grade 4 students without a Gymnasium recommendation can register their child at a Gymnasium. These students participate in a written suitability test. Tasks are issued centrally and take equal account of German, mathematics, and Sachunterricht. | 12 years, konkurrenzloses G8Modell (Kühn et al. 2013, p. 132). |
| ST | No | Performance in German and mathematics should be good to very good. Other subjects should be at least satisfactory. This is based on an overall average of 2.6. | 12 and 13 years, flexibles, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132). |


| Federal state | Tracking recommendation mandatory? | Requirements for attending a Gymnasium? | Years to obtain Abitur? |
| :---: | :---: | :---: | :---: |
| TH | No | Transition to Gymnasium if (a) the entrance exam is passed, or (b) the requirements are met, or (c) there is a recommendation from the so-called Klassenkonferenz (a special meeting of teachers to discuss the performance of each student in a class and its consequences). <br> With regard to (b), at least the grade good must be attained in the certificate for the 4th-grade school semester in German, mathematics, and so-called Heimat- and Sachkunde (preparatory form of subjects such as geography, biology, social studies, economics, physics, and chemistry taught in secondary school). A recommendation to attend the Gymnasium (c) is pronounced only if the grade satisfactory has been achieved in at most one of the subjects German, mathematics, or Heimat- and Sachkunde and at least the grade good in the others. If in one of the three subjects, at least the grade good; and in the remaining of these subjects, the grade satisfactory has been reached, the recommendation is given insofar as a successful attendance of Gymnasium can be expected based on the learning behavior shown so far. | 12 and 13 years, starres, konkurrierendes G8/G9-Modell (Kühn et al. 2013, p. 132). |

## Notes. Own compilation.

In Germany performance grades ranging from 1 (very good, A) to 6 (insufficient, F) are generally used.
We follow Kühn et al.'s (2013, p. 132-133) classification of the years needed to obtain Abitur. This classification corresponds to the information provided by the ministries. Please contact the authors for more details.
The abbreviations for the federal states are Baden Wurttemberg (BW); Bavaria (BY); Berlin (BE); Brandenburg (BB); Bremen (HB); Hamburg (HH); Hessen (HE); Mecklenburg-Western Pomerania (MV); Lower Saxony (NI); North Rhine-Westphalia (NW); Rhineland Palatinate (RP); Saarland (SL); Saxony (SN); Saxony-Anhalt (ST); Schleswig-Holstein (SH); Thuringia (TH).
Source: Information provided by the ministries of the federal states through direct contact as well as available school laws.

## Appendix 2: Coding do-File SC1, Wave 5

```
* 1. School district
**********************
fre p31540a
gen district = 0 // incorrect
replace district = 1 if p31540a == 1 & (p751001 g2R == 3 | p751001 g2R == 4 | ///
p751001_g2R >= 6 & p751001_g2R <= 16) // correc匂
replace district = 1 if p31540a == 2 & (p751001_g2R == 2 | p751001_g2R == 5 | ///
p751001 g2R == 1) // correct
replace district = 2 if p31540a == 3 // don't know
replace district = -97 if p31540a == -97
replace district = . if p751001_g2R == -21
la define district 0 "incorrect" 1 "correct" 2 "don't know"
la value district district
```

```
* 2. School outside district
```

$\star * * * * * * * * * * * * * * * * * * * * * * * * * * *$
fre p31540b
gen outside = 0 // incorrect
replace outside $=1$ if p31540b $==2$ \& (p751001_g2R >= 3 \& p751001_g2R <= 4 | ///
p751001 g2R >= 6 \& p751001 g2R <= 16) // correct
replace outside $=2$ if p31540b $==4$ \& (p751001_g2R >= 3 \& p751001_g2R <= 4 | ///
p751001 g2R >= 6 \& p751001 g2R <= 16) // don't know
replace outside $=$. if (p751001_g2R == 2 | p751001_g2R == 5 | p751001_g2R == 1) // identifying
federal states without districts
replace outside $=$. if p31540b $==$. \& (p751001_g2R >= 3 \& p751001_g2R <= 4 | ///
p751001_g2R>=6 \& p751001_g2R<=16) // Missing
replace outside $=$. if $\mathrm{p} \overline{7} 51001 \_g 2 R==-21$
la define outside 0 "incorrect" 1 "correct" 2 "don't know"
la value outside outside
fre outside if p751001_g2R!=-21
*3. Early school enrollment
***************************
fre p31540c
recode p31540c (1 $3=0$ "incorrect") (2 = 1 "correct") (4 = 2 "don't know") (-97 = -97 "re-
fused"), gen (early)
*4. Later school enrollment
***************************
fre p31540d
recode p31540c (1 $3=0$ "incorrect") (2 = 1 "correct") ( $4=2$ "don't know") (-97 = -97 "refused"), gen (later)

```
*5. Deadline school enrollment (Stichtag)
******************************************
```

fre p31541d p31541m
gen date = 0 // incorrect
replace date $=1$ if p31541d $==30 \& p 31541 m==6 \&(p 751001$ g $2 R==4$ | p751001 $g 2 R==6$ | ///
p751001_g2R == 13 | p751001_g2R==10 | p751001_g2R == 14 | p751001_g2R == 15 | ///
p751001_g2R == 1) // correct
replace date $=1$ if p31541d $==1 \& p 31541 m==7 \&\left(p 751001 \_g 2 R==2\right) / /$ correct
replace date $=1$ if p31541d $==1 \& p 31541 m==8 \&(p 751001-g 2 R==16) / /$ correct
replace date $=1$ if p31541d $==31 \& p 31541 m==8 \&(p 751001$ _g $2 R==7) / /$ correct
replace date $=1$ if p31541d $==30 \& p 31541 m==9 \&(p 751001$ g2R $==8$ | ///
$\mathrm{p} 751001 \_g 2 \mathrm{R}==9$ | p751001_g2R == $11\left|\mathrm{p} 751001 \_g 2 \mathrm{R}==12\right| \mathrm{p} 751001 \_g 2 \mathrm{R}==3 \mathrm{l} / / /$
p751001_g2R == 5) // correct
replace date $=1$ if p31541d $==31 \& p 31541 \mathrm{~m}==12 \& p 751001$ g2R $==11 / /$ correct
replace date $=2$ if p31541d $==-98$ | p31541m $==-98 / /$ don't know
replace date $=-97$ if p31541d $==-97$ | p31541m $==-97$ // refused
replace date $=$. if p751001_g2R == -21
la define date 0 "incorrect" 1 "correct" 2 "don't know"
la value date date

## Appendix 3: Coding do-File SC2, Wave 5

```
* 1. Tracking recommendation mandatory
*************************************
fre p445510
gen mandatory = 0 // incorrect
replace mandatory = 1 if p445510 == 2 // correct
replace mandatory = 2 if p445510 == 3 // don't know
replace mandatory = -97 if p445510 == -97 // -97
la define mandatory 0 "incorrect" 1 "correct" 2 "don't know"
la value mandatory mandatory
* 2. Requirement to attend Gymnasium
****************************************
fre p445520
gen requirement = 0 // incorrect
replace requirement = 1 if p445520 == 2 // correct
replace requirement = 2 if p445520 == 3 // don't know
replace requirement = -97 if p445520 == -97 // -97
la define requirement 0 "incorrect" 1 "correct" 2 "don't know"
la value requirement requirement
* 3. Reason why statement (2) is wrong
******************************************
fre p445531 p445532 p445533 p445534 p445535 p445536 p445537
```

egen not_mentioned $=$ anycount (p445531 p445532 p445533 p445534 p445535 p445536), values (0)
egen dont_know $=$ anycount (p445531 p445532 p445533 p445534 p445535 p445536), values (-98)
gen reason $=$.
replace reason $=0$ if p445520 == 2 // incorrect cases
replace reason $=1$ if $p 445520==2 \& p 751001$ g $2 \mathrm{R}==8$ \& $\mathrm{p} 445532==1$ \& not mentioned $==5 / /$
correct
replace reason $=1$ if $p 445520==2$ \& (p751001 g2R == 12 | p751001 g2R == 11 ///
$\mid \mathrm{p} 751001 \_g 2 \mathrm{R}==9$ | $\mathrm{p} 751001 \_\mathrm{g} 2 \mathrm{R}==13 \mid \mathrm{p} 751001 \_\mathrm{g} 2 \mathrm{R}==7$ | $\mathrm{p} 751001 \_\mathrm{g} 2 \mathrm{R}==15$ ) ///
\& p445532 $==1$ \& p445533 == $\overline{1}$ \& not_mentioned $==-4 / /$ correct
replace reason $=1$ if p445520 == 2 \& p751001_g2R == 16 \& p445533 == 1 \& not_mentioned == $5 / /$
correct
replace reason = 1 if $p 445520==2$ \& p751001_g2R == $14 \& p 445533==1$ \& p445536 == 1 \& ///
not mentioned == 4 // correct
replace reason $=1$ if $p 445520==2 \&\left(p 751001 \_g 2 R==4\right.$ | p751001_g2R $==2 / / /$
| p751001 g2R == 6 | p751001 $\mathrm{g} 2 \mathrm{R}==3$ | p751001 $\mathrm{g} 2 \mathrm{R}==5 \mid \mathrm{p} 751001 \mathrm{~g} 2 \mathrm{R}==1 \mathrm{l} / / /$
p751001_g2R == 10) \& p445534 == 1 \& not_mentioned == 5 // correct
replace reason $=2$ if p445520 $==2 \&$ don̄t_know $==6 / /$ don't know
la define reason 0 "incorrect" 1 "correct" 2 "don't know"
la value reason reason

```
* 4. Duration Hauptschulabschluss
** Duration Hauptschulabschluss
```

fre p445600
gen duration_hs = 0 // incorrect
replace durā̄ion_hs $=1$ if p445600 == $9 / /$ correct
replace duration_hs = 1 if p445600 == 10 \& (p751001_g2R == 4 | p751001_g2R == 5 | p751001_g2R

replace duration_hs $=2$ if p445600 == -98 // don't know
la define duratiōn hs 0 "incorrect" 1 "correct" 2 "don't know"
la value duration_hs duration_hs

* 5. Duration Realschulabschluss
. Duration Realschulabschluss
fre p445610
gen duration_rs = 0 // incorrect
replace duration_rs = 1 if p445610 == 10 // correct
replace duration_rs $=2$ if p445610 == -98 // don't know
la define duration_rs 0 "incorrect" 1 "correct" 2 "don't know"
la value duration_rs duration_rs
* 5. Duration Abitur
********************
fre p445620
gen duration_gy = 0 // incorrect
replace duration_gy = 1 if (p445620 == 12 | p445620 == 13 | p445620 == -20) \& ///
(p751001_g2R ! = $\overline{9} \&$ p751001_g2R $!=13 \& p 751001$ g2R $!=14$ ) // correct
replace duration $g y=1$ if $p 445620==12 \&(p 751001$ g2R == 9 | p751001 g2R == 13 | ///
p751001_g2R != 1̄4) // correct
replace duration_gy $=2$ if p445620 == -98 // don't know
replace duration_gy = -97 if p445620 == -97 // refused
la define duration_gy 0 "incorrect" 1 "correct" 2 "don't know"
la value duration_gy duration_gy
* 6. Dual vocational system (duale Ausbildung)
**********************************************
fre p31562a
recode p31562a (1 $24=0$ "incorrect") (3=1 "correct") (5=2 "don't know") ///
(-97=-97 "refused"), gen (dual)
* 7. Entrance qualification for universities of applied sciences (Fachhochschulreife)

fre p31561a
recode p31561a (1 $24=0$ "incorrect") (3=1 "correct") (5=2 "don't know") ///
(-97=-97 "refused"), gen (fachhochschulreife)


## Appendix 4: SC1, Wave 2: Original instrument in German language




| Variablen |  |  |
| :--- | :--- | :--- |
| p31520b | Wissensitems - staatliche Unterstützung | pParent |



| Variablen | Wissensitems - Kindergartenpflicht | pParent |
| :--- | :--- | :--- |
| p31520c |  |  |



Source: Leibniz-Institut für Bildungsverläufe e.V. (2017): Startkohorte 1: Neugeborene (SC1). Welle 2. Erhebungsinstrumente (SUF-Version 4.0.0), p. 46-48.

## Appendix 5: SC1, Wave 5: Original instrument in German language

| 76002Nun möchte ich Ihnen noch einige konkrete Fragen rund um das Thema Einschulung <br> stellen. Bitte denken Sie dabei an die Regelungen in dem Bundesland, in dem Sie <br> heute leben. Wenn Sie die Antwort nicht wissen, geben Sie bitte „weiß nicht" an! |
| :--- | :--- |
| Lange Zeit gab es in allen Bundesländern sogenannte Schulsprengel oder <br> Schulbezirke. Das bedeutet, dass der Staat einem Kind aufgrund seines Wohnortes <br> eine öffentliche Grundschule zuweist. Wie ist das heute in Ihrem Bundesland? Gibt es <br> dort Schulbezirke oder Schulsprengel? |
| << Vorgaben vorlesen. >> |
| Ja [1] |


| Variablen | Wissen um Einschulung - Grundschulwahl 1 | pParent |
| :--- | :--- | :--- |
| p31540a |  |  |


| $76003 \quad$Dürfen Eltern für ihr Kind eine andere öffentliche Grundschule außerhalb ihres <br> Schulsprengels oder Schulbezirks wählen? |  |
| :--- | :--- |
| Vorgaben vorlesen. |  |
| Es geht um das Bundesland, in dem Sie leben. |  |
| Mit öffentlichen Schulen sind nur staatliche Schulen gemeint, keine Schulen in freier Trägerschaft/Privatschulen. |  |
| Ja, ohne Weiteres [1] | $\square$ |
| Ja, unter bestimmten Voraussetzungen [2] | $\square$ |
| Nein [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76004 | $\square$ |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31540b | Wissen um Einschulung - Grundschulwahl 2 | pParent |


| $76004 \quad$ Dürfen Eltern ihr Kind früher einschulen lassen als regulär vorgesehen? |  |
| :--- | :--- |
| Vorgaben vorlesen. |  |
| Es geht um das Bundesland, in dem Sie leben. |  |
| Ja, ohne Weiteres [1] | $\square$ |
| Ja, unter bestimmten Voraussetzungen [2] | $\square$ |
| Nein [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76005 |  |


| Variablen | Wissen um Einschulung - vorzeitige Einschulung | pParent |
| :--- | :--- | :--- |
| p31540c |  |  |


| 76005 $\quad$ Dürfen Eltern ihr Kind ein Jahr von der Einschulung zurückstellen lassen? <br> Vorgaben vorlesen. <br> Es geht um das Bundesland, in dem Sie leben. <br> Ja, ohne Weiteres [1] |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Ja, unter bestimmten Voraussetzungen [2] | $\square$ |  |  |  |  |
| Nein [3] | $\square$ |  |  |  |  |
| weiß nicht [4] | $\square$ |  |  |  |  |
| Angabe verweigert [-97] | $\square$ |  |  |  |  |
| goto 76006 | $\square$ |  |  |  |  |
| Variablen |  |  |  |  |  |
| p31540d | Wissen um Einschulung - Rückstellung |  |  |  |  |

## 76006 Können Sie mir den Stichtag nennen, der für die reguläre Einschulung eines Kindes in Ihrem Bundesland gilt?

Gemeint ist der Stichtag der für regulär eingeschulte Kinder gilt, nicht für solche Kinder, die vorzeitig eingeschult oder zurückgestellt werden sollen.

| Tag |
| :--- |
| Range: $1-31$ |
| Monat |
| Range: $1-12$ |
| goto $760004 Z$ |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31541d | Wissen um Einschulung - Stichtag: Tag | pParent |
| p31541m | Wissen um Einschulung - Stichtag: Monat | pParent |



## 76118 Und können Sie mir sagen, welchen !!schulischen!! Abschluss die !!meisten Personen!! haben, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen?

<< Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Absch/üsse, sondern um die schulischen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife. >>
keinen Schulabschluss [1]

| Hauptschulabschluss [2] | $\square$ |
| :--- | :---: |
| Realschulabschluss/Mittlere Reife [3] | $\square$ |


| Abitur [4] | $\square$ |
| :--- | :--- |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76117 $=-97$ \& $76118=-97$ ) ) goto 7600052 <br> if (76117 <> -97 \& 76118 $=-97$ ) goto 76120 <br> if (76118 <> -97) goto 76120 |  |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31501b | Wissen um schulische Abschlüsse_Apotheker/in | pParent |


| 76120 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau? |  |  |  |
| :---: | :---: | :---: | :---: |
| << Vorgaben bei Bedarf vorlesen. |  |  |  |
| Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist. |  |  |  |
| Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Absch/üsse, sondern um die schulischen Absch/üsse, die die meisten Personen haben. |  |  |  |
| Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint. |  |  |  |
| Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen. |  |  |  |
| Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife. |  |  |  |
| Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife. >> |  |  |  |
| keinen Schulabschluss [1] $\square$ |  |  |  |
| Hauptschulabschluss [2] $\square$ |  |  |  |
| Realschulabschluss/Mittlere Reife [3] $\square$ |  |  |  |
| Abitur [4] $\square$ |  |  |  |
| weiß nicht [5] $\square$ |  |  |  |
| Angabe verweigert [-97] $\square$ |  |  |  |
| if (76118 = -97 \& 76120 = -97) goto $760005 Z$ <br> if $(76118$ <> -97 \& $76120=-97)$ goto 76121 <br> if (76120 <> -97) goto 76121 |  |  |  |
| Variablen |  |  |  |
| p31501c | Wissen um sc | _ Bankkaufmann/frau | pParent |

## 76121 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

<< Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Absch/üsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife. >>
keinen Schulabschluss [1]

| Hauptschulabschluss [2] | $\square$ |
| :--- | :--- |

Realschulabschluss/Mittlere Reife [3]

| Abitur [4] | $\square$ |
| :--- | :--- |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if $(76120=-97 \& 76121=-97)$ goto $760005 Z$ <br> if $(76120<>-97$ \& $76121=-97)$ goto 76122 <br> if $(76121<>-97)$ goto 76122 |  |


| Variablen | Wissen um schulische Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31501d |  |  |


| $76122 \quad$ Und bei Steuerfachangestellter oder Steuerfachangestellte? <br> << Vorgaben bei Bedarf vorlesen. <br> Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist. <br> Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen <br> Abschlüsse, die die meisten Personen haben. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal <br> vorlesen und rückversichern, ob er diese meint. <br> Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen. <br> Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss <br> oder Berufsbildungsreife. <br> Falls der Begriff, „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind <br> Mittlerer Abschluss oder Fachoberschulreife. >> <br> keinen Schulabschluss [1] |
| :--- |
| Hauptschulabschluss [2] |
| Realschulabschluss/Mittlere Reife [3] |
| Abitur [4] |
| weiß nicht [5] |
| Angabe verweigert [-97] |
| goto 760005Z |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31501e | Wissen um schulische Abschlüsse_Steuerfachangestellte/r | pParent |

## 76123 Jetzt haben wir ja über !!schulische!! Abschlüsse gesprochen. Nun geht es um !! berufliche!! Abschlüsse. <br> Welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?

<< Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
keine Ausbildung [1]

| abgeschlossene Ausbildung [2] | $\square$ |
| :--- | :--- |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76124 |  |


| Variablen | Wissen um berufliche Abschlüsse_Verkảufer/in | pParent |
| :--- | :--- | :--- |
| p31502a |  |  |



76126 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?
<< Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint. >>

| keine Ausbildung [1] | $\square$ |
| :---: | :---: |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76124 $=-97$ \& $76126=-97$ ) goto $760002 Z$ if $(76124$ <> -97 \& $76126=-97)$ goto 76127 if (76126 <> -97) goto 76127 |  |


| Variablen | Wissen um berufliche Abschlüsse_ Bankkaufmann/frau | pParent |
| :--- | :--- | :--- |
| p31502c |  |  |

## 76127 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

<< Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint. >>

| keine Ausbildung [1] | $\square$ |
| :--- | :---: |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76126 $=-97$ \& 76127 = -97) goto 7600022 <br> if (76126 <> -97 \& 76127 = -97) <br> if (7612 76128 |  |


| Variablen | Wissen berufliche Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31502d |  |  |

## 76128 Und bei Steuerfachangestellter oder Steuerfachangestellte?

<< Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint. >>
keine Ausbildung [1]

| abgeschlossene Ausbildung [2] | $\square$ |
| :--- | :--- |
| Sth |  |


| Studium [3] | $\square$ |
| :--- | :--- |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |

$760002 Z$

| Variablen |  |  |
| :--- | :--- | :--- |
| p31502e | Wissen um berufliche Abschlüsse_Steuerfachangestellte/r | pParent |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2018): Startkohorte 1: Neugeborene (SC1). Welle 5. Erhebungsinstrumente (SUF-Version 5.0.0), p. 83-94.

## Appendix 6: SC2, Wave 5: Original instrument in German language

| 76133 | Das Thema Bildung und insbesondere der Öbergang am Ende der Grundschulzeit <br> weisen viele Aspekte auf, die in der Öffentlichkeit nicht immer alle bekannt sind. Ich <br> lese Ihnen nun einige Aussagen vor. Bitte geben Sie zu jeder Aussage an, ob sie <br> stimmt, nicht stimmt oder ob Sie es nicht wissen. |
| :--- | :--- |
|  | Das Kind !!muss!! die am Ende der Grundschulzeit empfohlene Schulform !!in jedem |
| Fall!! besuchen. |  |

Vorgaben vorlesen.
Bei Antwort ja/nein nachfragen: „Stimmt, stimmt nicht oder weiß nicht?"
stimmt [1]

| stimmt nicht [2] | $\square$ |
| :--- | :--- |
| weiß nicht [3] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76134 |  |


| Variablen | Wissen Grundschulübergang_Übergangsempfehlung | pParent |
| :--- | :--- | :--- |
| p445510 |  |  |

76134 Für den Besuch des Gymnasiums braucht das Kind in den Fächern Mathematik und Deutsch mindestens einen Notendurchschnitt von 2.

Vorgaben bei Bedarf vorlesen.
Bei Antwort ja/nein nachfragen: „Stimmt, stimmt nicht oder weiß nicht?
Bei Unklarheit: Es geht hier um die Regelungen in dem Bundesland, in dem Ihr Kind zur Schule geht.

| stimmt [1] | $\square$ |
| :--- | :--- |
| stimmt nicht [2] | $\square$ |
| weiß nicht [3] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if $(p 44552 ~<>~ 2) ~ g o t o ~$ <br> if $(p 44552=2)$ goto 76135 |  |

## Variablen

| p445520 | Wissen Grundschulübergang_Noten2 | pParent |
| :--- | :--- | :--- |

## 76135 [MF] Warum stimmt diese Aussage Ihrer Meinung nach nicht? Ich lese Ihnen nun verschiedene mögliche Gründe vor. Von diesen können Sie auch mehr als einen nennen.

Jede Antwortvorgabe soll vorgelesen werden. Nach jeder Vorgabe solte kurz gewartet werden, ob diese gemäß dem Befragten zutrifft. Wenn ein vorgegebener Grund zutraf, dann sollen trotzdem noch die restlichen Gründe vorgelesen werden


| Variablen | Wissen Übergang_Noten2: bessere Noten | pParent |
| :--- | :--- | :--- |
| p445531 | Wissen Übergang_Noten2: schlechtere Noten | pParent |
| p445532 | Wissen Übergang_Noten2: Noten anderer Fächer | pParent |
| p445533 | Wissen Übergang_Noten2: kein Notenschnitt | pParent |
| p445534 | Wissen Übergang_Noten2: Eltern | pParent |
| p445535 | Wissen Übergang_Noten2: andere Kompetenzen | pParent |
| p445536 | Wissen Übergang_Noten2: anderer Grund | pParent |
| p445537 |  |  |

76139 Nun habe ich noch ein paar Fragen zur Dauer des Schulbesuchs.
Können Sie mir sagen, wie viele Jahre man bis zum Hauptschulabschluss die Schule besuchen muss? Bitte zählen Sie die Grundschulzeit mit.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.
Bei Nachfrage bzw. Unklarheit: Gemeint ist der einfache Hauptschulabschluss; nicht gemeint ist der erweiterte Hauptschulabschluss.
|
I__ Jahr

Range: 0-20
goto 76140

| Variablen | Wissen_Dauer Hauptschulabschluss | pParent |
| :--- | :--- | :--- |
| p445600 |  |  |

76140 Und können Sie mir sagen, wie viele Jahre man bis zum Realschulabschluss die Schule besuchen muss? Bitte zählen Sie auch hier die Grundschulzeit wieder mit.
Falls der Begriff „Realschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlere Reife, Mittlerer Abschluss oder Fachoberschulreife.


Jahr

Range: 0-20
goto 76141

| Variablen |  |  |  |
| :--- | :--- | :--- | :---: |
| p445610 | Wissen_Dauer Realschulabschluss | pParent |  |


| 76141 | Und wie viele Jahre muss man für das Abitur die Schule besuchen? Bitte zählen Sie <br> die Grundschulzeit wieder mit. |
| :--- | :--- |
| Der Button „12 oder 13 Jahre" soll nur dann genutzt werden, wenn beides gleichzeitig genannt wird. |  |
| 12 oder 13 Jahre $[-20]$ |  |
| Range: $0-20$ |  |
| goto $76102 Z$ |  |


| Variablen | Wissen_Dauer Abitur | pParent |
| :--- | :--- | :--- |
| p445620 |  |  |


| 76129Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Hierzu hätte <br> ich noch ein paar Fragen an Sie. <br> Können Sie mir sagen, was in Deutschland als ", Duales Ausbildungssystem" <br> bezeichnet wird? |
| :--- | :--- | :--- |
| Vorgaben vorlesen. |
| Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal |
| vorlesen und rückversichern, ob er diese meint. |
| Der Besitz von zwei Ausbildungsabschlüssen [1] |


| 76142 | Und es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Hierzu <br> hätte ich noch eine Frage an Sie. <br> Können Sie mir sagen, was man unter "Fachhochschulreife" versteht? |  |
| :--- | :--- | :--- |
| Vorgaben vorlesen. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal <br> vorlesen und rückversichern, ob er diese meint. <br> Den Abschluss einer Meisterausbildung [1] | $\square$ |  |
| Ein abgeschlossenes Studium an einer Fachhochschule <br> [2] | $\square$ |  |
| Ein Abschluss, der zum Studium an einer Fachhochschule <br> berechtigt [3] | $\square$ |  |
| Ein anderes Wort für Abitur [4] | $\square$ |  |
| weiß nicht [5] | $\square$ |  |
| Angabe verweigert [-97] | $\square$ | $\square$ |
| goto 76103Z | $\square$ |  |
| Variablen | $\square$ |  |
| p31561a | $\square$ |  |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2018): Erhebungsinstrumente (SUFVersion). NEPS Startkohorte 2 - Kindergarten. Frühe Bildung in Kindergarten und Grundschule. Welle 5-5.1.0, p. 361-364.

## Appendix 7: SC2, Wave 7: Original instrument in German language

```
76123 Unterschiedliche Berufe oder Ausbildungen erfordern auch
    unterschiedliche !!berufliche Abschlüsse!!.
    Ich werde lhnen nun verschiedene Berufe nennen. Bitte sagen Sie mir zu jedem Beruf,
    welchen !!beruflichen!! Abschluss die !!meisten Personen!! haben, die heutzutage in
    Deutschland diesen Beruf ergreifen. Wenn Sie es nicht wissen, können Sie auch weiß
    nicht angeben.
    Welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in
    Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?
```

Vorgaben vorlesen.
Bei Nachfrage: „Es geht nicht darum wie es früher war, sondern wie es heute ist. "
Bei Nachfrage: „Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen
Abschlüsse, die die meisten Personen haben."
Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal
vorlesen und rückversichern, ob er diese meint.
keine Ausbildung [1]

| abgeschlossene Ausbildung [2] | $\square$ |
| :--- | :--- |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |

Angabe verweigert [-97]
goto 76124

| Variablen |  |  |  |
| :--- | :--- | :--- | :---: |
| p31502a | Wissen um berufliche Abschlüsse_ Verkäufer/in | pParent |  |

76124 Und welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen?
Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Absch/üsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

| keine Ausbildung [1] |
| :--- |
| abgeschlossene Ausbildung [2] |



| Studium [3] | $\square$ |
| :--- | :--- |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76123 $=-97$ \& 76124 $=-97$ ) goto 76129 <br> if (76123 <> -97 \& 76124 $=-97$ ) goto 76126 <br> if (76124 <> -97) goto 76126 |  |


| Variablen | Wissen um berufliche Abschlüsse_Apotheker/in | pParent |
| :--- | :--- | :--- |
| p31502b |  |  |

76126 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?
Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
keine Ausbildung [1]
abgeschlossene Ausbildung [2]

| Studium [3] | $\square$ |
| :--- | :--- |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| $\left.\begin{array}{l}\text { if }(76124=-97 ~ \& ~ 76126 ~\end{array}=-97\right)$ goto 76129 |  |
| if $(76124<>-97$ \& $76126=-97)$ goto 76127 |  |
| if $(76126<>-97)$ goto 76127 |  |$\quad$


| Variablen | Wissen um berufliche Abschlüsse_Bankkaufmann/frau | pParent |
| :--- | :--- | :--- |
| p31502c |  |  |

## 76127 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
keine Ausbildung [1]

| abgeschlossene Ausbildung [2] | $\square$ |
| :--- | :--- |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |

```
if (76126 = -97 & 76127 = -97) goto 76129
if (76126 <> -97 & 76127 = -97) goto 76128
if (76127 <> -97) goto 76128
```

Variablen

| p31502d | Wissen berufliche Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |


| $76128 \quad$ Und bei Steuerfachangestellter oder Steuerfachangestellte? |  |
| :--- | :--- |
| Vorgaben bei Bedarf vorlesen. |  |
| Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist. |  |
| Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen <br> Absch/üsse, die die meisten Personen haben. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal <br> vorlesen und rückversichern, ob er diese meint. <br> keine Ausbildung [1] | $\square$ |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76129 | $\square$ |


| Variablen | Wissen um berufliche Abschlüsse_Steuerfachangestellte/r | pParent |
| :--- | :--- | :--- |
| p31502e |  |  |


| $76129 \quad$Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Hierzu hätte <br> ich noch ein paar Fragen an Sie. <br> Können Sie mir sagen, was in Deutschland als "Duales Ausbildungssystem" <br> bezeichnet wird? |  |
| :--- | :--- |
| Vorgaben vorlesen. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal <br> vorlesen und rückversichern, ob er diese meint. <br> Der Besitz von zwei Ausbildungsabschlüssen [1] | $\square$ |
| Die Tatsache, dass jemand erst eine Ausbildung macht <br> und dann noch studiert [2] | $\square$ |
| Die Kombination von schulischer Ausbildung in der <br> Berufsschule und praktischer Ausbildung im Betrieb [3] | $\square$ |
| Die Trennung zwischen dem ersten und zweiten Lehrjahr <br> [4] | $\square$ |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76130 | $\square$ |


| Variablen | Wissen um Option - duales Ausbildungssystem | pParent |
| :--- | :--- | :--- |
| p31562a |  |  |


| $76130 \quad$ Und können Sie mir sagen, was man unter "Fachhochschulreife" versteht? <br> Vorgaben vorlesen. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal <br> vorlesen und rückversichern, ob er diese meint. <br> den Abschluss einer Meisterausbildung [1] |  |
| :--- | :--- |
| ein abgeschlossenes Studium an einer Fachhochschule [2] | $\square$ |
| ein Abschluss, der zum Studium an einer Fachhochschule <br> berechtigt [3] | $\square$ |
| ein anderes Wort für Abitur [4] | $\square$ |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76116Z | $\square$ |
| Variablen | $\square$ |
| p31561a | $\square$ |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2018): Erhebungsinstrumente (SUFVersion). NEPS Startkohorte 2 - Kindergarten. Frühe Bildung in Kindergarten und Grundschule. Welle 7-7.0.0, p. 210-213.

## Appendix 8: SC3, Wave 4, target: Original instrument in German language

| 66 Stell dir vor, du hättest alle Möglichkeiten zu werden, was du willst. Was wäre dann dein Wunschberuf? |  |  |
| :---: | :---: | :---: |
| Bitte in Druckbuchstaben eintragen. |  |  |
| 8 |  |  |
| Variablen |  |  |
| t31060a_O | Idealistische Berufsaspirationen: Berufswunsch | pTarget |
| t31060a_g1 | Idealistische Berufsaspirationen: Berufswunsch (KIdB 1988) | pTarget |
| t31060a_g2 | Idealistische Berufsaspirationen: Berufswunsch (KIdB 2010) | pTarget |
| t31060a_g3 | Idealistische Berufsaspirationen: Berufswunsch (ISCO-88) | pTarget |
| t31060a_g4 | Idealistische Berufsaspirationen: Berufswunsch (ISCO-08) | pTarget |
| t31060a_g6 | Idealistische Berufsaspirationen: Berufswunsch (SIOPS-88) | pTarget |
| t31060a_g5 | Idealistische Berufsaspirationen: Berufswunsch (ISEI-88) | pTarget |
| t31060a_g7 | Idealistische Berufsaspirationen: Berufswunsch (MPS) | pTarget |
| t31060a_g9 | Idealistische Berufsaspirationen: Berufswunsch (BLK) | pTarget |
| t31060a_g14 | Idealistische Berufsaspirationen: Berufswunsch (ISEI-08) | pTarget |
| t31060a_g16 | Idealistische Berufsaspirationen: Berufswunsch (SIOPS-08) | pTarget |


| 67 | Welchen schulischen Abschluss haben die meisten Personen, die den von dir in Frage <br> 66 angegebenen Beruf heutzutage in Deutschland ergreifen? |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
| Bitte nur eine Antwort ankreuzen. <br> Hauptschulabschluss [2] | $\square$ |  |  |  |
| Realschulabschluss/Mittlere Reife [3] | $\square$ |  |  |  |
| Abitur [4] | $\square$ |  |  |  |
| keinen Schulabschluss [1] | $\square$ |  |  |  |
| weil3 nicht [5] | $\square$ |  |  |  |
| Variablen |  |  |  |  |
| t31501f | Schulischer Abschluss Wunschberuf |  |  |  |

$68 \quad \begin{aligned} & \text { Und welchen beruflichen Abschluss haben die meisten Personen, die den von dir in } \\ & \text { Frage } 66 \text { genannten Beruf heutzutage in Deutschland ergreifen? }\end{aligned}$
Bitte nur eine Antwort ankreuzen.

| keine Ausbildung [1] | $\square$ |
| :--- | :--- | :--- |
| Studium [4] | $\square$ |
| Vollzeitschulische Berufsausbildung (z.B. Besuch einer |  |
| Fachschule) [3] |  |$\quad \square$


| 69 | Denke einmal an alles, was du gerade weißt. Welchen Beruf wirst du wohl später <br> tatsächlich haben? |
| :--- | :--- | :--- |
| Wenn du dir nicht sicher bist, dann trage den Beruf ein, der deiner Meinung nach am wahrscheinlichsten ist. |  |
| Bitte in Druckbuchstaben eintragen. |  |


| Variablen | Realistische Berufsaspirationen: Berufswunsch |  |
| :--- | :--- | :--- |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{O}$ | Realistische Berufsaspirationen: Berufswunsch (KIdB 1988) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 1$ | Realistische Berufsaspirationen: Berufswunsch (KIdB 2010) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 2$ | Realistische Berufsaspirationen: Berufswunsch (ISCO-88) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 3$ | Realistische Berufsaspirationen: Berufswunsch (ISCO-08) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 4$ | Realistische Berufsaspirationen: Berufswunsch (ISEI-88) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 5$ | Realistische Berufsaspirationen: Berufswunsch (SIOPS-88) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 6$ | Realistische Berufsaspirationen: Berufswunsch (MPS) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 7$ | Realistische Berufsaspirationen: Berufswunsch (BLK) | pTarget |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 9$ | Realistische Berufsaspirationen: Berufswunsch (ISEI-08) | pTarget |
| t 31160 a _g14 | RTarget |  |
| $\mathrm{t} 31160 \mathrm{a} \_\mathrm{g} 16$ |  |  |



Bitte nur eine Antwort ankreuzen.
Hauptschulabschluss [2] $\quad \square$

| Realschulabschluss/Mittlere Reife [3] | $\square$ |
| :--- | :--- |


| Abitur [4] | $\square$ |
| :--- | :---: |
| keinen Schulabschluss [1] | $\square$ |


| weiß nicht [5] | $\square$ |
| :--- | :--- |


| Variablen | Schulischer Abschluss realistischer Beruf | pTarget |
| :--- | :--- | :--- |
| t31501g |  |  |

71 Und welchen beruflichen Abschluss haben die meisten Personen, die den von dir in Frage 69 genannten Beruf heutzutage in Deutschland ergreifen?
Bitte nur eine Antwort ankreuzen.
keine Ausbildung [1] $\square$

| Studium [4] | $\square$ |
| :--- | :---: |
| Vollzeitschulische Berufsausbildung (z.B. Besuch einer <br> Fachschule) [3] | $\square$ |
| Lehre/betriebliche Ausbildung [2] | $\square$ |
| weiß nicht [5] | $\square$ |


| 72 | Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Weißt du, <br> was in Deutschland als „Duales Ausbildungssystem" bezeichnet wird? |  |  |
| :--- | ---: | :--- | :--- |
| Bitte kreuze die richtige Antwort an. <br> bezeichnet die Tatsache, dass jemand eine Ausbildung <br> gemacht hat und dann noch studiert [2] | $\square$ |  |  |
| bezeichnet die Kombination von schulischer Ausbildung in <br> der Berufsschule und praktischer Ausbildung im Betrieb [3] | $\square$ | $\square$ |  |
| bezeichnet die Trennung zwischen dem ersten und dem <br> zweiten Lehriahr [4] <br> bezeichnet den Besitz von zwei Ausbildungsabschlüssen <br> [1] | $\square$ | $\square$ | pTarget |
| weiß nicht [5] | $\square$ |  |  |


| $73 \quad$ Und weißt du, was man unter der „Fachhochschulreife" versteht? |  |
| :--- | :--- |
| Bitte kreuze die richtige Antwort an. <br> den Abschluss einer Meisterausbildung [1] | $\square$ |
| ein anderes Wort für Abitur [4] | $\square$ |
| ein Abschluss, der zum Studium an einer Fachhochschule <br> berechtigt [3] | $\square$ |
| ein abgeschlossenes Studium an einer Fachhochschule [2] | $\square$ |
| weiß nicht [5] | $\square$ |


| Variablen | Wissen um Fachhochschulreife | pTarget |
| :--- | :--- | :--- |
| t31561a | Wa |  |


| $74 \quad$ Weißt du, was man in Deutschland unter einer „Berufsschule" versteht? |  |
| :--- | :--- |
| Bitte kreuze die richtige Antwort an. <br> Die Berufsschule bildet Berufsberater aus. [1] | $\square$ |
| Die Berufsschule dient ausschließlich der Weiterbildung <br> amm Ende der Ausbildung. [4] <br> Die Berufsshule wird zusätzlich während einer <br> Berufsausbildung besucht. [2] | $\square$ |
| Die Berufsschule besuchen Senioren, die sich im <br> Ruhestand weiterqualifizieren wollen. [3] | $\square$ |
| weiß nicht [5] | $\square$ |


| Variablen | Wissen um Berufsschule | pTarget |
| :--- | :--- | :--- |
| t31563a |  |  |

## 75 Unterschiedliche Berufe oder Ausbildungen erfordern auch unterschiedliche Schulabschlüsse. <br> Bitte gib im Folgenden an, welchen schulischen Abschluss die meisten Personen haben, die heutzutage in Deutschland folgende Berufe ergreifen.

Bitte in jeder Zeile ein Kästchen ankreuzen.

| weiß nicht [5] | $\square$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { keinen } \\ \text { Schulabschlu } \\ \text { ss [1] } \end{gathered}$ | Hauptschulab schluss [2] | Realschulabs chluss/Mittlere Reife [3] | Abitur [4] | weiß nicht [5] |
| a) Verkäufer/-in | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

weiß nicht [5]

| b) Apotheker/-in | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| :--- | :--- | :--- | :--- | :--- | :--- |


| weiß nicht [5] |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| c) Bankkaufmann/-frau | $\square$ | $\square$ |  |  |  |  |  |

weiß nicht [5]
d) Augenoptiker/-in

| Variablen |  |  |
| :--- | :--- | :--- |
| t31501a | Wissen schulische Abschlüsse - Verkäufer_in | pTarget |
| t31501b | Wissen schulische Abschlüsse - Apotheker_in | pTarget |
| t31501c | Wissen schulische Abschlüsse - Bankkaufmann_frau | pTarget |
| t31501d | Wissen schulische Abschlüsse - Augenoptiker_in | pTarget |

## 76 Unterschiedliche Berufe erfordern auch unterschiedliche Ausbildungsabschlüsse. Bitte gib nun an, welchen beruflichen Abschluss die meisten Personen haben, die heutzutage in Deutschland folgende Berufe ergreifen.

Bitte in jeder Zeile ein Kästchen ankreuzen.
weiß nicht [4]
keine abgeschlosse
Ausbildung [1] ne Ausbildung Studium [3] weiß nicht [4]
[2]
a) Verkäufer/-in

```
b) Apotheker/-in
```

weiß nicht [4]
c) Bankkaufmann/-frau
weiß nicht [4]
d) Augenoptiker/-in $\qquad$

| Variablen | Wissen berufliche Abschlüsse_Verkäufer_in | pTarget |
| :--- | :--- | :--- |
| t31502a | Wissen berufliche Abschlüsse_Apotheker_in | pTarget |
| t31502b | Wissen berufliche Abschlüsse_Bankkaufmann_frau | pTarget |
| t31502c | Wissen berufliche Abschlüsse_Augenoptiker_in | pTarget |
| t31502d |  |  |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2016): Startkohorte 3: Klasse 5 (SC3). Welle 4. Erhebungsinstrumente (SUF-Version 5.0.0), p. 44-49.

## Appendix 9: SC3, Wave 4, parent: Original instrument in German language

76117 Unterschiedliche Berufe oder Ausbildungen erfordern auch unterschiedliche !! Schulabschlüsse!!.
Ich werde Ihnen nun verschiedene Berufe nennen. Bitte sagen Sie mir zu jedem Beruf, welchen !!schulischen!! Abschluss die !!meisten Personen!! haben, die heutzutage in Deutschland diesen Beruf ergreifen. Wenn Sie es nicht wissen, können Sie auch weiß nicht angeben.
Welchen !!schulischen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?
Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen
Abschlüsse, die die meisten Personen haben.
Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
Hauptschulabschluss [2]

Realschulabschluss/Mittlere Reife [3]

Abitur [4]
keinen Schulabschluss [1]

| weiß nicht [5] | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| goto 76118 |  |

## Variablen

| p31501a | Wissen um schulische Abschlüsse_Verkäufer/in | pParent |
| :--- | :--- | :--- |

## 76118 Und können Sie mir sagen, welchen !!schulischen!! Abschluss die !!meisten Personen!! haben, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen?

Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife.
Hauptschulabschluss [2]

Realschulabschluss/Mittlere Reife [3]

Abitur [4]
keinen Schulabschluss [1]
weiß nicht [5]
Angabe verweigert [-97]
if $(76117=-97 \& 76118=-97)$ goto 76123
if (76117 <> -97 \& $76118=-97$ ) goto 76120
if (76118 <> -97) goto 76120


| p31501b | Wissen um schulische Abschlüsse_Apotheker/in | pParent |
| :--- | :--- | :--- |

## 76120 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Absch/üsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff "Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife.

Hauptschulabschluss [2]
Realschulabschluss/Mittlere Reife [3]

Abitur [4]
keinen Schulabschluss [1]
weiß nicht [5]

Angabe verweigert [-97]
if $(76118=-97 \& 76120=-97)$ goto 76123
if $(76118<>-97 \& 76120=-97)$ goto 76121
if ( 76120 <> -97) goto 76121

| Variablen | Wissen um schulische Abschlüsse_ Bankkaufmann/frau | pParent |
| :--- | :--- | :--- |
| p31501c |  |  |

## 76121 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife.
Hauptschulabschluss [2]
Realschulabschluss/Mittlere Reife [3]
Abitur [4]
keinen Schulabschluss [1]

| weiß nicht [5] |
| :--- |
| Angabe verweigert [-97] |
| if $(76120=-97 \& 76121=-97)$ goto 76123 <br> if (76120 <> -97 \& 76121=-97) goto 76122 <br> if $(76121$ <> -97) goto 76122 |


| Variablen | Wissen um schulische Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31501d |  |  |

## 76122 Und bei Steuerfachangestellter oder Steuerfachangestellte?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Absch/üsse, sondern um die schulischen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.

Falls der Befragte mit Hochschulreife antwortet, diese Nennung der Antwortoption Abitur zurechnen.
Falls der Begriff „Hauptschulabschluss" nicht bekannt ist: Weitere verwandte Begriffe sind Mittelschulabschluss oder Berufsbildungsreife.

Falls der Begriff „Realschulabschluss" oder "Mittlere Reife" nicht bekannt ist: Weitere verwandte Begriffe sind Mittlerer Abschluss oder Fachoberschulreife.
Hauptschulabschluss [2]

Realschulabschluss/Mittlere Reife [3]


| weiß nicht [5] | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| goto 76123 |  |


| Variablen | Wissen um schulische Abschlüsse_Steuerfachangestellte/r | pParent |
| :--- | :--- | :--- |
| p31501e |  |  |

76123 Jetzt haben wir ja über !!schulische!! Abschlüsse gesprochen. Nun geht es um !! berufliche!! Abschlüsse.
Welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?
Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Absch/üsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
abgeschlossene Ausbildung [2]
Studium [3]
keine Ausbildung [1]

| weiß nicht $[4]$ | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| goto 76124 |  |


| Variablen | Wissen um berufliche Abschlüsse_Verkäufer/in | pParent |
| :--- | :--- | :--- |
| p31502a |  |  |

76124 Und welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen?
Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
abgeschlossene Ausbildung [2]

Studium [3]
keine Ausbildung [1]

| weiß nicht [4] | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| if $(76123=-97 \& 76124=-97)$ goto 76129 |  |
| if $(76123$ <> -97 \& 76124 $=-97)$ goto 76126 |  |
| if $(76124$ <> -97) goto 76126 |  |


| Variablen | Wissen um berufliche Abschlüsse_Apotheker/in | pParent |
| :--- | :--- | :--- |
| p31502b |  |  |

76126 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?
Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
abgeschlossene Ausbildung [2]


| weiß nicht [4] | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| if (76124 $=-97$ \& 76126 $=-97$ ) goto 76129 |  |
| if (76124 <> -97 \& 76126 = -97) goto 76127 |  |
| if $(76126$ <> -97) goto 76127 |  |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31502c | Wissen um berufliche Abschlüsse_Bankkaufmann/frau | pParent |

## 76127 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
abgeschlossene Ausbildung [2]


| Variablen | Wissen berufliche Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31502d |  |  |

76128 Und bei Steuerfachangestellter oder Steuerfachangestellte?
Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Absch/üsse, die die meisten Personen haben.

Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
abgeschlossene Ausbildung [2]


| weiß nicht $[4]$ | $\square$ |
| :--- | :--- |
| Angabe verweigert $[-97]$ | $\square$ |
| goto 76129 |  |


| Variablen | Wissen um berufliche Abschlüsse_Steuerfachangestellte/r | pParent |
| :--- | :--- | :--- |
| p31502e |  |  |

```
76129 Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Hierzu hätte ich noch ein paar Fragen an Sie. Können Sie mir sagen, was in Deutschland als „Duales Ausbildungssystem" bezeichnet wird?
```

Vorgaben vorlesen.
Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint.
Der Besitz von zwei Ausbildungsabschlüssen [1]

Die Trennung zwischen dem ersten und zweiten Lehrjahr [4]
Die Kombination von schulischer Ausbildung in der
Berufsschule und praktischer Ausbildung im Betrieb [3]
Die Tatsache, dass jemand erst eine Ausbildung macht und dann noch studiert [2]

| weiß nicht [5] | $\square$ |
| :--- | :--- |
| Angabe verweigert [-97] | $\square$ |
| goto 76130 |  |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31562a | Wissen um Optionen_Definition duales Ausbildungssystem | pParent |


| 76130 Und können Sie mir sagen, was man unter „Fachhochschulreife" versteht? <br> Vorgaben vorlesen. <br> Wenn der Befragte mit „das Zweite" oder „das Dritte" antwortet, die jeweilige Antwortvorgabe noch einmal vorlesen und rückversichern, ob er diese meint. |  |  |
| :---: | :---: | :---: |
|  |  |  |
| den Abschluss einer Meisterausbildung [1] $\square$ |  |  |
| ein anderes Wort für Abitur [4] <br> ein Abschluss, der zum Studium an einer Fachhochschule berechtigt [3] |  |  |
| ein abgeschlossenes Studium an einer Fachhochschule [2] $\square$ |  |  |
| weiß nicht [5] $\square$ |  |  |
| Angabe verweigert [-97] $\square$ |  |  |
| goto 76116 Z |  |  |
| Variablen |  |  |
| p31561a | Wissen um Optionen_Definition Fachhochschulreife | pParent |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2016): Startkohorte 3: Klasse 5 (SC3). Welle 4. Erhebungsinstrumente (SUF-Version 5.0.0), p. 366-374.

## Appendix 10: SC3, Wave 6, target: Original instrument in German language

| 47 Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Weißt du, was in Deutschland als „Duales Ausbildungssystem" bezeichnet wird? |  |  |  |
| :---: | :---: | :---: | :---: |
| Bitte kreuze die richtige Antwort an. |  |  |  |
| bezeichnet den Besitz von zwei Ausbildungsabschlüssen [1] |  |  |  |
| bezeichnet die Tatsache, dass jemand erst eine Ausbildung macht und dann noch studiert [2] |  |  |  |
| bezeichnet die Kombination von schulischer Ausbildung in der Berufsschule und praktischer Ausbildung im Betrieb [3] |  |  |  |
| bezeichnet die Trennung zwischen dem ersten und dem zweiten Lehrjahr [4] |  |  |  |
| weiß nicht [5] $\quad \square$ |  |  |  |
| Variablen |  |  |  |
| t31562a | Wissen um duale Ausbildung |  | pTarget |


| 48 | $\quad$ Und weißt du, was man unter der "Fachhochschulreife" versteht? |
| :--- | :--- |
| Bitte kreuze die richtige Antwort an. |  |
| Den Abschluss einer Meisterausbildung [1] |  |$\quad \square$


| Variablen |  |  |
| :--- | :--- | :--- |
| t31561a | Wissen um Fachhochschulreife | pTarget |

49 Unterschiedliche Berufe oder Ausbildungen erfordern auch unterschiedliche Schulabschlüsse.
Bitte gib im Folgenden an, welchen schulischen Abschluss die meisten Personen haben, die heutzutage in Deutschland folgende Berufe ergreifen.
Bitte in jeder Zeile ein Kästchen ankreuzen.

|  | keinen <br> Schulabschlu <br> ss [1] | Hauptschulab <br> schluss [2] | Realschulabs <br> chluss/Mittlere <br> Reife [3] | Abitur [4] | weiß nicht [5] |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Verkäufer/-in | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| b) Apotheker/-in | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| c) Bankkaufmann/-frau | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| d) Augenoptiker/-in | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
|  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |


| Variablen |  | Wissen schulische Abschlüsse - Verkäufer_in |
| :--- | :--- | :--- |

## 50 Unterschiedliche Berufe erfordern auch unterschiedliche Ausbildungsabschlüsse. Bitte gib nun an, welchen beruflichen Abschluss die meisten Personen haben, die heutzutage in Deutschland folgende Berufe ergreifen.

Bitte in jeder Zeile ein Kästchen ankreuzen.

keine | abgeschlosse |
| :---: |
| ne Ausbildung |
| [2] | Studium [3] weiß nicht [4]



| Variablen | Wissen berufliche Abschlüsse_Verkäufer_in | pTarget |
| :--- | :--- | :--- |
| t 31502 a | Wissen berufliche Abschlüsse_Apotheker_in | pTarget |
| t 31502 b | Wissen berufliche Abschlüsse_Bankkaufmann_frau | pTarget |
| t 31502 c | Wissen berufliche Abschlüsse_Augenoptiker_in | pTarget |
| t 31502 d |  |  |

Source: Leibniz-Institut für Bildungsverläufe e.V. (2017): Startkohorte 3: Klasse 5 (SC3). Welle 6. Erhebungsinstrumente (SUF-Version 6.0.0), p. 31-32.

## Appendix 11: SC4, wave 5, target: original instrument in German language

| $\mathbf{1 7}$Stellen Sie sich vor, Sie hätten alle Möglichkeiten zu werden, was Sie wollen. Was wäre <br> dann Ihr Wunschberuf? <br> Bitte in Druckbuchstaben eintragen. |
| :--- | :--- | :--- |




| 20 Denken Sie einmal an alles, was Sie gerade wissen. Welchen Beruf werden Sie wohl später tatsächlich haben? |  |  |
| :---: | :---: | :---: |
| Wenn Sie sich noch nicht sicher sind, dann tragen Sie den Beruf ein, der ihrer Meinung nach am wahrscheinlichsten ist. |  |  |
| Bitte in Druckbuchstaben eintragen. |  |  |
| ¢ |  |  |
| Variablen |  |  |
| t31160a_O | Realistische Berufsaspirationen: Berufswunsch | pTarget |
| 131160a_g1 | Realistische Berufsaspirationen: Berufswunsch (KIdB 1988) | pTarget |
| t31160a_g2 | Realistische Berufsaspirationen: Berufswunsch (KIdB 2010) | pTarget |
| t31160a_g ${ }^{\text {3 }}$ | Realistische Berufsaspirationen: Berufswunsch (ISCO-88) | pTarget |
| t31160a_g4 | Realistische Berufsaspirationen: Berufswunsch (ISCO-08) | pTarget |
| t31160a_g 5 | Realistische Berufsaspirationen: Berufswunsch (ISEI-88) | pTarget |
| t31160a_g6 | Realistische Berufsaspirationen: Berufswunsch (SIOPS-8B) | pTarget |
| t31160a_g7 | Realistische Berufsaspirationen: Berufswunsch (MPS) | pTarget |
| t31160a_g9 | Realistische Berufsaspirationen: Berufswunsch (BLK) | pTarget |
| t31160a_g14 | Realistische Berufsaspirationen: Berufswunsch (ISEI-08) | pTarget |
| t31160a_g16 | Realistische Berufsaspirationen: Berufswunsch (SIOPS-08) | pTarget |


| 21 Welchen schulischen Abschluss haben die meisten Personen, die den von Ihnen in Frage $\mathbf{2 0}$ angegebenen Beruf heutzutage in Deutschland ergreifen? |  |  |  |
| :---: | :---: | :---: | :---: |
| Bitte nur eine Antwort ankreuzen. |  |  |  |
| keinen Schulabschluss [1] |  | $\square$ |  |
| Hauptschulabschluss [2] |  | $\square$ |  |
| Realschulabsciluss/Mitlere Reise [3] |  | $\square$ |  |
| Abitur [4] |  | $\square$ |  |
| weis nicht (3) |  | $\square$ |  |
| Variablen |  |  |  |
| t31501g | Schulischer Ab | Beruf | pTarget |

22 Und welchen beruflichen Abschluss haben die meisten Personen, die den von Ihnen in Frage $\mathbf{2 0}$ genannten Beruf heutzutage in Deutschland ergreifen?
Bitte nur eine Antwort ankreuzen.

| Studium [4] | $\square$ |
| :--- | :--- |
| Vollzeitschulische Berufsausbildung (z.B. Besuch einer <br> Fachschule) [3] | $\square$ |
| Lehre/betriebliche Ausbildung [2] | $\square$ |
| keine Ausbildung [1] | $\square$ |
| weiß nicht [5] | $\square$ |


| Variablen | Beruflicher Abschluss realistischer Beruf | pTarget |
| :--- | :--- | :--- |
| t31502g |  |  |

## 34 Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Wissen Sie, was in Deutschland als „Duales Ausbildungssystem" bezeichnet wird?

Bitte kreuzen Sie die richtige Antwort an.
bezeichnet den Besitz von zwei Ausbildungsabschlüssen
[1]
bezeichnet die Tatsache, dass jemand eine Ausbildung gemacht hat und dann noch studiert [2]
bezeichnet die Kombination von schulischer Ausbildung in
der Berufsschule und praktischer Ausbildung im Betrieb [3]
bezeichnet die Trennung zwischen dem ersten und dem
zweiten Lehrjahr [4]
weiß nicht [5]

| Variablen | Wissen um duale Ausbildung | pTarget |
| :--- | :--- | :--- |
| t31562a |  |  |



## 36 Unterschiedliche Berufe oder Ausbildungen erfordern auch unterschiedliche schulische Abschlüsse. <br> Bitte geben Sie im Folgenden an, welchen schulischen Abschluss die meisten Personen haben, die heutzutage in Deutschland folgende Berufe ergreifen. <br> Bitte in jeder Zeile ein Kästchen ankreuzen.

```
weis nicht [5]
```

|  | keinen <br> Schulabschlu <br> ss [1] |
| :--- | :---: |
| a) Verkäufer/in | $\square$ |

weis nicht [5]
b) Apotheker/in


| Variablen |  |  |
| :--- | :--- | :--- |
| t 31501 a | Wissen schulische Abschlüsse - Verkäufer_in | pTarget |
| t 31501 b | Wissen schulische Abschlüsse - Apotheker_in | pTarget |
| t 31501 c | Wissen schulische Abschlüsse - Bankkaufmann_frau | pTarget |
| t 31501 d | Wissen schulische Abschlüsse - Augenoptiker_in | pTarget |
| $\mathbf{t 3 1 5 0 1 e}$ | Wissen schulische Abschlüsse - Steuerfachangestellte_r | pTarget |



Source: Leibniz-Institut für Bildungsverläufe e.V. (2016): Startkohorte 4: Klasse 9 (SC4). Wellen 5 und 6. Erhebungsinstrumente (SUF-Version 6.0.0), p. 17-20, 27-29.

## Appendix 12: SC4, Wave 5, parent: Original instrument in German language

```
76101 Unterschiedliche Berufe oder Ausbildungen erfordern auch unterschiedliche !!
    Schulabschlüsse!!.
    Ich werde Ihnen nun verschiedene Berufe nennen. Bitte sagen Sie mir zu jedem Beruf,
        welchen !!schulischen!! Abschluss die !!meisten Personen!! haben, die heutzutage in
        Deutschland diesen Beruf ergreifen. Wenn Sie es nicht wissen, können Sie auch weiß 
        nicht angeben.
        Welchen !!schulischen!! Abschluss haben die !!meisten Personen!!, die heutzutage in
        Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?
```

Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen
Abschlüsse, die die meisten Personen haben.
Hauptschulabschluss [2]
Realschulabschluss/Mittlere Reife [3]
Abitur [4]
keinen Schulabschluss [1]
weiß nicht [5]
Angabe verweigert [-97]
goto 76102

| Variablen |  |  |  | Wissen um schulische Abschlüsse_Verkäufer/in | pParent |
| :--- | :--- | :--- | :---: | :---: | :---: |
| p31501a |  |  |  |  |  |


| 76102 Und können Sie mir sagen, welchen !!schulischen!! Abschluss die !!meisten Personen!! haben, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen? |
| :---: |
| Vorgaben vorlesen. |
| Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist. |
| Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Absch/üsse, die die meisten Personen haben. |
| keinen Schulabschluss [1] $\quad \square$ |
| Hauptschulabschluss [2] $\quad \square$ |
| Realschulabschluss/Mittlere Reife [3] $\square$ |
| Abitur [4] $\quad \square$ |
| weiß nicht [5] $\quad \square$ |
| Angabe verweigert [-97] $\quad \square$ |
| $\begin{aligned} & \text { if }(76101=-97 \& 76102=-97) \text { goto } 76107 \\ & \text { if }(76101<>-97 \& 76102=-97) \text { goto } 76104 \\ & \text { if }(76102<>-97) \text { goto } 76104 \end{aligned}$ |


| Variablen |  |  |
| :--- | :--- | :--- |
| p31501b | Wissen um schulische Abschlüsse_Apotheker/in | pParent |

76104 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?
Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen Abschlüsse, die die meisten Personen haben.

| keinen Schulabschluss [1] |  |
| :--- | :--- |
| Hauptschulabschluss [2] | $\square$ |
| Realschulabschluss/Mittlere Reife [3] | $\square$ |
| Abitur [4] | $\square$ |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76102 $=-97 \& 76104=-97) ~$ goto 76107 <br> if $(76102<>-97 ~ \& ~ 76104 ~=-97) ~ g o t o ~ 76105 ~$ <br> if (76104 <> -97) goto 76105 |  |


| Variablen | Wissen um schulische Abschlüsse_Bankkaufmann/frau | pParent |
| :--- | :--- | :--- |
| p31501c |  |  |



| Variablen | Wissen um schulische Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31501d |  |  |


| $76106 \quad$ Und bei Steuerfachangestellter oder Steuerfachangestellte ? |  |
| :--- | :--- |
| Vorgaben bei Bedarf vorlesen. |  |
| Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist. |  |
| Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die schulischen |  |
| Abschlüsse, die die meisten Personen haben. |  |
| keinen Schulabschluss [1] | $\square$ |
| Hauptschulabschluss [2] | $\square$ |
| Realschulabschluss/Mittlere Reife [3] | $\square$ |
| Abitur [4] | $\square$ |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76107 | $\square$ |


| Variablen | Wissen um schulische Abschlüsse_Steuerfachangestellte/r | pParent |
| :--- | :--- | :--- |
| p31501e |  |  |

76107 Jetzt haben wir ja über !!schulische!! Abschlüsse gesprochen. Nun geht es um !! berufliche!! Abschlüsse.
Welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Verkäufer oder Verkäuferin ergreifen?

Vorgaben vorlesen
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

| keine Ausbildung [1] | $\square$ |
| :--- | :--- |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76108 |  |


| Variablen | Wissen um berufliche Abschlüsse_Verkäufer/in | pParent |
| :--- | :--- | :--- |
| p31502a |  |  |

76108 Und welchen !!beruflichen!! Abschluss haben die !!meisten Personen!!, die heutzutage in Deutschland den Beruf Apotheker oder Apothekerin ergreifen?
Vorgaben vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.
keine Ausbildung [1]

| abgeschlossene Ausbildung [2] | $\square$ |
| :--- | :--- |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |

if (76107 $=-97$ \& $76108=-97$ ) goto 76113
if (76107 <> -97 \& 76108 = -97) goto 76110
if (76108 <> -97) goto 76110

| Variablen | Wissen um berufliche Abschlüsse_Apotheker/in | pParent |
| :--- | :--- | :--- |
| p31502b |  |  |

## 76110 Und wie ist das bei dem Beruf Bankkaufmann oder Bankkauffrau?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

| keine Ausbildung [1] | $\square$ |
| :--- | :--- |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if (76108 = -97 \& 76110 = -97) goto 76113 |  |
| if (76108 <>-97 \& 76110 = -97) goto 76111 |  |
| if (76110 <> -97) goto 76111 |  |


| Variablen | Wissen um berufliche Abschlüsse_Bankkaufmann/frau | pParent |
| :--- | :--- | :--- |
| p31502c |  |  |

## 76111 Und bei dem Beruf Augenoptiker oder Augenoptikerin?

Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.
keine Ausbildung [1]
abgeschlossene Ausbildung [2]

| Studium [3] | $\square$ |
| :--- | :--- |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| if $(76110=-97$ \& 76111 $=-97)$ goto 76113 <br> if $(76110<>-97 \& 76111=-97)$ goto 76112 <br> if $(76111<>-97)$ goto 76112 |  |


| Variablen | Wissen um berufliche Abschlüsse_Augenoptiker/in | pParent |
| :--- | :--- | :--- |
| p31502d |  |  |

76112 Und bei Steuerfachangestellter oder Steuerfachangestellte?
Vorgaben bei Bedarf vorlesen.
Bei Nachfrage: Es geht nicht darum wie es früher war, sondern wie es heute ist.
Bei Nachfrage: Es geht bei dieser Frage nicht um formal benötigte Abschlüsse, sondern um die beruflichen Abschlüsse, die die meisten Personen haben.

| keine Ausbildung [1] | $\square$ |
| :--- | :--- |
| abgeschlossene Ausbildung [2] | $\square$ |
| Studium [3] | $\square$ |
| weiß nicht [4] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76113 |  |


| Variablen | Wissen um berufliche Abschlüsse_Steuerfachangestellte/r | pParent |
| :--- | :--- | :--- |
| p31502e |  |  |

\(\left.$$
\begin{array}{|ll|}\hline 76113 & \begin{array}{l}\text { Es gibt ja verschiedene Schul- und Ausbildungssysteme in Deutschland. Hierzu hätte } \\
\text { ich noch ein paar Fragen an Sie. } \\
\\
\text { Können Sie mir sagen, was in Deutschland als „Duales Ausbildungssystem" } \\
\text { bezeichnet wird? }\end{array}
$$ <br>
\begin{array}{ll}Vorgaben vorlesen. <br>
Die Trennung zwischen dem ersten und zweiten Lehrjahr <br>
[4] <br>
Die Kombination zwischen schulischer Ausbildung in der <br>

Berufsschule und praktischer Ausbildung im Betrieb [3]\end{array} \& \square\end{array}\right]\)| Die Tatsache, dass jemand eine Ausbildung gemacht hat <br> und dann noch studiert [2] | $\square$ |
| :--- | :--- | :--- |
| Der Besitz von zwei Ausbildungsabschlüssen [1] | $\square$ |
| weiß nicht [5] | $\square$ |
| Angabe verweigert [-97] | $\square$ |
| goto 76114 | $\square$ |


| Variablen | Wissen um Optionen_Definition duales Ausbildungssystem | pParent |
| :--- | :--- | :--- |
| p31562a |  |  |



Source: Leibniz-Institut für Bildungsverläufe e.V. (2016): Startkohorte 4: Klasse 9 (SC4). Wellen 5 und 6. Erhebungsinstrumente (SUF-Version 6.0.0), p. 1102-1108.

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[^0]:    1 The items presented in this paper were developed in cooperation with our colleagues Sebastian E. Wenz, Vanessa Obermeier, and Kerstin Hoenig.
    2 In this paper, we focus on the objective knowledge measurements and do not consider measurements of the subjective level of information. Furthermore, we do not include items on behavior, on how persons search for information, and on which information pools they use.

[^1]:    3 In this paper, we present the official translations of the survey instruments commissioned by the Research Data Center.

[^2]:    4 We sincerely thank these project members for their support and the empirical results provided.

[^3]:    5 We did this together with our colleagues from the research data center of the LIfBi; in particular, Markus Zielonka and Sven Pelz thoroughly supported and promoted these procedures.

[^4]:    6 We sincerely thank Birgit Becker for her support and the empirical results she provided

[^5]:    7 We would like to sincerely thank the ministries of the federal states for the information provided on the regulations in the relevant years.

[^6]:    8 In Germany performance grades ranging from 1 (very good, $A$ ) to 6 (insufficient, $F$ ) are generally used.

[^7]:    9 We sincerely thank the project staff for their support and the empirical results they provided.
    10 We would like to sincerely thank the ministries of the federal states for the information provided on the regulations in the central years.

