# **SOEP** Survey Papers

# SOEP-Core v37 – COGDJ

SOEP Group

DIW **SOEP**

The German Socio Economic Panel at DIW Berlin

# SOEP-Core v37 – COGDJ

SOEP Group

2022

## Contents

## 6 Task 3: Matrices

## 1  Introduction

In 2006, SOEP introduced a cognition test for adolescents as part of the SOEP's survey instruments. Since then, the test has been conducted annually with each new cohort of 17-year-old. To investigate the cognitive performance potential of the adolescents, we developed a questionnaire based on the I-S-T 2000 test (Amthauer, Brocke, Liepmann & Beauducel, 2001), which is suitable for an individual panel survey. The modifications were described in detail by Solga et al (2005). The cognitive test measures the cognitive mechanics of the 17-year-old in three different modules (word analogies, arithmetic operator, and matrices). Cognitive mechanics refers to the hard-wired, biologically based information processing skills. The task set "Word Analogies" measures the verbal cognitive potential of the respondents. The respondents are asked to assign words to a given word sequence according to a certain rule. The test uses a person's vocabulary to measure combinatorics. The "arithmetic operator" measures the numerical cognitive potential of the respondents. These tasks focus primarily on the young person's abstract combinatorial ability and logical thinking. The "Matrices" task set measures the respondents' figural cognitive abilities.

The design and structure of the questionnaire require that the cognition test is conducted by an interviewer and that the time is monitored. The interviewer-supported survey is mandatory. Further information can be found in Schupp and Herrmann (2009) and Richter et al (2017).

References:

Amthauer, R., Brocke, B., Liepmann, D., & Beauducel, A. (2001). Intelligenz-Struktur-Test 2000 R (I-S- T 2000 R) Handanweisung. Göttingen: Hogrefe.

Solga, H., Stern, E., von Rosenbladt, B., Schupp, J., & Wagner, G. G. (2005). The measurement and importance of general reasoning potentials in schools and labour markets. Berlin: DIW Berlin.

Richter, D., Rohrer, J., Metzing, M., Nestler, W., Weinhardt, M., Schupp, J. (2017). SOEP Scales Manual (updated for SOEP-Core v32.1). SOEPSurvey Papers 423: Series C. Berlin: DIW/SOEP.

Schupp, J., & Herrmann, S. (2009). Kognitionspotenziale Jugendlicher. Ergänzung zum Jugendfragebogen der Längsschnittstudie Sozio-oekonomisches Panel (SOEP). Berlin: DIW Berlin.

## 2  Identifier Variables

syear – Survey Year

| | |
|---|---|
| 2006 | 835 |
| 2007 | 295 |
| 2008 | 222 |
| 2009 | 211 |
| 2010 | 190 |
| 2011 | 155 |
| 2012 | 189 |
| 2013 | 228 |
| 2014 | 302 |
| 2015 | 253 |
| 2016 | 236 |
| 2017 | 229 |
| 2018 | 245 |

| | |
|---|---|
| 2019 | 209 |
| 2020 | 256 |

This variable is used to assign the survey year. The first year in this dataset is 2006.

## cid – Original Houshold Number, Case ID

| | |
|---|---|
| <NA> | 4055 |

This variable identifies the respondent as living in a particular household at the time of the survey and is used to link to different data sets.

## pid – Never Changing Person ID

| | |
|---|---|
| 9804 | 1 |
| 9805 | 1 |
| 11303 | 1 |
| 13404 | 1 |
| 13405 | 1 |
| 13406 | 1 |
| 13407 | 1 |
| 18703 | 1 |
| 18704 | 1 |
| 18705 | 1 |
| 18706 | 1 |
| 19204 | 1 |
| 19205 | 1 |
| 19206 | 1 |
| 20105 | 1 |
| … (4025 rows omitted) | 4025 |
| 34778504 | 1 |
| 34833404 | 1 |
| 34889203 | 1 |
| 34944204 | 1 |
| 34956103 | 1 |
| 34963203 | 1 |
| 34997703 | 1 |
| 35000304 | 1 |
| 35002703 | 1 |
| 35010803 | 1 |
| 35014305 | 1 |
| 35025602 | 1 |
| 35028803 | 1 |
| 35031204 | 1 |
| 35031205 | 1 |

This variable identifies the respondent as living in a particular household at the time of the survey and is used to link to different data sets.

## djstat – Status Of Partitipation

| | | |
|---|---|---:|
| 1 | Questionnaire Missing | 3579 |
| 2 | Chosen Without Interview - No Participation | 242 |
| 3 | Dj-Questionnaire Refused | 234 |
| -1 | No Answer | 0 |
| -2 | Does not apply | 0 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable is used to determine whether the interviewee in the sample participated in the DJ survey and which reasons for non-participation played a role.

## 3  Generated Variables

This section provides information on the school type and the sum scores for the three modules: analogies, arithmetic operators, and matrices. Sum scores are generated for all right, wrong and unanswered questions.

## schule – Educational Partitipation

| | | |
|---|---|---:|
| 1 | No Degree, No School Attendence | 19 |
| 2 | Other Degree | 6 |
| 3 | Other School, continued education | 2 |
| 4 | Secondary General School Attendence | 287 |
| 5 | Secondary School Degree | 342 |
| 6 | Comprehensive School Attendence | 339 |
| 7 | Intermediate School Attendence | 732 |
| 8 | Intermediate School Degree | 430 |
| 9 | Technical HighSchool Attendence | 19 |
| 10 | Technical School Degree | 12 |
| 11 | Upper Secondary School Attendence | 1486 |
| 12 | Upper Secondary School Degree | 8 |
| 13 | Vocational School Attendence | 33 |
| 14 | Technical Collegel Attendence | 1 |
| 15 | University Attendence | 2 |
| 21 | Former Secondary General School According To Mother | 72 |
| 22 | Former Intermediate School According To Mother | 110 |
| 23 | Former Upper School According To Mother | 121 |
| -1 | No Answer | 34 |
| -2 | Does not apply | 0 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable intends to record in as differentiated a form as possible which type of school the interviewees attend or which educational qualifications they have at the time of the survey.

## sumindex – Sumindex From all given Answers

| | | |
|---|---|---|
| 8 | | 2 |
| 11 | | 2 |
| 13 | | 5 |
| 14 | | 2 |
| 15 | | 1 |
| 16 | | 1 |
| 17 | | 3 |
| 18 | | 3 |
| 19 | | 2 |
| 20 | | 4 |
| 21 | | 3 |
| 22 | | 4 |
| 23 | | 2 |
| 24 | | 5 |
| 25 | | 7 |
| ... | (27 rows omitted) | 1322 |
| 53 | | 168 |
| 54 | | 159 |
| 55 | | 152 |
| 56 | | 209 |
| 57 | | 197 |
| 58 | | 230 |
| 59 | | 340 |
| 60 | | 756 |
| -1 | No Answer | 0 |
| -2 | Does not apply | 476 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all given answers regardless of their correctness from all three question categories of the DJ Questionnaire.

## indexa2 – Sumindex From Answers In Taskgroup No. 2 - Analogies

| | |
|---|---|
| 1 | 3 |
| 2 | 1 |
| 3 | 2 |
| 4 | 1 |
| 5 | 2 |
| 6 | 3 |
| 7 | 2 |

| | | |
|---|---|---:|
| 8 | | 5 |
| 9 | | 5 |
| 10 | | 11 |
| 11 | | 22 |
| 12 | | 24 |
| 13 | | 35 |
| 14 | | 62 |
| 15 | | 74 |
| 16 | | 102 |
| 17 | | 124 |
| 18 | | 216 |
| 19 | | 574 |
| 20 | | 2302 |
| -1 | No Answer | 10 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all given answers regardless of their correctness from the question category "Analogies".

## indexa6 – sumindes From Answers In Taskgroups No. 6 - Arithmetic Operator

| | | |
|---|---|---:|
| 1 | | 12 |
| 2 | | 36 |
| 3 | | 29 |
| 4 | | 40 |
| 5 | | 49 |
| 6 | | 46 |
| 7 | | 53 |
| 8 | | 64 |
| 9 | | 77 |
| 10 | | 93 |
| 11 | | 102 |
| 12 | | 124 |
| 13 | | 158 |
| 14 | | 180 |
| 15 | | 190 |
| 16 | | 225 |
| 17 | | 207 |
| 18 | | 245 |
| 19 | | 332 |
| 20 | | 1283 |
| -1 | No Answer | 35 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |

| | |
|---|---|
| -5 Not included in this version of the questionnaire | 0 |
| -6 Version of questionnaire with modified filtering | 0 |
| -7 Only available in less restricted edition | 0 |

This variable contains the sum of all given answers independent of their correctness from the question category "arithmetic operator".

## indexa9 – Sumindex From Answers Taskgroup No. 9 - Figures

| | |
|---|---|
| 1 | 2 |
| 2 | 2 |
| 3 | 10 |
| 4 | 8 |
| 5 | 11 |
| 6 | 15 |
| 7 | 29 |
| 8 | 21 |
| 9 | 35 |
| 10 | 34 |
| 11 | 47 |
| 12 | 79 |
| 13 | 102 |
| 14 | 120 |
| 15 | 154 |
| 16 | 212 |
| 17 | 181 |
| 18 | 211 |
| 19 | 325 |
| 20 | 1964 |
| -1 No Answer | 18 |
| -2 Does not apply | 475 |
| -3 Answer improbable | 0 |
| -4 Inadmissible multiple response | 0 |
| -5 Not included in this version of the questionnaire | 0 |
| -6 Version of questionnaire with modified filtering | 0 |
| -7 Only available in less restricted edition | 0 |

This variable contains the sum of all given answers regardless of their correctness from the question category "matrices".

## sdindex – complete Sumindex deductive thinking - Right Answers

| | |
|---|---|
| 3 | 4 |
| 4 | 3 |
| 5 | 3 |
| 6 | 3 |
| 7 | 10 |
| 8 | 4 |
| 9 | 16 |

| | | |
|---|---|---:|
| 10 | | 15 |
| 11 | | 22 |
| 12 | | 27 |
| 13 | | 35 |
| 14 | | 48 |
| 15 | | 56 |
| 16 | | 49 |
| 17 | | 52 |
| … | (29 rows omitted) | 3049 |
| 47 | | 36 |
| 48 | | 33 |
| 49 | | 23 |
| 50 | | 11 |
| 51 | | 9 |
| 52 | | 7 |
| 53 | | 7 |
| 55 | | 2 |
| -1 | No Answer | 56 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all correct answers in all three categories.

## analog – Sumindex Right Answers In Taskgroup No. 2 - Analogies

| | |
|---|---:|
| 0 | 2 |
| 1 | 34 |
| 2 | 113 |
| 3 | 221 |
| 4 | 293 |
| 5 | 316 |
| 6 | 298 |
| 7 | 318 |
| 8 | 340 |
| 9 | 335 |
| 10 | 306 |
| 11 | 283 |
| 12 | 229 |
| 13 | 191 |
| 14 | 129 |
| 15 | 72 |
| 16 | 57 |
| 17 | 24 |
| 18 | 6 |
| 19 | 2 |
| 20 | 1 |

| | | |
|---|---|---|
| -1 | No Answer | 10 |
| -2 | Does not apply | 475 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all correct answers in the category "Analogies".

## ianalog – Sumindex Wrong Answers In Taskgroup No. 2 - Analogies

| | | |
|---|---|---|
| 0 | | 8 |
| 1 | | 11 |
| 2 | | 29 |
| 3 | | 49 |
| 4 | | 105 |
| 5 | | 125 |
| 6 | | 202 |
| 7 | | 254 |
| 8 | | 278 |
| 9 | | 294 |
| 10 | | 301 |
| 11 | | 330 |
| 12 | | 298 |
| 13 | | 279 |
| 14 | | 268 |
| 15 | | 267 |
| 16 | | 243 |
| 17 | | 150 |
| 18 | | 71 |
| 19 | | 8 |
| -1 | No Answer | 10 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all wrong answers in the category "Analogies".

## fanalog – Sumindex Not Given Answers In Taskgroup No. 2 - Analogies

| | |
|---|---|
| 0 | 2774 |
| 1 | 574 |
| 2 | 216 |
| 3 | 124 |
| 4 | 102 |
| 5 | 74 |
| 6 | 62 |
| 7 | 35 |
| 8 | 24 |

| | |
|---|---|
| 9 | 22 |
| 10 | 11 |
| 11 | 5 |
| 12 | 5 |
| 13 | 2 |
| 14 | 3 |
| 15 | 2 |
| 16 | 1 |
| 17 | 2 |
| 18 | 1 |
| 19 | 3 |
| 20 | 13 |

This variable contains the sum of all unanswered tasks in the category "Analogies".

### rechenz – Sumindex Right Answers In Taskgroup No. 6 - Arithmetic Operator

| | | |
|---|---|---|
| 0 | | 5 |
| 1 | | 21 |
| 2 | | 73 |
| 3 | | 73 |
| 4 | | 72 |
| 5 | | 105 |
| 6 | | 124 |
| 7 | | 134 |
| 8 | | 157 |
| 9 | | 190 |
| 10 | | 212 |
| 11 | | 236 |
| 12 | | 263 |
| 13 | | 230 |
| 14 | | 271 |
| 15 | | 264 |
| 16 | | 239 |
| 17 | | 203 |
| 18 | | 172 |
| 19 | | 224 |
| 20 | | 277 |
| -1 | No Answer | 35 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all correct answers in the category "Arithmetic Operator".

### irechenz – Sumindex Wrong Answers In Taskgroup No. 6 - Arithmetic Operator

| | | |
|---|---|---|
| 0 | | 1036 |
| 1 | | 606 |
| 2 | | 381 |
| 3 | | 242 |
| 4 | | 212 |
| 5 | | 214 |
| 6 | | 140 |
| 7 | | 127 |
| 8 | | 114 |
| 9 | | 108 |
| 10 | | 75 |
| 11 | | 59 |
| 12 | | 54 |
| 13 | | 53 |
| 14 | | 40 |
| 15 | | 36 |
| 16 | | 28 |
| 17 | | 12 |
| 18 | | 7 |
| 20 | | 1 |
| -1 | No Answer | 35 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all wrong answers in the category "Arithmetic Operator".

### frechenz – Sumindex Not Given Answers In Taskgroup No. 6 - Arithmetic Operator

| | |
|---|---|
| 0 | 1756 |
| 1 | 332 |
| 2 | 245 |
| 3 | 207 |
| 4 | 224 |
| 5 | 190 |
| 6 | 180 |
| 7 | 158 |
| 8 | 124 |
| 9 | 102 |
| 10 | 93 |
| 11 | 77 |
| 12 | 64 |
| 13 | 53 |
| 14 | 46 |
| 15 | 49 |
| 16 | 40 |
| 17 | 29 |

| | |
|---|---|
| 18 | 36 |
| 19 | 12 |
| 20 | 38 |

This variable contains the sum of all unanswered tasks in the category "Arithmetic Operator".

## matrize – Sumindex Right Answers In Taskgroup No. 9 - Figures

| | | |
|---|---|---|
| 0 | | 11 |
| 1 | | 30 |
| 2 | | 43 |
| 3 | | 74 |
| 4 | | 110 |
| 5 | | 154 |
| 6 | | 213 |
| 7 | | 253 |
| 8 | | 313 |
| 9 | | 352 |
| 10 | | 434 |
| 11 | | 404 |
| 12 | | 386 |
| 13 | | 292 |
| 14 | | 221 |
| 15 | | 138 |
| 16 | | 93 |
| 17 | | 29 |
| 18 | | 9 |
| 19 | | 2 |
| 20 | | 1 |
| -1 | No Answer | 18 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all correct answers in the category "Matrices".

## imatrize – Sumindex Wrong Answers In Taskgroup No. 9 - Figures

| | |
|---|---|
| 0 | 37 |
| 1 | 74 |
| 2 | 140 |
| 3 | 206 |
| 4 | 253 |
| 5 | 310 |
| 6 | 288 |
| 7 | 321 |

| | | |
|---|---|---|
| 8 | | 343 |
| 9 | | 308 |
| 10 | | 297 |
| 11 | | 243 |
| 12 | | 217 |
| 13 | | 170 |
| 14 | | 138 |
| 15 | | 90 |
| 16 | | 65 |
| 17 | | 38 |
| 18 | | 14 |
| 19 | | 6 |
| 20 | | 4 |
| -1 | No Answer | 18 |
| -2 | Does not apply | 475 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

This variable contains the sum of all wrong answers in the category "Matrices".

### fmatrize – Sumindex Not Given Answers In Taskgroup No. 9 - Figures

| | |
|---|---|
| 0 | 2437 |
| 1 | 325 |
| 2 | 211 |
| 3 | 181 |
| 4 | 212 |
| 5 | 154 |
| 6 | 120 |
| 7 | 102 |
| 8 | 79 |
| 9 | 46 |
| 10 | 34 |
| 11 | 35 |
| 12 | 21 |
| 13 | 29 |
| 14 | 15 |
| 15 | 11 |
| 16 | 8 |
| 17 | 10 |
| 18 | 2 |
| 19 | 2 |
| 20 | 21 |

This variable contains the sum of all unanswered tasks in the category "Matrices".

## 4 Task 1: Analogies

These questions are designed to assess verbal cognitive potential. The respondents are asked to assign words to a given word sequence based on a certain rule. The test uses a person's vocabulary to measure combinatorics.

### a_21 – Row 1 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 123 |
| 1 | Right Answer | 3392 |
| -1 | No Answer | 68 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

klein : groß = kurz : lang (small : large = short : long )

### a_22 – Row 2 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 284 |
| 1 | Right Answer | 3189 |
| -1 | No Answer | 110 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Vorsicht : Sicherheit = Risiko : Gefahr (caution : safety = risk : danger)

### a_23 – Row 3 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1399 |
| 1 | Right Answer | 2115 |
| -1 | No Answer | 69 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

atmen : Lungen = schwitzen : Poren (breathe : lungs = sweat : pores)

## a_24 – Row 4 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2096 |
| 1 | Right Answer | 1364 |
| -1 | No Answer | 123 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Treppe : Leiter = Haus : Zelt (stairs : ladder = house : tent)

## a_25 – Row 5 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1084 |
| 1 | Right Answer | 2369 |
| -1 | No Answer | 130 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Vertrauen : Experte = Unsicherheit : Anfänger (trust : expert = insecurity : beginner)

## a_26 – Row 6 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1240 |
| 1 | Right Answer | 2291 |
| -1 | No Answer | 52 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Gramm : Gewicht = Stunde : Zeit (gram : weight = hour : time)

## a_27 – Row 7 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1399 |
| 1 | Right Answer | 2091 |
| -1 | No Answer | 93 |
| -2 | Does not apply | 472 |

| | | |
|---|---|---|
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Milch : Volumen = Salz : Gewicht (milk : volume = salt : weight)

## a_28 – Row 8 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2138 |
| 1 | Right Answer | 1360 |
| -1 | No Answer | 85 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Mensch : Gehirn = Stadt : Verwaltung (human : brain = city : administration)

## a_29 – Row 9 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1807 |
| 1 | Right Answer | 1482 |
| -1 | No Answer | 294 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Wasser : Erosion = Alter : Falten (water : erosion = age : wrinkles)

## a_30 – Row 10 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 1532 |
| 1 | Right Answer | 1992 |
| -1 | No Answer | 59 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Album : Foto = Zeitung : Artikel (album : photo = newspaper : article )

## a_31 – Row 11 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2029 |
| 1 | Right Answer | 1305 |
| -1 | No Answer | 249 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Maschine : Pflanze = Auto : Eiche (machine : plant = car : oak )

## a_32 – Row 12 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2448 |
| 1 | Right Answer | 897 |
| -1 | No Answer | 238 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

chronisch : akut = dauernd : zeitweilig (chronic : acute = permanent : temporary )

## a_33 – Row 13 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2026 |
| 1 | Right Answer | 979 |
| -1 | No Answer | 578 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Atheist : Religion = Pazifist : Krieg (atheist : religion = pacifist : war )

## a_34 – Row 14 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2475 |
| 1 | Right Answer | 816 |
| -1 | No Answer | 292 |
| -2 | Does not apply | 472 |

| | | |
|---|---|---|
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

mutig : verwegen = großzügig : verschwenderisch (brave : daring = generous : lavish )

## a_35 – Row 15 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2814 |
| 1 | Right Answer | 571 |
| -1 | No Answer | 198 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Nerv : Leitung = Pupille : Blende (nerve : conduction = pupil : aperture )

## a_36 – Row 16 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2723 |
| 1 | Right Answer | 727 |
| -1 | No Answer | 133 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Diät : Gewicht = Medikament : Schmerzen (diet : weight = medicine : pain )

## a_37 – Row 17 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2635 |
| 1 | Right Answer | 665 |
| -1 | No Answer | 283 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Sammlung : Anhäufung = Buch : Wörterbuch (collection : accumulation = book : dictionary )

### a_38 – Row 18 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2755 |
| 1 | Right Answer | 579 |
| -1 | No Answer | 249 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Freude : Erfolg = Müdigkeit : Arbeit (joy : success = fatigue : work )

### a_39 – Row 19 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2719 |
| 1 | Right Answer | 505 |
| -1 | No Answer | 359 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Eis : Eisen = Wasser : Quecksilber (ice : iron = water : mercury )

### a_40 – Row 20 Analogoy Task

| | | |
|---|---|---|
| 0 | Wrong Answer | 2863 |
| 1 | Right Answer | 511 |
| -1 | No Answer | 209 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

Haus : Treppe = Fluss : Schleuse (house : stairs = river : water lock)

## 5 Task 2: Arithmetic Operator

The "arithmetic operator" measures the numerical cognitive potential of the respondents. These tasks focus primarily on the young person's abstract combinatorial ability and logical thinking.

## b_101 – Row 1 Task Arithmetic Operator

| | | |
|---|---|---:|
| 0 | Wrong Answer | 22 |
| 1 | Right Answer | 3482 |
| -1 | No Answer | 79 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

$5 + 12 = 17$

## b_102 – Row 2 Task Arithmetic Operator

| | | |
|---|---|---:|
| 0 | Wrong Answer | 64 |
| 1 | Right Answer | 3389 |
| -1 | No Answer | 130 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

$323 - 89 = 234$

## b_103 – Row 3 Task Arithmetic Operator

| | | |
|---|---|---:|
| 0 | Wrong Answer | 342 |
| 1 | Right Answer | 2914 |
| -1 | No Answer | 327 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

$14 + 8 \times 3 = 66$

## b_104 – Row 4 Task Arithmetic Operator

| | | |
|---|---|---:|
| 0 | Wrong Answer | 543 |
| 1 | Right Answer | 2615 |
| -1 | No Answer | 425 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |

| | | |
|---|---|---|
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

121 - 10 x 8 = 888

## b_105 – Row 5 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 338 |
| 1 | Right Answer | 2965 |
| -1 | No Answer | 280 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

9 - 3 x 5 = 30

## b_106 – Row 6 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 529 |
| 1 | Right Answer | 2556 |
| -1 | No Answer | 498 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

12 x 5 - 15 = 45

## b_107 – Row 7 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 624 |
| 1 | Right Answer | 2358 |
| -1 | No Answer | 601 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

68 + 32 : 4 = 25

### b_108 – Row 8 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 539 |
| 1 | Right Answer | 2591 |
| -1 | No Answer | 453 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

9 x 7 + 14 = 77

### b_109 – Row 9 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 481 |
| 1 | Right Answer | 2600 |
| -1 | No Answer | 502 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

972 - 18 - 6 = 948

### b_110 – Row 10 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 643 |
| 1 | Right Answer | 2281 |
| -1 | No Answer | 659 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

1462 + 1817 + 32 = 3311

### b_111 – Row 11 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 711 |
| 1 | Right Answer | 2182 |
| -1 | No Answer | 690 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |

| | | |
|---|---|---|
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

7684 - 6123 + 4 1565

## b_112 – Row 12 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 454 |
| 1 | Right Answer | 2504 |
| -1 | No Answer | 625 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

69 + 12 + 144 = 225

## b_113 – Row 13 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 682 |
| 1 | Right Answer | 2142 |
| -1 | No Answer | 759 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

273 - 129 - 12 = 132

## b_114 – Row 14 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 863 |
| 1 | Right Answer | 1738 |
| -1 | No Answer | 982 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

10119 - 9950 : 13 = 13

### b_115 – Row 15 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 552 |
| 1 | Right Answer | 2098 |
| -1 | No Answer | 933 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

2216 - 1006 : 2 = 605

### b_116 – Row 16 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 949 |
| 1 | Right Answer | 1788 |
| -1 | No Answer | 846 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

26 + 3 x 5 = 145

### b_117 – Row 17 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 964 |
| 1 | Right Answer | 1316 |
| -1 | No Answer | 1302 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

2142 : 7 : 9 = 34

### b_118 – Row 18 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 1170 |
| 1 | Right Answer | 977 |
| -1 | No Answer | 1435 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |

| | | |
|---|---|---|
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

412 + 15 : 7 = 61

## b_119 – Row 19 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 999 |
| 1 | Right Answer | 950 |
| -1 | No Answer | 1633 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

133 : 19 + 43 = 50

## b_120 – Row 20 Task Arithmetic Operator

| | | |
|---|---|---|
| 0 | Wrong Answer | 790 |
| 1 | Right Answer | 1184 |
| -1 | No Answer | 1608 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

5500 : 20 + 3105 = 3380

# 6  Task 3: Matrices

The "Matrices" task set measures the respondents' figural cognitive abilities.

## a_161 – Row 1 Task Figures

| | | |
|---|---|---|
| 0 | Wrong Answer | 207 |
| 1 | Right Answer | 3327 |
| -1 | No Answer | 49 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |

-7    Only available in less restricted edition                              0

The 3rd symbol corresponds to the correct solution.

### a_162 – Row 2 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 1243 |
| 1 | Right Answer | 2269 |
| -1 | No Answer | 70 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 3rd symbol corresponds to the correct solution.

### a_163 – Row 3 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 874 |
| 1 | Right Answer | 2520 |
| -1 | No Answer | 189 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 3rd symbol corresponds to the correct solution.

### a_164 – Row 4 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 1025 |
| 1 | Right Answer | 2484 |
| -1 | No Answer | 74 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 2nd symbol corresponds to the correct solution.

### a_165 – Row 5 Task Figures

| 0  | Wrong Answer                                        | 1158 |
|----|-----------------------------------------------------|------|
| 1  | Right Answer                                        | 2313 |
| -1 | No Answer                                           | 112  |
| -2 | Does not apply                                      | 472  |
| -3 | Answer improbable                                   | 0    |
| -4 | Inadmissible multiple response                      | 0    |
| -5 | Not included in this version of the questionnaire   | 0    |
| -6 | Version of questionnaire with modified filtering    | 0    |
| -7 | Only available in less restricted edition           | 0    |

The 2nd symbol corresponds to the correct solution.

### a_166 – Row 6 Task Figures

| 0  | Wrong Answer                                        | 445  |
|----|-----------------------------------------------------|------|
| 1  | Right Answer                                        | 2989 |
| -1 | No Answer                                           | 149  |
| -2 | Does not apply                                      | 472  |
| -3 | Answer improbable                                   | 0    |
| -4 | Inadmissible multiple response                      | 0    |
| -5 | Not included in this version of the questionnaire   | 0    |
| -6 | Version of questionnaire with modified filtering    | 0    |
| -7 | Only available in less restricted edition           | 0    |

The 2nd symbol corresponds to the correct solution.

### a_167 – Row 7 Task Figures

| 0  | Wrong Answer                                        | 1248 |
|----|-----------------------------------------------------|------|
| 1  | Right Answer                                        | 2035 |
| -1 | No Answer                                           | 300  |
| -2 | Does not apply                                      | 472  |
| -3 | Answer improbable                                   | 0    |
| -4 | Inadmissible multiple response                      | 0    |
| -5 | Not included in this version of the questionnaire   | 0    |
| -6 | Version of questionnaire with modified filtering    | 0    |
| -7 | Only available in less restricted edition           | 0    |

The 1st symbol corresponds to the correct solution.

### a_168 – Row 8 Task Figures

| 0  | Wrong Answer                                        | 1727 |
|----|-----------------------------------------------------|------|
| 1  | Right Answer                                        | 1660 |
| -1 | No Answer                                           | 196  |
| -2 | Does not apply                                      | 472  |
| -3 | Answer improbable                                   | 0    |
| -4 | Inadmissible multiple response                      | 0    |
| -5 | Not included in this version of the questionnaire   | 0    |

| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 1st symbol corresponds to the correct solution.

### a_169 – Row 9 Task Figures

| 0 | Wrong Answer | 1804 |
|----|--------------|------|
| 1 | Right Answer | 1559 |
| -1 | No Answer | 220 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 5th symbol corresponds to the correct solution.

### a_170 – Row 10 Task Figures

| 0 | Wrong Answer | 2203 |
|----|--------------|------|
| 1 | Right Answer | 929 |
| -1 | No Answer | 451 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 1st symbol corresponds to the correct solution.

### a_171 – Row 11 Task Figures

| 0 | Wrong Answer | 1377 |
|----|--------------|------|
| 1 | Right Answer | 1956 |
| -1 | No Answer | 250 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 2nd symbol corresponds to the correct solution.

### a_172 – Row 12 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 1736 |
| 1 | Right Answer | 1564 |
| -1 | No Answer | 283 |
| -2 | Does not apply | 472 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 3rd symbol corresponds to the correct solution.

### a_173 – Row 13 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 2308 |
| 1 | Right Answer | 736 |
| -1 | No Answer | 538 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 4th symbol corresponds to the correct solution.

### a_174 – Row 14 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 741 |
| 1 | Right Answer | 2535 |
| -1 | No Answer | 306 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 2nd symbol corresponds to the correct solution.

### a_175 – Row 15 Task Figures

| | | |
|---|---|---:|
| 0 | Wrong Answer | 2395 |
| 1 | Right Answer | 707 |
| -1 | No Answer | 480 |
| -2 | Does not apply | 473 |

|     |                                                  |   |
|-----|--------------------------------------------------|---|
| -3  | Answer improbable                                | 0 |
| -4  | Inadmissible multiple response                   | 0 |
| -5  | Not included in this version of the questionnaire | 0 |
| -6  | Version of questionnaire with modified filtering | 0 |
| -7  | Only available in less restricted edition        | 0 |

The 5th symbol corresponds to the correct solution.

## a_176 – Row 16 Task Figures

|     |                                                  |      |
|-----|--------------------------------------------------|------|
| 0   | Wrong Answer                                     | 1903 |
| 1   | Right Answer                                     | 1140 |
| -1  | No Answer                                        | 539  |
| -2  | Does not apply                                   | 473  |
| -3  | Answer improbable                                | 0    |
| -4  | Inadmissible multiple response                   | 0    |
| -5  | Not included in this version of the questionnaire | 0    |
| -6  | Version of questionnaire with modified filtering | 0    |
| -7  | Only available in less restricted edition        | 0    |

The 2nd symbol corresponds to the correct solution.

## a_177 – Row 17 Task Figures

|     |                                                  |      |
|-----|--------------------------------------------------|------|
| 0   | Wrong Answer                                     | 1453 |
| 1   | Right Answer                                     | 1384 |
| -1  | No Answer                                        | 745  |
| -2  | Does not apply                                   | 473  |
| -3  | Answer improbable                                | 0    |
| -4  | Inadmissible multiple response                   | 0    |
| -5  | Not included in this version of the questionnaire | 0    |
| -6  | Version of questionnaire with modified filtering | 0    |
| -7  | Only available in less restricted edition        | 0    |

The 5th symbol corresponds to the correct solution.

## a_178 – Row 18 Task Figures

|     |                                                  |      |
|-----|--------------------------------------------------|------|
| 0   | Wrong Answer                                     | 1821 |
| 1   | Right Answer                                     | 787  |
| -1  | No Answer                                        | 974  |
| -2  | Does not apply                                   | 473  |
| -3  | Answer improbable                                | 0    |
| -4  | Inadmissible multiple response                   | 0    |
| -5  | Not included in this version of the questionnaire | 0    |
| -6  | Version of questionnaire with modified filtering | 0    |
| -7  | Only available in less restricted edition        | 0    |

The 2nd symbol corresponds to the correct solution.

## a_179 – Row 19 Task Figures

| | | |
|---|---|---|
| 0 | Wrong Answer | 1600 |
| 1 | Right Answer | 1136 |
| -1 | No Answer | 846 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 4th symbol corresponds to the correct solution.

## a_180 – Row 20 Task Figures

| | | |
|---|---|---|
| 0 | Wrong Answer | 1628 |
| 1 | Right Answer | 816 |
| -1 | No Answer | 1138 |
| -2 | Does not apply | 473 |
| -3 | Answer improbable | 0 |
| -4 | Inadmissible multiple response | 0 |
| -5 | Not included in this version of the questionnaire | 0 |
| -6 | Version of questionnaire with modified filtering | 0 |
| -7 | Only available in less restricted edition | 0 |

The 5th symbol corresponds to the correct solution.