

The Big Five Personality Dimensions in Large-Scale Surveys: An Overview of 25 German Data Sets for Personality Research

Rammstedt, Beatrice; Roemer, Lena; Mutschler, Julie; Lechner, Clemens

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:

Rammstedt, B., Roemer, L., Mutschler, J., & Lechner, C. (2023). The Big Five Personality Dimensions in Large-Scale Surveys: An Overview of 25 German Data Sets for Personality Research. *Personality Science*, 4, 1-25. <https://doi.org/10.5964/ps.10769>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:

<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more Information see:

<https://creativecommons.org/licenses/by/4.0>

The Big Five Personality Dimensions in Large-Scale Surveys: An Overview of 25 German Data Sets for Personality Research

Beatrice Rammstedt¹ , Lena Roemer¹ , Julie Mutschler¹, Clemens Lechner¹ 

[1] GESIS – Leibniz Institute for the Social Sciences, Mannheim, Germany.

Personality Science, 2023, Vol. 4, Article e10769, <https://doi.org/10.5964/ps.10769>

Received: 2022-12-05 • **Accepted:** 2023-09-24 • **Published (VoR):** 2023-11-14

Handling Editor: John F. Rauthmann, Ludwig-Maximilians-Universität München, Munich, Germany

Reviewing: Round 1 - Sara J Weston; Anonymous #1. No open reviews are available.

Corresponding Author: Beatrice Rammstedt, POB 122155, 68072 Mannheim, Germany. E-mail: Beatrice.rammstedt@gesis.org

Supplementary Materials: Data [see [Index of Supplementary Materials](#)] 

Abstract

In recent decades, the number of large-scale surveys that have included measures of the Big Five personality traits in their standard questionnaires has grown sharply both in Germany and internationally. Consequently, a vast, heterogeneous, high-quality data base is now readily available to personality psychologists for secondary analyses. In this paper, we provide an overview of 25 public large-scale surveys assessing the Big Five. Our aim is to increase researchers' awareness of the availability and analytical potential of these data, and ultimately to increase their reuse. We restricted our selection to surveys of the adult population, conducted in Germany, based on probabilistic samples with a minimum sample size of 1,500 respondents, and assessing all Big Five dimensions with a validated Big Five instrument. We describe the study designs, the measures used to assess the Big Five, and the research potential of these valuable data.

Keywords

Big Five, data sets, large-scale surveys, Big Five Inventory, personality research, secondary data analyses, open data



This is an open access article distributed under the terms of the [Creative Commons Attribution 4.0 International License, CC BY 4.0](#), which permits unrestricted use, distribution, and reproduction, provided the original work is properly cited.

Relevance Statement

In recent decades, the number of large-scale surveys that have included measures of the Big Five personality traits in their standard questionnaires has grown sharply both in Germany and internationally. Consequently, a vast, heterogeneous, high-quality data base is now readily available to personality psychologists for secondary analyses. In this paper, we provide an overview of 25 public large-scale surveys assessing the Big Five. Our aim is to increase researchers' awareness of the availability and analytical potential of these data, and ultimately to increase their reuse. We restricted our selection to surveys of the adult population, conducted in Germany, based on probabilistic samples with a minimum sample size of 1,500 respondents, and assessing all Big Five dimensions with a validated Big Five instrument. We describe the study designs, the measures used to assess the Big Five, and the research potential of these valuable data.

Key Insights

- overview of 25 public large-scale surveys assessing the Big Five
- description of analytical potential of these data
- aim to increase researchers' awareness of the availability

In recent decades, the Big Five personality dimensions have become increasingly established as a comprehensive framework to describe personality (e.g., [John et al., 2008](#); [McCrae & Costa, 2008](#)). This has led to broad interest in their assessment, even in fields outside core personality research, such as sociology, economics, and epidemiology. Nowadays, the Big Five are included in most large-scale social surveys as an almost standard construct, like subjective well-being.

The data resulting from these large-scale social surveys are highly valuable for personality research. The public large-scale surveys include a variety of additional constructs, they rely mostly on population-representative or at least heterogeneous samples, and often follow a longitudinal design, allowing to address key research questions of personality psychologists. Moreover, these public large-scale surveys have numerous advantages in terms of sample size and sample quality compared to the typically self-conducted small-scale studies still dominating personality psychology and adjacent fields. Self-conducted studies are usually based on small, selective samples of college students or—as it is increasingly common today—samples collected using Amazon Mechanical Turk (MTurk) (e.g., [Webb & Tangney, 2022](#)). As well-funded programs run by professionals specialized in survey research methods, these surveys typically far exceed the scope of data collections that an individual researcher or research group could ever hope to carry out alone. Many of these survey programs comprise panel data or repeated cross-sectional data that enable longitudinal analyses, greatly expanding the type of research questions that can be answered and offering opportunities for causal inference (e.g., by using fixed-effects models). These data are usually freely available to personality

psychologists (and other researchers) for secondary analyses. However, apart from a few highly prominent and widely used surveys, such as the German Socio-Economic Panel (SOEP; Goebel et al., 2019), most of the large-scale surveys presented in this paper do not appear to be widely known among personality psychologists and remain underutilized in current research. This is unfortunate because these surveys have enormous analytical potential for research on the development, consequences, or predictors of personality traits—a potential that has thus far lain largely dormant. Indeed, many of these surveys are like hidden gems that have yet to be discovered by personality psychologists.

The aim of the present paper is therefore to provide researchers in personality psychology and beyond with an overview of these available and reusable data sets. Because they are so numerous, we deliberately limited this overview to surveys that (a) focused on the adult population, (b) were conducted in Germany, (c) were based on probability samples, (d) had a minimum sample size of about 1,500 respondents, and (e) included an assessment of all Big Five dimensions with a validated Big Five instrument.

Search Strategy

In the first step, we included surveys in our overview with which we were personally familiar by virtue of having worked extensively with them in the past. Second, to provide a more comprehensive and less subjective overview, we systematically searched the databases of the following German research data centers using the key words *personality* and *Big Five*: the GESIS Data Archive for the Social Sciences; the Research Data Center of the SOEP; the Research Data Centre of the German Centre for Higher Education Research and Science Studies (DZHW); the Research Data Center of the Federal Institute for Vocational Education and Training (BIBB); the Research Data Center of the Institute for Employment Research (IAB). Third, we screened well-known international survey programs for the inclusion of personality measures. Finally, we contacted experts affiliated with the identified surveys to solicit tips about additional data sources. These steps resulted in 25 data sets. Although this list may not be exhaustive, it does cover the most important and prominent large-scale surveys in Germany that include personality measures.¹

Overview of the Selected Surveys

In what follows, we give an aggregated overview of the selected surveys. In this overview, we address central aspects of the study designs and the measures used to assess the

1) We invite researchers to add potentially overseen studies fulfilling our criteria in the overview tables available in the OSF project (see [Supplementary Materials](#)).

Big Five. These central aspects largely define the research questions that can be posed around the Big Five. In a next step, we sketch some research potentials that emerge from further characteristics in the surveys. In addition, [Table 1](#) provides a structured overview of the substantive focus of each survey, and [Table 2](#) summarizes details of their designs, sample sizes, personality measures, etc.

Research Design

Only a few of the identified survey programs are cross-sectional or repeated cross-sections in which independent samples are drawn for each wave (e.g., the German General Social Survey [ALLBUS], the World Values Survey [WVS]), whereas most of them are panel surveys following the same respondents over many years. In the period covered by the present paper, some of these panel surveys assessed the Big Five multiple times. For example, the Panel Analysis of Intimate Relationships and Family Dynamics (pairfam) and the SOEP reassessed the Big Five every four years, and the GESIS Panel did so yearly.

Sampling Design and Target Population

As noted earlier, we included only surveys that targeted either the general adult population or adult subpopulations in Germany (with a minimum age of 15 years, but with the majority of the target population aged 18 years or over). These adult subpopulations included, for example, the elderly (the Survey of Health, Ageing and Retirement in Europe [SHARE]), (un-)employed persons (the Panel Study Labour Market and Social Security [PASS]; the BIBB/BAuA Employment Survey), and highly educated persons (the DZHW Graduate Panel and PhD Panel). Further, we included only large-scale surveys comprising at least 1,500 respondents. We also restricted our selection to surveys based on randomly selected respondents, so that they were representative of the corresponding population. Compared with non-random samples, such as convenience samples or quota samples, such random samples have important advantages from the perspective of representativeness and correct statistical inference to the population level ([Lohr, 2021](#)). Random sampling in these surveys was done via random-route procedures developed by the Arbeitskreis Deutscher Markt- und Sozialforschungsinstitute (ADM; e.g., the survey Personality and Voting Behavior 2003), was register-based (e.g., ALLBUS, the GESIS Panel), or was a combination of both (e.g., the SOEP, the German Internet Panel [GIP]). For telephone surveys, established random digit dialing procedures for dual frame samples (e.g., [Gabler et al., 2012](#)) were used. In some cases, total universe samples of the specific target group were drawn (e.g., the DZHW PhD Panel).

Most of the longitudinal surveys included in our overview were regularly refreshed with new samples in order to address panel mortality. This ensured that their potential for longitudinal analyses was preserved despite dropout.

Table 1
General Overview of the Included Data Sets

Survey Program	Further Specification of the Data Set	Study Focus	Exemplary Psychological Constructs	URL	Reference	Data Accessibility ^a	Notes
ALLBUS	ISSP Germany 2003 & 2004 ^b	Attitudes, behavior, and social change; focus on social inequality and digital divide; national identity	–	https://www.gesis.org/en/allbus/allbus-home	Terwey, 2000	Free access upon registration	ISSP Germany 2003 & 2004 are part of the ALLBUS 2004 data set
ALLBUS	ISSP Germany 2005 & 2006 ^b	Attitudes, behavior, and social change; focus on attitudes toward different ethnic groups, work orientations, role of government	–	https://www.gesis.org/en/allbus/allbus-home	Terwey, 2000	Free access upon registration	ISSP Germany 2005 & 2006 are part of the ALLBUS 2006 data set
ALLBUS	ISSP Germany 2007 & 2008 ^b	Attitudes, behavior, and social change; focus on political participation, leisure and sport, religion	–	https://www.gesis.org/en/allbus/allbus-home	Terwey, 2000	Free access upon registration	ISSP Germany 2007 & 2008 are part of the ALLBUS 2008 data set
BIBB/BAuA Employment Survey	BIBB – Personality traits conditions, skill requirements, and employment health	Employment, working life goals	Locus of control, occupational self-efficacy, workaholism, procrastination, risk taking, vocabulary test	https://www.bibb.de/en/index.php	Rohrbach-Schmidt et al., 2020	Free access for scientific purposes upon request	Supplementary survey to the BIBB/BAuA Employment Survey (https://metadaten.bibb.de/en/dataset/detail/123)
DZHW PhD Panel	PhD Panel 2014	Careers of doctorate holders	Self-efficacy, internal/external locus of control, life goals	https://www.dzhw.eu/en/index.html	G. Brandt et al., 2020	Free access for scientific purposes upon request	
DZHW Graduate Panel	Graduate Panel 2009	Study, career entry, career and further qualification of university graduates	Life goals, study motives	https://www.dzhw.eu/en/forschung/projekt?pr_id=302	G. Brandt et al., 2022	Free access for scientific purposes upon request	

Survey Program	Further Specification of the Data Set	Study Focus	Exemplary Psychological Constructs	URL	Reference	Data Accessibility ^a	Notes
FReDA	FReDA GGS Sample, Anchors	Dyadic multi-actor study on family life, relationships, and demography; gender roles, reproductive health	Subjective well-being, attitudes and values, satisfaction, COVID-related attitudes, relationship quality, self-esteem	https://www.freda-panel.de/FReDA/EN/Startseite.html	Schneider et al., 2021	Free access for scientific purposes upon request	Data already collected, personality assessments to be released
GESIS Panel		Multi-topic open panel infrastructure with yearly core modules (e.g., personality, life satisfaction) and externally submitted studies	Values, political behavior and orientations, well-being, quality of life, environmental attitudes and behavior, satisfaction, religiosity, COVID-19 behavior	https://gesis-panel.org	Bosnjak et al., 2018	Free access for scientific purposes upon request	
GIP		Multi-topic panel, attitudes and preferences in political and economic decision-making processes	Satisfaction, COVID-related behavior, health, political efficacy	https://www.unimannheim.de/en/gip	Blom et al., 2015	Free access for scientific purposes upon request	Subsample of about $N = 3,600$ participants in a COVID-related longitudinal sub-study with higher frequency
GLES	Cross-Section 2017, Pre- and Post-Election	Election research, political attitudes and behaviors during election campaigns and after federal elections in Germany	Emotions, trust, political knowledge, religiosity	https://gles-en.eu	GLES, 2019	Free access upon registration	Data consist of two subsamples, surveyed before and after the election; $N = 3,412$ agreed to be included in the GLES Panel (Sample B), which conducts up to two waves per year
GLES	Cross-Section 2021, Pre-Election	Election research, political attitudes and behaviors during election campaigns and after federal elections in Germany	Emotions, trust, political knowledge, religiosity	https://gles-en.eu	GLES, 2022	Free access upon registration	Participants could agree to be included in the GLES Panel (Sample C), which conducts up to two waves per year

Survey Program	Further Specification of the Data Set	Study Focus	Exemplary Psychological Constructs	URL	Reference	Data Accessibility ^a	Notes
SOEP	The SOEP includes several subsamples with different sociodemographic indicators c foci (not further specified in this table)	Living in Germany; household composition, occupational biographies, employment, earnings, health and satisfaction indicators	Satisfaction, self-esteem, trust, risk aversion, worries, well-being, depressive traits, life goals, locus of control, loneliness	https://www.diw.de/en/soep 2019	Goebel et al., 2019	Free access for scientific purposes upon request	
ISJP Germany	ISJP 4	Attitudes to social justice and social inequality; focus on familial social support	Satisfaction, justice attitudes	https://www.sowi.hu-berlin.de/de/lehberichte/empisoz/forschung/archiv/isjp	Wegener, 2015	Free access upon registration	
Nacaps	Nacaps 2018	Career paths of highly qualified academics in Germany	Willingness to take risks, self-efficacy, locus of control, motives for doing a doctorate	https://www.nacaps.de/en/index.html	Adrian et al., 2020	Free access for scientific purposes upon request	
Nacaps	Nacaps 2020 (follow-up cohort)	Career paths of highly qualified academics in Germany	Willingness to take risks, self-efficacy, locus of control, motives for doing a doctorate	https://www.nacaps.de/en/index.html	When released, free access for scientific purposes upon request	Data already collected; to be released	
NAKO	Starting Cohort	Multidisciplinary, population-based cohort study to investigate the development and aetiology of diseases, identify risk factors, and enhance early detection and prevention of diseases	Depression, anxiety, childhood trauma, personality traits, professional recognition, occupational stress, health-related quality of life	https://www.nako.de	Peters et al., 2022	Free access for scientific purposes upon application	Follow-up survey completed in 2022. Follow-up examinations will be completed in 2024. Two additional surveys on COVID-19 (May/June 2020, October/November 2022).

Survey Program	Further Specification of the Data Set	Study Focus	Exemplary Psychological Constructs	URL	Reference	Data Accessibility ^a	Notes
NEPS	Starting Cohort 5	Educational processes and competence development	Domain-general and domain-specific competencies, self-esteem, vocational interests, satisfaction	https://www.neps-data.de/Mainpage	Blossfeld et al., 2011	Free access for scientific purposes upon request	
NEPS	Starting Cohort 6	Educational processes and competence development	Domain-general and domain-specific competencies, self-esteem, vocational interests, satisfaction, values	https://www.neps-data.de/Mainpage	Blossfeld et al., 2011	Free access for scientific purposes upon request	
Piafam	Anchors	Multi-actor study on partnership and family dynamics, transition to parenthood, intergenerational relationships, parenting and child development	Loneliness, self-esteem, dyadic coping, depression, anger, sexuality, dark triad	https://www.piafam.de/en/ https://www.freda-panel.de/EN	Huinink et al., 2011	Fee-based access for scientific purposes upon request	Subsample of N = 3,160 participated in an additional, optional online survey on COVID-19. The Piafam sample was integrated into the FReDA panel in 2022.
PASS (IAB)		Labor market and social security; dynamics between basic income support and social situations of households, poverty	Satisfaction, self-efficacy, impulsivity, memory test, benefits of work	https://iab.de/en/the-iab/surveys/panel-study-pass/	Trappmann et al., 2019	Free access for scientific purposes upon request	
Personality and Voting Behavior 2003		Personality traits, voting behavior and political orientation, political knowledge tests.	Values, authoritarianism, political efficacy	https://search.gesis.org/research_data/ZA4052	Schumann, 2004	Free access upon registration	
PIAAC-L	PIAAC-Longitudinal	Development of cognitive competences, longitudinal effects of skill outcomes over the life course, cognitive	Competencies, reading, numeracy, reading reciprocity, locus of control, perseverance, longitudinal	https://www.gesis.org/en/piaac/rde/data/piaac-longitudinal	Rammstedt et al., 2017	Free access for scientific purposes upon request	

Survey Program	Further Specification of the Data Set	Study Focus	Exemplary Psychological Constructs	URL	Reference	Data Accessibility ^a	Notes
SHARE ^b		competencies in a broader context	satisfaction, grit, life events	Cognitive function, mental health, work quality, loneliness, trust http://www.share-project.org/home0.html	Börsch-Supan et al., 2013	Free access for scientific purposes upon request	
TwinLife	Cohort 4	Extended twin family study on the development of social inequality; biological and social origins	Satisfaction, self-esteem, psychopathology, achievement motivation, academic self-concept, cognitive abilities	https://www.twinline.de/ ; documentation/ cognitive abilities	Hahn et al., 2016;	Free access for scientific purposes upon request	Four TwinLife COVID-19 Supplementary Surveys have been conducted.
WVS ^b	Sample Wave 6	Social, political, economic, religious and cultural values, beliefs, and norms	Happiness, life satisfaction, values, religiosity,	https://www.worldvaluessurvey.org/wvs.jsp	Ingelhart et al., 2018	Free access upon registration	

Note. ALLBUS = Allgemeine Bevölkerungsumfrage der Sozialwissenschaften [German General Social Survey]; BIBB/BfAuA; BIBB = Bundesinstitut für Berufsbildung [Federal Institute for Vocational Education and Training]; BAuA= *Bandesanstalt für Arbeitsschutz und Arbeitsmedizin* [Federal Institute for Occupational Safety and Health]; DZHW = *Deutsche Zentrum für Hochschul- und Wissenschaftsforschung* [German Centre for Higher Education Research and Science Studies]; FReDA = Family Research and Demographic Analysis—the German Family Demography Panel Study; GGS = the Generations and Gender Survey; GIP = the *German Internet Panel*; GLES = the *German Longitudinal Election Study*; SOEP = the German Socio-Economic Panel; ISJP = the International Social Justice Project; ISSP = the International Social Survey Programme; Nacaps = the National Academics Panel Study; NAKO = Nationale Kohorte [German National Cohort]; NEPS = the German National Educational Panel Study; pairfam = Panel Analysis of Intimate Relationships and Family Dynamics—the German Family Panel; PASS = Panel Arbeitsmarkt und soziale Sicherung [Panel Study Labour Market and Social Security]; IAB = Institut für Arbeitsmarkt- und Berufsforschung [Institute for Employment Research (the research institute of the Federal Employment Agency)]; PIAAC-L = the Programme for the International Assessment of Adult Competencies Longitudinal; SHARE = the *Survey of Health, Ageing and Retirement in Europe*; WVS = the World Values Survey.

^a Many survey programs provide multiple data versions that differ in their levels of sensitivity and potential for de-identification. Displayed in the column is the accessibility for the standard scientific use files; data versions that include more sensitive variable might entail higher access barriers (e.g., access via on-site use or remote desktops); which, however, are not further specified in this table. ^b Studies are part of international survey programmes. Thus, corresponding data from other countries are also available.

Table 2*Detailed Overview of the Included Data Sets and the Assessment of the Big Five*

Survey Program	Further Specification of the Data Set	Target Population	N(at First Big Five Assessment)	Big Five Measure	Year of First Big Five Assessment	Design, Yes/No	Repeated Big Five Assessments, Yes/No	Study Span	Sampling Design	Mode (Big Five)	Big Five Reports From/About Others?
ALBUS	ISSP Germany 2003 & 2004	Age ≥ 18 years	2,619	BFI-10	2004	No	No	Cross-sectional	Register	CAPI + SAQF	—
ALBUS	ISSP Germany 2005 & 2006	Age ≥ 18 years	3,344	BFI-10	2006	No	No	Cross-sectional	Register	CAPI + CASI	—
ALLBUS	ISSP Germany 2007 & 2008	Age ≥ 18 years	3,423	BFI-10	2008	No	No	Cross-sectional	Register	CAPI + CASI	—
BIBB/BAuA	BIBB-Personality traits and employment	Employed (≥ 10 hr/ week) persons aged ≥ 15 years	8,010	BFI-S	2017/2018	No	No	Cross-sectional	Telephone sample, dual frame	CAPI	—
DZHW PhD panel	PhD Panel 2014	Doctorate holders who completed their doctorate in 2014	5,408	BFI-10	2015	Yes	Yes, in 2018 and 2021	2015–ongoing	Total universe	SAQF + CAWI	—
DZHW Graduate Panel	Graduate Panel 2009	Higher education graduates with first degree in 2009	2,465	BFI-10	2015	Yes	No	2010–2019	Stratified cluster sample	(SAQF +) CAWI	—
FrDA	FrDA GGS Sample; Anchors	Adults aged 18 to 49 years	37,783 ^a	BFI-2-XS	2,022	Yes	Yes, planned (cycle yet to be decided)	2021–ongoing	Register	CAWI + SAQF	Self-reports from partners
GESIS Panel		Age ≥ 18 years	4,035	BFI-10; BFI-2-S (once in 2017)	2014	Yes	Yes, every year	2014–ongoing	Register	CAWI & SAQF	—
GIP		Adults aged 16 to 75 years	1,483	BFI-10	2012	Yes	Yes, in 2014 (and 2018) ^a	2012–ongoing	Multi-stage route; register-based	CAWI	Self-reports from household members ^b
GLES	Cross-Section 2017, Pre- and Post-Election	Age ≥ 16 years	4,291	BFI-10	2017	No	No	2017	Register	CAPI	—

Survey Program	Further Specification of the Data Set	N(at First Big Five Assessment)	Big Five Measure	Year of First Big Five Assessment	Longitudinal Design, Yes/No	Repeated Big Five Assessments, Yes/No	Study Span	Sampling Design	Mode (Big Five)	Big Five Reports From/About Others?
CLFS	Cross-Section 2021, Age ≥ 16 years	5,116	BFI-10	2021	No	No	2021	Register	CAWI + SaQF	—
SOEP	The SOEP includes subsamples with different sociodemographic foci	21,105 (2005) Openness item since 2009)	BFI-S/BFI-S (+1)	2005	Yes	Yes, every four years	1984–ongoing	Several designs: PAPI + CAPI with random route; register-based	Self-reports from household members	—
ISIP Germany	ISIP 4	Adults aged 18–85 years	3059	BFI-S	2006	No	No	Register	PAPI	—
NACAPS	Nacaps 2018	Doctoral candidates and doctorate holders	28,368	BFI-S	2019	Yes	Yes, every year	2019–ongoing	Total universe: CAWI doctoral candidates enrolled on December 1, 2018	—
NACAPS	Nacaps 2020 (follow-up cohort)	Doctoral candidates and doctorate holders	15,472	BFI-S	2021	Yes	Yes, every year	2021–ongoing	Total universe: CAWI doctoral candidates enrolled for the first time between December 2, 2018 and December 1, 2020	—
NAKO	Starting Cohort	Adults aged 20–74 years	205,415	BFI-S	2014–2019	Yes	Yes, 2019–2024	2014–ongoing	Register	CASI —
NEPS	Starting Cohort 5	First-year students	13,233	BFI-10 (+ 1 Agreeableness item)	2012	Yes	Yes, in 2016	2010–ongoing sampling	Multi-stage CATI	—

Survey Program	Further Specification of the Data Set	N (at First Big Five Assessment)	Big Five Measure	Year of First Big Five Assessment	Longitudinal Design, Yes/No	Repeated Big Five Assessments, Yes/No	Study Span	Sampling Design	Mode (Big Five)	Big Five Reports From/About Others?	
NEPS	Starting Cohort 6 years	Adults aged 21–63 years	BFI-10 (+ 1 Agreeableness item)	2012/13	Yes	Yes, in 2015/6	2007–ongoing	Register	CAPI + CATI –		
Parfam	Anchors	Adults aged between 16–18, 26–28 and 36–38 (and their partners, children, parents)	BFI-K	2009/10	Yes	Yes every four years	2008–ongoing	Register	CASI	Other-reports about own child (age <= 8 years) and partner's ideal personality; self-reports of partner, parents and children (age 8–14 years)	
PASS (TAB)	Age ≥ 15 years; in households registered in Germany, and in households in receipt of basic income support	15,607	BFI-K	2011	Yes	Yes, in 2019	2007–ongoing	Register (of welfare recipients); register from a private data provider	CAPI + CATI Self-reports from household members		
Personality and Voting Behavior 2003	Age ≥ 18 years, eligible to vote	2,544	BFI-K; NEO-FFI; BFI	2003	No	No	Cross-sectional	Multi-stage with random route	PAPI + SAQP	Assesment of the personality of politicians	
PLAAC-L	PLAAC-Longitudinal	respondents aged 16–65 years and their household members	PLAAC 2012	6,231	BFI-S (+ 1 Openness item)	2,014	Yes	Yes, in 2016	2012–2016 Register	CAPI	Self-reports from partners
SHARE	Age ≥ 50 years and their partners	3,820	BFI-10 (+ 1 Agreeableness item)	2,017	Yes	Yes, in 2019/20	2004–ongoing	Register	CAPI	Self-reports from partners; self-reports from the interviewees	

Survey Program	Further Specification of the Data Set	N (at First Big Five Assessment)	Big Five Measure	Year of First Big Five Assessment	Longitudinal Design, Assessment	Repeated Big Five Assessments, Yes/No	Sampling Design	Mode (Big Five)	Big Five Reports From/About Others?
TwinLife	Cohort 4 ^c Twins aged -23 years and their families	3,792 (in 984 families with twins) ^c	BFI-S (+ 1 Openness item)	2014–2016	Yes	Yes, again in 2018–2020; and thereafter every two years	Register	CASI	Self-reports from twins, siblings, partners, parents (other-reports only for younger cohorts)
WVS	Sample Wave 6 Age ≥ 18 years	2,046	BFI-10	2013	No	No	Cross-sectional	PAPI	-

Note. ALLBUS = Allgemeine Bevölkerungsumfrage der Sozialwissenschaften [German General Social Survey]; BIBB/BauA: BIBB = Bundesinstitut für Berufsbildung [Federal Institute for Vocational Education and Training]; BauA= *Bundesanstalt für Arbeitsschutz und Arbeitsmedizin* [Federal Institute for Occupational Safety and Health]; DZHW = Deutsche Zentrum für Hochschul- und Wissenschaftsforschung [German Centre for Higher Education Research and Science Studies]; FReDA = Family Research and Demographic Analysis—The German Family Demography Panel Study; GGS = Generations and Gender Survey; GIP = the German Internet Panel; GLES = the German Longitudinal Election Study; SOEP = the German Socio-Economic Panel; ISJP = the International Social Justice Project; NACAPS = the National Academics Panel Study; NAKO = Nationale Kohorte [German National Cohort]; NEPS = the National Educational Panel Study; pairfam = the Panel Analysis of Intimate Relationships and Family Dynamics; PASS = Panel Arbeitsmarkt und soziale Sicherung [Panel Study Labour Market and Social Security]; IAB = Institut für Arbeitsmarkt- und Berufsforschung [Institute for Employment Research, the research institute of the Federal Employment Agency]; PlAAC-L = Programme for the International Assessment of Adult Competencies Longitudinal; SHARE = the Survey of Health, Ageing and Retirement in Europe; WVS = the World Values Survey. BFI-10 = the Ten-Item Big Five Inventory; BFI-S = the Big Five Inventory-SOEP; BFI-2-XS = the extra-short form of the Big Five Inventory-2 (BFI-2); BFI-2-S = the short form of the Big Five Inventory-2; BFI-K = the German-language short form of the Big Five Inventory (BFI); NEO-FFI = the NEO Five-Factor Inventory. CAWI = computer-assisted web interview; CASI = computer-assisted personal interview; PAPI = computer-assisted self-interview; CATI = computer-assisted telephone interview; SAQP = self-administered questionnaire, paper; PAPI = paper-and-pencil interview.

^a The depicted N for FReDA is from the recruitment wave. Personality was (first) assessed in 2022, in wave 2B. The data of wave 2B is planned to be released in 2024. ^b The German Internet Panel (GIP) includes three cohorts, initially sampled in 2012, 2014, and 2018. The 2012 and 2014 cohorts are household samples; the 2018 cohort is a person sample. In 2018, the BFI-10 was administered only to the newly recruited participants. ^c TwinLife includes three additional cohorts that comprise families with twins aged 5 years (Cohort 1), families with twins aged 11 years (Cohort 2), and families with twins aged 17 years (Cohort 3). On the first measurement occasion, the total N was 14,413.

Thematic Foci of the Survey Programs

The thematic orientation differs greatly across the included survey programs. Most have more or less clear thematic foci. For example, pairfam focused on partnership and fertility; the German National Educational Panel Study (NEPS) on educational pathways and competence development; PASS on the labor market, poverty, and the welfare state; the BIBB/BAuA Employment Survey on qualification and working conditions; and SHARE on health and retirement. By contrast, the GESIS Panel, as an omnibus access panel, does not have a specific thematic focus, but rather includes a large variety of constructs according to the submitted modules (e.g., subjective health, environmental attitudes and behavior, attitudes toward refugees, social and political participation). All selected survey programs include a detailed assessment of sociodemographic background variables, such as education, socioeconomic status, income, and migration status.

Prompted by the COVID-19 pandemic, several surveys (e.g., GIP, the German Twin-Life study, the GESIS Panel) included additional modules focusing on behavior, experiences, and attitudes during the pandemic.

Big Five Measures

The selected surveys differ in the measures used to assess personality. Nearly every survey that fulfilled our criteria used a short-scale variant of the Big Five Inventory (BFI; John et al., 2008; German adaptation by Rammstedt, 1997). The most likely reason for this is the fact that short and ultra-short forms of the BFI are available and can be used free of charge for research purposes.

Surveys such as the GESIS Panel, GIP, NEPS², ALLBUS, SHARE,¹ and the WVS used the BFI-10 (Rammstedt & John, 2007), which assesses each Big Five dimension with one positively keyed and one negatively keyed item, thereby implicitly controlling for acquiescence. Other surveys included more comprehensive measures. For instance, the SOEP, TwinLife, the German National Academics Panel Study (Nacaps), and the BIBB/BAuA Employment Survey used the Big Five Inventory-SOEP (BFI-S; Schupp & Gerlitz, 2008), a 15-item version of the BFI originally developed for the SOEP. Pairfam and PASS used the BFI-K (Rammstedt & John, 2005), a 20-item short form of the BFI. In one wave, the GESIS Panel also used the 30-item BFI-2-S (Rammstedt et al., 2020), a short scale version of the 60-item BFI-2 (Soto & John, 2017; German adaptation by Danner et al., 2019), a revised version of the BFI. Both the BFI-2 and the BFI-2-S allow the Big Five to be measured at both the domain and facet levels (three facets per domain). In a recent wave, the panel survey Family Research and Demographic Analysis (FReDA) used the even more abbreviated form of the BFI-2, the BFI-2-XS (Rammstedt et al., 2020).

2) As suggested by Rammstedt and John (2007), both NEPS and SHARE also included an additional Agreeableness item.

Only one of the selected surveys—Personality and Voting Behavior 2003—included in addition to BFI scales a personality measure that did not hail from the BFI family, namely, the NEO Five-Factor Inventory (NEO-FFI; [Costa & McCrae, 1989](#), German adaptation [Borkenau & Ostendorf, 1991](#)), the 60-item short form of the NEO Personality Inventory (NEO-PI; [Costa & McCrae, 1992](#)). The GESIS Panel and Personality and Voting Behavior 2003 included different Big Five measures, thus allowing comparisons across instruments.

Regarding the response scales used, the BFI-10, BFI-2-XS, BFI-K were always administered with a 5-point rating scale as suggested by [Rammstedt and John \(2005, 2007\)](#) and [Rammstedt et al. \(2020\)](#). The BFI-s was mostly administered using a 7-point rating scale (i.e., SOEP, Nacaps, NAKO, PIAAC-L, TwinLife). In one other study using the BFI-S (i.e., BIBB-BAuA), however, a 5-point scale was used. The NEO-FFI was also assessed using a 7-point rating scale. While response scales were generally directed from disagreement to agreement, the response scales used in the ALLBUS and ISJP were oriented in the opposite direction (i.e., from agreement to disagreement).

Additional Psychological Constructs Included in the Selected Surveys

Besides the Big Five, most of the selected survey programs also assessed other core psychological constructs, such as intelligence (e.g., BIBB-BAuA Employment Survey, NEPS, the SOEP), human values (e.g., the GESIS Panel, the WVS), or more specific constructs, such as locus of control (e.g., the BIBB-BAuA Employment Survey, the SOEP), procrastination (e.g., the BIBB-BAuA Employment Survey), and achievement motivation (e.g., NEPS).

Nearly all of the selected surveys included measures of general and/or specific satisfaction with life. Several panel surveys (e.g., the SOEP, the GESIS Panel) also measured critical life events (since the preceding survey wave).

Big Five Reports From/About Additional Respondents

All of the selected survey programs included a self-report measure of the Big Five for the target person. In some surveys, other household members (e.g., the SOEP, PASS, GIP), relatives (e.g., romantic partners in pairfam, PIAAC-L and SHARE; twins, siblings, parents, partners in TwinLife), or even the interviewer (e.g., SHARE) were asked to provide information about their own personalities. In these cases, self-reports by these household members/relatives/partners/interviewers are available and can be compared with the personality self-reports of the target person. Big Five reports about others as assessed by the target person were included in pairfam, with the target person reporting about the Big Five personality of their child and of an idealized partner. Other-reports in which a third party assesses the personality of the target person were, to the best

of our knowledge, not included in any of the survey (yet, the younger cohorts of TwinLife—which did not meet our inclusion criteria—included parent-reports about the personality of the target person (i.e., the child)).

Big Five Assessment Mode

The selected survey programs differ in their assessment modes. In some cases, assessment modes even differ among respondents of the same survey according to their assessment mode preferences (e.g., web-based or paper-and-pencil questionnaire; e.g., the GESIS Panel, GIP). In other cases, assessment modes differ over time/across assessments, because in one year the assessment was conducted as a personal interview and in other years as a telephone interview or a web-based questionnaire (e.g., NEPS, the SOEP, TwinLife). In this overview, we focus on the mode(s) of the Big Five assessment (see [Table 2](#)). The Big Five were commonly assessed in the form of a personal interview (with an interviewer reading out each question and coding the answer; e.g., PASS, SHARE, NEPS Starting Cohort 6). In other surveys, Big Five questionnaires were self-administered (without an interviewer present; e.g., the GESIS Panel, TwinLife, GIP).

Further Research Potential

Besides the analysis of associations between the Big Five and various outcome variables, associations among partners/household members, and potential longitudinal effects or methodological differences among instruments, samples, and modes, the data sets also have further research potential.

Paradata

For most of the selected survey programs, some form of paradata (i.e., data describing the data collection process) are provided. These may include the assessment date, the assessment duration, regional information, information about the assessment itself (where it took place, if others were present, etc.), or information about the interviewer (i.e., the person conducting the interview and recording the answers; e.g., SHARE). Such paradata can be used for both methodological (e.g., [Cheng et al., 2020](#)) and substantive analyses (allowing, e.g., analyses of the effects of weather on personality self-reports; see [Rammstedt et al., 2015](#)).

Regional information in particular allows survey data to be merged with geodata—for example, on pollution, regional wealth, or regional political orientation—which offers wide analytical potential (e.g., [Ebert et al., 2022](#); for a general overview, see [Bluemke et al., 2017](#)).

International Survey Programs

Although most of the survey programs included in [Table 1](#) are national surveys conducted in Germany only, some (e.g., SHARE, the International Social Survey Programme [ISSP], the WVS, the International Social Justice Project [ISJP]) are part of international comparative survey programs. In these cases, cross-nationally comparative analyses for the Big Five are possible (e.g., [Levinsky et al., 2019](#); [Rammstedt et al., 2013](#); [Schmitt et al., 2008](#)).

Replication and Integrative Data Analysis

Beyond their individual value as data sources, the selected survey programs offer unprecedented analytical potential when combined to answer a specific research question. Researchers can fruitfully combine multiple data sources in different ways. For example, they can conduct independent tests of the same hypothesis in multiple data sets to ascertain whether the results replicate across studies and are robust to variations in study design, measures, sample composition, and other survey characteristics. In some cases, it may even be possible to use meta-analytical techniques to combine results obtained in separate samples. This will contribute to building a more robust and replicable body of evidence in personality psychology. Additionally, for some research questions, researchers might want to pool and harmonize several data sources in order to use them for an integrative data analysis (see [Curran & Hussong, 2009](#); [Curran et al., 2008](#)). Among other advantages, this may be a useful way of increasing statistical power or improving the coverage of certain sociodemographic subgroups or geographical units. Such a mega-analysis was for example conducted based on ten panel studies (also including the SOEP) to investigate the prospective associations of the Big Five with several life outcomes ([Beck & Jackson, 2022](#)).

Conclusion

The present paper aimed to provide personality researchers with an overview of data-sets from large-scale surveys in Germany that include measures of the Big Five. By that we aimed to increase the awareness and interest of psychologists—usually trained in primary data assessment and usage—in reusing these available high-quality datasets as they provide a broad research potential and clear methodological advantages compared to the typically used small-scale selective samples. This potential includes, on the one hand, substantive issues, such as concurrent associations between the Big Five and a broad variety of outcome variables (e.g., [Denissen et al., 2018](#)) or personality change over time and across cohorts. Also of interest from a personality psychology point of view are associations between the Big Five and the additional psychological constructs assessed (e.g., intelligence; see, e.g., [Rammstedt et al., 2016](#)), or similarities between personality

self-ratings of target persons and their partners (see, e.g., [Rammstedt & Schupp, 2008](#)) or (other) household members.

On the other hand, the available longitudinal data allow researchers to predict outcomes based on previously assessed personality structure (e.g., COVID-19-related attitudes and behavior; [Rammstedt et al., 2021](#)) in order to investigate personality change based on repeated Big Five assessments ([Lucas & Donnellan, 2011](#); [Roemer et al., n.d.](#); [Specht et al., 2011](#)) and to draw stronger causal inferences (e.g., [Anger et al., 2017](#); [Sander et al., 2021](#)).

Linked paradata in particular allow researchers to answer innovative research questions related to regional personality differences (e.g., [Ebert et al., 2022](#); [Obschonka et al., 2019](#)) or differences in self-ratings depending on situation effects, for example, interviewer characteristics (e.g., [Brunton-Smith et al., 2017](#)).

And finally, methodological questions, such as the effects of different assessment modes (e.g., [Lang et al. 2011](#)), acquiescence (e.g., [Rammstedt et al., 2010](#)), or response formats, can be answered by combining data from different studies.

Besides all the mentioned potentials and benefits of these high-quality large-scale data, such studies also suffer some drawbacks. For example, the included (personality) scales are usually only short scale measures with their limitations with regard to reliability and validity. In addition, per definition using secondary data does only allow to use the included constructs and their measures, which could undermine the fit for specific research questions. Also, the level of detail in the documentation of the survey programs varies. Finally, inflated error rates may occur when researchers use the same data to answer similar questions, or dependencies among research papers that may appear as presenting distinct evidence but are in fact based on the same data, or shared sampling bias and overfitting (for recent overviews, see, e.g., [Mroczek et al., 2022](#); [Thompson et al., 2020](#)).

In this paper, we have tried to provide as comprehensive and complete an overview of the available surveys as possible. Because our search procedure was subjective in some regards, and was based partly on hearsay, we may have overlooked other available studies that would have met our criteria. To enable missed studies to be added, we have made our overview tables available in an OSF project (see [Supplementary Materials](#)), and any OSF user can post comments suggesting further surveys for inclusion.

As mentioned above, we restricted our overview to surveys conducted in Germany and focusing on the general adult population or on adult subpopulations. We are convinced that there is a similar need for a comparable overview of survey programs focusing, for example, on children and adolescents, or of survey programs conducted in countries other than Germany. For example, in addition to the two adult cohorts covered by the NEPS data sets included in this overview, NEPS provides additional data on the personality traits of primary and secondary school students. These data lend themselves to research on personality development and trait–outcome relationships, such as links

between personality and achievement (e.g., N. D. Brandt et al., 2020; Lechner et al., 2017; Roemer et al., 2022).

In sum, with our paper we hope to inspire researchers to make more use of these valuable data sets, and to avail themselves of these data's potential to answer important research questions.

Funding: The authors have no funding to report.

Acknowledgments: We would like to thank the following experts of the included surveys for reviewing our survey descriptions: Cordula Artelt, Beatrice van Berk, Michael Blohm, Barbara Felderer, Tobias Gummer, Monika Jungbauer-Gans, Kseniya Kizilova, Leo Panreck, David Richter, Joss Rossmann, Frank Spinath, Harald Schoen, Mark Trappmann, Bernd Weiss.

Competing Interests: The authors have declared that no competing interests exist.

Author Contributions: *Beatrice Rammstedt*—Idea, conceptualization | Design planning | Resource provision (materials, participants, etc.) | Writing | Supervision, mentoring | Project coordination, administration. *Lena Roemer*—Design planning | Resource provision (materials, participants, etc.) | Research implementation (software, hardware, etc.) | Data collection | Data management (storage, curation, processing, etc.) | Visualization (data presentation, figures, etc.) | Validation, reproduction, checking | Feedback, revisions | Project coordination, administration. *Julie Mutschler*—Data collection | Data management (storage, curation, processing, etc.). *Clemens Lechner*—Idea, conceptualization | Design planning | Feedback, revisions | Supervision, mentoring.

Data Availability: An overview of the different data sets is available in [Table 1](#) and in the OSF project (see [Roemer et al., 2022](#)).

Supplementary Materials

The Supplementary Materials contain a more detailed table with information on the different datasets (see [Roemer et al., 2022](#)).

Index of Supplementary Materials

Roemer, L., Lechner, C., & Rammstedt, B. (2022). *Big Five in large scale surveys in Germany* [Table]. OSF. <https://osf.io/twzaf>

References

Note. References marked with an asterisk indicate the data sets of or the reference papers related to the survey programs presented in this overview.

*Adrian, D., Ambrasat, J., Briedis, K., Friedrich, C., Fuchs, A., Geils, M., Kovalova, I., Lange, J., Lietz, A., Martens, B., Redeke, S., Ruß, U., Sarcletti, A., Schwabe, U., Seifert, M., Siegel, M., Teichmann,

- C., Tesch, J., De Vogel, S., . . . Deutsches Zentrum für Hochschul- und Wissenschaftsforschung (DZHW). (2020). *National Academics Panel Study (Nacaps) 2018* (1.0.0) [Data set]. DZHW. <https://doi.org/10.21249/DZHW:NAC2018:1.0.0>
- Anger, S., Camehl, G., & Peter, F. (2017). Involuntary job loss and changes in personality traits. *Journal of Economic Psychology*, 60, 71–91. <https://doi.org/10.1016/j.jeop.2017.01.007>
- Beck, E. D., & Jackson, J. J. (2022). A mega-analysis of personality prediction: Robustness and boundary conditions. *Journal of Personality and Social Psychology*, 122(3), 523–553. <https://doi.org/10.1037/pspp0000386>
- *Blom, A. G., Gathmann, C., & Krieger, U. (2015). Setting up an online panel representative of the general population: The German Internet Panel. *Field Methods*, 27(4), 391–408. <https://doi.org/10.1177/1525822X15574494>
- *Blossfeld, H.-P., Roßbach, H.-G., & von Maurice, J. (2011). Education as a lifelong process: The German National Educational Panel Study (NEPS). *Zeitschrift für Erziehungswissenschaft*, 14, 19–34. <https://doi.org/10.1007/s11618-011-0179-2>
- Bluemke, M., Resch, B., Lechner, C. M., Westerholt, R., & Kolb, J.-P. (2017). Integrating geographic information into survey research: Current applications, challenges, and future avenues. *Survey Research Methods*, 11(3), 307–327. <https://doi.org/10.18148/srm/2017.v11i3.6733>
- Borkenau, P., & Ostendorf, F. (1991). Ein Fragebogen zur Erfassung fünf robuster Persönlichkeitsfaktoren [A questionnaire for assessing five robust personality factors]. *Diagnostica*, 37(1), 29–41.
- *Börsch-Supan, A., Brandt, M., Hunkler, C., Kneip, T., Korbmacher, J., Malter, F., Schaan, B., Stuck, S., & Zuber, S. (2013). Data resource profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). *International Journal of Epidemiology*, 42(4), 992–1001. <https://doi.org/10.1093/ije/dyt088>
- *Bosnjak, M., Dannwolf, T., Enderle, T., Schaurer, I., Struminskaya, B., Tanner, A., & Weyandt, K. W. (2018). Establishing an open probability-based mixed-mode panel of the general population in Germany: The GESIS Panel. *Social Science Computer Review*, 36(1), 103–115. <https://doi.org/10.1177/0894439317697949>
- Brandt, N. D., Lechner, C., Tetzner, J., & Rammstedt, B. (2020). Differential effects of personality and cognitive ability on academic performance across school subjects and tracks. *Journal of Personality*, 88(2), 249–265. <https://doi.org/10.1111/jopy.12482>
- *Brandt, G., Briedis, K., Dahm, G., Euler, T., Fabian, G., Klüver, S., Rehn, T., Trommer, M., & Deutsches Zentrum für Hochschul- und Wissenschaftsforschung (DZHW). (2022). *DZHW Graduate Panel 2009/DZHW-Absolventenpanel 2009* (2.0.0) [Data set]. German Centre for Higher Education Research and Science Studies (DZHW). <https://doi.org/10.21249/DZHW:GRA2009:2.0.0>
- *Brandt, G., Briedis, K., De Vogel, S., Jakštat, S., Kovalova, I., Lapstich, A.-M., Teichmann, C., & Deutsches Zentrum für Hochschul- und Wissenschaftsforschung (DZHW). (2020). *DZHW PhD Panel 2014* (4.0.0) [Data set]. German Centre for Higher Education Research and Science Studies (DZHW). <https://doi.org/10.21249/DZHW:PHD2014:4.0.0>

- Brunton-Smith, I., Sturgis, P., & Leckie, G. (2017). Detecting and understanding interviewer effects on survey data by using a cross-classified mixed effects location-scale model. *Journal of the Royal Statistical Society: Series A: Statistics in Society*, 180(2), 551–568.
<https://doi.org/10.1111/rssa.12205>
- Cheng, A., Zamarro, G., & Orriens, B. (2020). Personality as a predictor of unit nonresponse in an Internet panel. *Sociological Methods & Research*, 49(3), 672–698.
<https://doi.org/10.1177/0049124117747305>
- Costa, P. T., & McCrae, R. R. (1989). *NEO Five-Factor Inventory (NEO-FFI)*. Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4(1), 5–13.
<https://doi.org/10.1037/1040-3590.4.1.5>
- Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods*, 14(2), 81–100. <https://doi.org/10.1037/a0015914>
- Curran, P. J., Hussong, A. M., Cai, L., Huang, W., Chassin, L., Sher, K. J., & Zucker, R. A. (2008). Pooling data from multiple longitudinal studies: The role of item response theory in integrative data analysis. *Developmental Psychology*, 44(2), 365–380.
<https://doi.org/10.1037/0012-1649.44.2.365>
- Danner, D., Rammstedt, B., Bluemke, M., Lechner, C. M., Berres, S., Knopf, T., Soto, C. J., & John, O. P. (2019). Das Big-Five Inventar 2: Validierung eines Persönlichkeitssinventars zur Erfassung von 5 Persönlichkeitsdomänen und 15 Facetten [The German Big Five Inventory 2: Measuring 5 personality domains and 15 facets]. *Diagnostica*, 65(3), 121–132.
<https://doi.org/10.1026/0012-1924/a000218>
- Denissen, J. J. A., Bleidorn, W., Hennecke, M., Luhmann, M., Orth, U., Specht, J., & Zimmermann, J. (2018). Uncovering the power of personality to shape income. *Psychological Science*, 29(1), 3–13.
<https://doi.org/10.1177/0956797617724435>
- Ebert, T., Gebauer, J. E., Brenner, T., Bleidorn, W., Gosling, S. D., Potter, J., & Rentfrow, P. J. (2022). Are regional differences in psychological characteristics and their correlates robust? Applying spatial-analysis techniques to examine regional variation in personality. *Perspectives on Psychological Science*, 17(2), 407–441. <https://doi.org/10.1177/1745691621998326>
- Gabler, S., Häder, S., Lehnhoff, I., & Mardian, E. (2012). Weighting for unequal inclusion probabilities and nonresponse in dual frame telephone surveys. In S. Häder, M. Häder, & M. Kühne (Eds.), *Telephone surveys in Europe* (pp. 147–167). Springer.
https://doi.org/10.1007/978-3-642-25411-6_11
- *German Longitudinal Election Study (GLES). (2019). *Vor- und Nachwahl-Querschnitt (Kumulation) (GLES 2017) [Pre- and Post-election Cross Section (Cumulation) (GLES 2017)]* (3.0.1) [Data set]. GESIS Data Archive. <https://doi.org/10.4232/1.13236>
- *German Longitudinal Election Study (GLES). (2022). *GLES Cross-Section 2021, Pre-Election* (2.0.0) [Data set]. GESIS. <https://doi.org/10.4232/1.13860>

- *Goebel, J., Grabka, M. M., Liebig, S., Kroh, M., Richter, D., Schröder, C., & Schupp, J. (2019). The German Socio-Economic Panel (SOEP). *Jahrbücher für Nationalökonomie und Statistik*, 239(2), 345–360. <https://doi.org/10.1515/jbnst-2018-0022>
- *Hahn, E., Gottschling, J., Bleidorn, W., Kandler, C., Spengler, M., Kornadt, A. E., Schulz, W., Schunck, R., Baier, T., Krell, K., Lang, V., Lenau, F., Peters, A.-L., Diewald, M., Riemann, R., & Spinath, F. M. (2016). What drives the development of social inequality over the life course? The German TwinLife study. *Twin Research and Human Genetics*, 19(6), 659–672. <https://doi.org/10.1017/thg.2016.76>
- *Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Zeitschrift für Familienforschung*, 23(1), 77–101. <https://doi.org/10.20377/jfr-235>
- *Ingelhart, R., Haerpfer, C. W., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., & Puranen, B. (2018). *World Values Survey Wave 6 (2010–2014)* (Version 20201117) [Data set]. World Values Survey Association. <https://doi.org/10.14281/18241.8>
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). Guilford Press.
- Lang, F. R., John, D., Lüdtke, O., Schupp, J., & Wagner, G. G. (2011). Short assessment of the Big Five: Robust across survey methods except telephone interviewing. *Behavior Research Methods*, 43(2), 548–567. <https://doi.org/10.3758/s13428-011-0066-z>
- Lechner, C. M., Danner, D., & Rammstedt, B. (2017). How is personality related to intelligence and achievement? A replication and extension of Borghans et al. and Salkever. *Personality and Individual Differences*, 111, 86–91. <https://doi.org/10.1016/j.paid.2017.01.040>
- Levinsky, M., Litwin, H., & Lechner, C. M. (2019). Personality traits: The Ten-Item Big Five Inventory (BFI-10). In M. Bergmann, A. Scherpenzeel, & A. Börsch-Supan (Eds.), *SHARE Wave 7 methodology: Panel innovations and life histories* (pp. 29–34). MEA, Max Planck Institute for Social Law and Social Policy. http://www.share-project.org/fileadmin/pdf_documentation/MFRB_Wave7/SHARE_Methodenband_A4_WEB.pdf
- Lohr, S. L. (2021). *Sampling: Design and analysis* (3rd ed.). Chapman and Hall/CRC.
- Lucas, R. E., & Donnellan, M. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, 101(4), 847–861. <https://doi.org/10.1037/a0024298>
- McCrae, R. R., & Costa, P. T., Jr. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 159–181). The Guilford Press.
- Mroczek, D. K., Weston, S. J., Graham, E. K., & Willroth, E. C. (2022). Data overuse in aging research: Emerging issues and potential solutions. *Psychology and Aging*, 37(1), 141–147. <https://doi.org/10.1037/pag0000605>

- Obschonka, M., Wyrwich, M., Fritsch, M., Gosling, S. D., Rentfrow, P. J., & Potter, J. (2019). Von unterkühlten Norddeutschen, gemütlichen Süddeutschen und aufgeschlossenen Großstädtern: Regionale Persönlichkeitsunterschiede in Deutschland [Reserved northerners, jovial southerners, and open urbanites: Regional personality differences in Germany]. *Psychologische Rundschau*, 70(3), 173–194. <https://doi.org/10.1026/0033-3042/a000414>
- *Peters, A., German National Cohort (NAKO) Consortium, Peters, A., Greiser, K. H., Göttlicher, S., Ahrens, W., Albrecht, M., Bamberg, F., Bärnighausen, T., Becher, H., Berger, K., Beule, A., Boeing, H., Bohn, B., Bohnert, K., Braun, B., Brenner, H., Bülow, R., Castell, S., Damms-Machado, A., ...Zschocke, J. (2022). Framework and baseline examination of the German National Cohort (NAKO). *European Journal of Epidemiology*, 37(10), 1107–1124. <https://doi.org/10.1007/s10654-022-00890-5>
- Rammstedt, B. (1997). *Die deutsche Version des Big Five Inventory (BFI): Übersetzung und Validierung eines Fragebogens zur Erfassung des Fünf-Faktoren-Modells der Persönlichkeit* [Unpublished thesis]. Bielefeld University.
- Rammstedt, B., Danner, D., & Martin, S. (2016). The association between personality and cognitive ability: Going beyond simple effects. *Journal of Research in Personality*, 62, 39–44. <https://doi.org/10.1016/j.jrp.2016.03.005>
- Rammstedt, B., Danner, D., Soto, C. J., & John, O. P. (2020). Validation of the short and extra-short forms of the Big Five Inventory-2 (BFI-2) and their German adaptations. *European Journal of Psychological Assessment*, 36(1), 149–161. <https://doi.org/10.1027/1015-5759/a000481>
- Rammstedt, B., Goldberg, L. R., & Borg, I. (2010). The measurement equivalence of Big Five factor markers for persons with different levels of education. *Journal of Research in Personality*, 44(1), 53–61. <https://doi.org/10.1016/j.jrp.2009.10.005>
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41(1), 203–212. <https://doi.org/10.1016/j.jrp.2006.02.001>
- Rammstedt, B., & John, O. P. (2005). Kurzversion des Big Five Inventory (BFI-K): Entwicklung und Validierung eines ökonomischen Inventars zur Erfassung der fünf Faktoren der Persönlichkeit. *Diagnostica*, 51(4), 195–206. <https://doi.org/10.1026/0012-1924.51.4.195>
- Rammstedt, B., Kemper, C. J., & Borg, I. (2013). Correcting Big Five measurements for acquiescence: An 18-country cross-cultural study with representative samples. *European Journal of Personality*, 27(1), 71–81. <https://doi.org/10.1002/per.1894>
- Rammstedt, B., Lechner, C. M., & Weiß, B. (2021). Does personality predict responses to the COVID-19 crisis? Evidence from a prospective large-scale study. *European Journal of Personality*, 36(1), 47–60. <https://doi.org/10.1177/0890207021996970>
- *Rammstedt, B., Martin, S., Zabal, A., Carstensen, C., & Schupp, J. (2017). The PIAAC longitudinal study in Germany: Rationale and design. *Large-Scale Assessments in Education*, 5(1), Article 4. <https://doi.org/10.1186/s40536-017-0040-z>

- Rammstedt, B., Mutz, M., & Farmer, R. (2015). The answer is blowing in the wind: Effects of weather on personality ratings. *European Journal of Psychological Assessment*, 31(4), 287–293. <https://doi.org/10.1027/1015-5759/a000236>
- Rammstedt, B., & Schupp, J. (2008). Only the congruent survives – Personality similarities in couples. *Personality and Individual Differences*, 45(6), 533–535. <https://doi.org/10.1016/j.paid.2008.06.007>
- Roemer, L., Lechner, C. M., & Rammstedt, B. (2022). Beyond competencies: Associations between personality and school grades are largely independent of subject-specific and general cognitive competencies. *Journal of Intelligence*, 10(2), 26. <https://doi.org/10.3390/intelligence10020026>
- Roemer, L., Lechner, C. M., Rammstedt, B., & Roberts, B. W. (n.d.). *The base-rate and long-term relevance of year-to-year change in personality traits*. Manuscript submitted for publication.
- *Rohrbach-Schmidt, D., & Ebner, C., Bundesinstitut für Berufsbildung (BIBB), & Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA). (2020). *Persönlichkeitseigenschaften und Erwerbstätigkeit in Deutschland – BIBB-Zusatzbefragung zur BIBB/BAuA-Erwerbstägenbefragung 2018 (SUF)* [Personality Traits and Employment – BIBB follow-up survey to the 2018 BIBB/BAuA Employment Survey (SUF)] [Data set]. Federal Institute for Vocational Education and Training (BIBB). <https://doi.org/10.7803/501.18.2.1.10>
- Sander, J., Schumann, P., Richter, D., & Specht, J. (2021). Leisure activities as a driver of personality development? A random-intercept cross-lagged panel model across 13 years in adulthood. *Collabra. Psychology*, 7(1), Article 23473. <https://doi.org/10.1525/collabra.23473>
- Schmitt, D. P., Realo, A., Voracek, M., & Allik, J. (2008). Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures. *Journal of Personality and Social Psychology*, 94(1), 168–182. <https://doi.org/10.1037/0022-3514.94.1.168>
- *Schneider, N. F., Bujard, M., Wolf, C., Gummer, T., Hank, K., & Neyer, F. J. (2021). Family Research and Demographic Analysis (FReDA): Evolution, framework, objectives, and design of “The German Family-Demography Panel Study.” *Comparative Population Studies*, 46, 149–186.
- *Schumann, S. (2004). *Persönlichkeit und Wahlverhalten 2003* [Personality and voting behavior 2003] (Version 1.0.0) [Data set]. GESIS Data Archive. <https://doi.org/10.4232/1.4052>
- Schupp, J., & Gerlitz, J.-Y. (2008). *Big Five Inventory-SOEP (BFI-S)*. Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS). <https://doi.org/10.6102/zis54>
- Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, 113(1), 117–143. <https://doi.org/10.1037/pspp0000096>
- Specht, J., Egloff, B., & Schmukle, S. C. (2011). Stability and change of personality across the life course: The impact of age and major life events on mean-level and rank-order stability of the Big Five. *Journal of Personality and Social Psychology*, 101(4), 862–882. <https://doi.org/10.1037/a0024950>
- *Terwey, M. (2000). ALLBUS: A German general social survey. *Schmollers Jahrbuch*, 120(1), 151–158. <https://doi.org/10.3790/schm.120.1.151>

Thompson, W. H., Wright, J., Bisnett, P. G., & Poldrack, R. A. (2020). Meta-research: Dataset decay and the problem of sequential analyses on open datasets. *eLife*, 9, Article e53498.
<https://doi.org/10.7554/eLife.53498>

*Trappmann, M., Bähr, S., Beste, J., Eberl, A., Frodermann, C., Gundert, S., Schwarz, S., Teichler, N., Unger, S., & Wenzig, C. (2019). Data resource profile: Panel Study Labour Market and Social Security (PASS). *International Journal of Epidemiology*, 48(5), 1411–1411g.
<https://doi.org/10.1093/ije/dyz041>

Webb, M. A., & Tangney, J. P. (2022). Too good to be true: Bots and bad data from Mechanical Turk. *Perspectives on Psychological Science*. Advance online publication.
<https://doi.org/10.1177/17456916221120027>

*Wegener, B. (2015). *International Social Justice Project 2006 (ISJP 2006)—Germany* (1.0.0) [Data set]. GESIS Data Archive. <https://doi.org/10.4232/1.5177>
<https://doi.org/10.4232/1.5177>



Personality Science (PS) is an official journal of the European Association of Personality Psychology (EAPP).



leibniz-psychology.org

PsychOpen GOLD is a publishing service by Leibniz Institute for Psychology (ZPID), Germany.