

Entringer, Theresa Margareta; Griese, Florian; Zimmermann, Stefan; Richter, David

Research Report

SOEP Scales Manual (updated for SOEP-Core v37)

SOEP Survey Papers, No. 1217

Provided in Cooperation with:

German Institute for Economic Research (DIW Berlin)

Suggested Citation: Entringer, Theresa Margareta; Griese, Florian; Zimmermann, Stefan; Richter, David (2022) : SOEP Scales Manual (updated for SOEP-Core v37), SOEP Survey Papers, No. 1217, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin

This Version is available at:

<https://hdl.handle.net/10419/269012>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



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

1217²⁰²²

SOEP Survey Papers

Series C - Data Documentations (Datendokumentationen)

SOEP Scales Manual (updated for SOEP-Core v37)

Theresa Entringer, Florian Griese, Stefan Zimmermann, David Richter

Running since 1984, the German Socio-Economic Panel (SOEP) is a wide-ranging representative longitudinal study of private households, located at the German Institute for Economic Research, DIW Berlin.

The aim of the SOEP Survey Papers Series is to thoroughly document the survey's data collection and data processing.

The SOEP Survey Papers is comprised of the following series:

- Series A – Survey Instruments (Erhebungsinstrumente)
- Series B – Survey Reports (Methodenberichte)
- Series C – Data Documentation (Datendokumentationen)
- Series D – Variable Descriptions and Coding
- Series E – SOEPmonitors
- Series F – SOEP Newsletters
- Series G – General Issues and Teaching Materials

The SOEP Survey Papers are available at <http://www.diw.de/soepsurveypapers>

Editors:

- Dr. Jan Goebel, DIW Berlin
- Prof. Dr. Stefan Liebig, DIW Berlin and Freie Universität Berlin
- Prof. Dr. David Richter, DIW Berlin and Freie Universität Berlin
- Prof. Dr. Carsten Schröder, DIW Berlin and Freie Universität Berlin
- Prof. Dr. Jürgen Schupp, DIW Berlin and Freie Universität Berlin
- Prof. Dr. Sabine Zinn, DIW Berlin and Humboldt Universität zu Berlin

Please cite this paper as follows:

Theresa Entringer, Florian Griese, Stefan Zimmermann, David Richter. 2022. SOEP Scales Manual (updated for SOEP-Core v37). SOEP Survey Papers 1217 Series C. Berlin: DIW/SOEP



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.
© 2022 by SOEP

ISSN: 2193-5580 (online)

DIW Berlin
German Socio-Economic Panel (SOEP)
Mohrenstr. 58
10117 Berlin
Germany

soeppapers@diw.de

SOEP Scales Manual

(updated for SOEP-Core v37)

Theresa Entringer, Florian Griese, Stefan Zimmermann, and David Richter

SOEP Scales Manual

Release 2022

**Theresa Entringer, Florian Giese, Stefan Zimmermann,
David Richter**

Dec 20, 2022

CONTENTS

1 Scales Manual	1
1.1 Affective Well-Being	1
1.2 Anomie	3
1.3 Basic Social Justice Orientations Scale	5
1.4 Cognitive Competencies	7
1.4.1 Symbol-Digit Test and Animal Naming Task	7
1.4.2 Multiple-Choice Vocabulary Intelligence Test (MWT)	9
1.4.3 I-S-T 2000 R	9
1.5 Conspiracy Mentality	10
1.6 Effort-Reward Imbalance Model	11
1.7 Impulsiveness & Patience	15
1.8 Life Goals	16
1.9 Life Satisfaction	19
1.10 Locus of Control	29
1.11 Loneliness	32
1.12 Narcissistic Admiration and Rivalry Questionnaire Short Scale (NARQ-S)	33
1.13 Optimism/Pessimism – Attitudes toward the Future	34
1.14 Parenting Goals	35
1.15 Parenting Role	37
1.16 Parenting Style	39
1.17 Patient Health Questionnaire – 4 (PHQ-4)	41
1.18 Personality – Big Five	42
1.18.1 Big Five (Adults)	42
1.18.2 Big Five (Youth)	47
1.18.3 Big Five (13-14 year olds, self-report)	48
1.18.4 Big Five (11-12 year olds, self-report)	48
1.18.5 Big Five (9-10 year olds & 5-6 year olds, parent reports)	49
1.18.6 Big Five (2-3 year olds, parent reports)	50
1.19 Reciprocity	51
1.20 Risk Aversion	54
1.21 Self Esteem	56
1.22 Sources of Social Inequality	57
1.23 Strengths and Difficulties Questionnaire (SDQ)	59
1.23.1 Strengths and Difficulties Questionnaire (5-6 year olds & 9-10 year olds, parent reports)	59
1.23.2 Strengths and Difficulties Questionnaire (11-12 year olds & 13-14 year olds, self-report)	61
1.24 Supportive Parenting	64
1.25 Temperament	65
1.26 Tendency to Forgive	66
1.27 Trust, Trustworthiness, Fairness	68
1.28 Vineland Adaptive Behavior Scales	69

**CHAPTER
ONE**

SCALES MANUAL

Introduction

This manual briefly describes the theoretical background and development of all of the scales used in the Socio-Economic Panel (SOEP) study. It also provides the relevant citations as well as the items belonging to the scales and the answer format, including the verbal anchors.

The unique value of this manual lies in the presentation of each scale in the form of easy-to-understand tables listing variable names of the items in the scale in a wave-specific dataset (labels). This allows the individual items to be found and aggregated quickly.

In addition, the tables in this manual include mean values (M), standard deviations (SD), corrected item-total correlations (CITC), and information as to whether the item has to be recoded before aggregation (R). The number of valid cases in the particular survey years, as well as two measures of reliability, the internal consistency (Cronbach's Alpha) and test-retest correlations (if available), are also reported.

1.1 Affective Well-Being

Summary

Affective well-being describes the balance between positive and negative emotional experiences and is of interest for the research on well-being in psychology and economics as well as in the social sciences in general. The scale consists of four items and has been used in the SOEP since 2007.

Theoretical Background

In the psychological literature, subjective well-being is assumed to consist of two components: cognitive well-being and affective well-being (Schimmack et al., 2002). Here, affective well-being represents the emotional component of subjective well-being. In contrast to cognitive well-being, which is based on reflexive evaluation of subjective well-being, affective well-being hinges on the balance between positive and negative emotions (Sumner, 1996). The distinction between cognitive and affective well-being is important for the scientific investigation of subjective well-being and for policy considerations about public well-being. If the aim is to maximize subjective well-being on both the individual and the social level, and if the two are indeed separate components, it is crucial to measure their relative importance. Despite the importance of distinguishing between cognitive and affective well-being, their relationship has been researched little to date (Schimmack, 2009). Their relationship also highlights the need to examine factors such as unemployment that potentially influence subjective well-being (e.g., Schimmack et al., 2008). Conceptually, the relationship between affective well-being and other general personality characteristics is also of interest.

Scale Development

Theoretical considerations and results from the 2006 SOEP pretest led to the construction of a scale consisting of four items. One item deals with positive experiences ("happy"), while the other three items deal with negative experiences (annoyed, afraid, sad; Schimmack, 2009). In the pilot study, the measure constructed in this manner showed a high

correlation with a longer measure of affective balance consisting of 10 items and produced results that are consistent with the previous results in the relevant psychological literature (Schimmack et al., 2008).

References

- Schimmack, U. 2009. *Measuring wellbeing in the SOEP*. Schmollers Jahrbuch, 129, 241-249.
- Schimmack, U., Diener, E., & Oishi, S. (2002). Life-Satisfaction is a momentary judgment and a stable personality characteristic: The use of chronically accessible and stable sources. *Journal of Personality*, 70, 345-384.
- Schimmack, U., Schupp, J., & Wagner, G. G. (2008). The influence of environment and personality on the affective and cognitive component of subjective well-being. *Social Indicators Research*, 89, 41-60.
- Sumner, L. W. (1996): *Welfare, happiness, and ethics*. Oxford: University Press.

Items

I will now read to you a number of feelings. Please indicate for each feeling how often or rarely you experienced this feeling in the last four weeks (Ich lese Ihnen eine Reihe von Gefühlen vor. Geben Sie bitte jeweils an, wie häufig oder selten Sie dieses Gefühl in den letzten vier Wochen erlebt haben):

1. Angry (ärgerlich gefühlt)?
2. Worried (ängstlich gefühlt)?
3. Happy (glücklich gefühlt)?
4. Sad (traurig gefühlt)?

Scale: 1 (Very rarely / Sehr selten) to 5 (Very often / Sehr oft)

Test-Retest Correlations

In 2009, this scale was included in a retest taken by a subsample ($N = 164$ completed the scale) within 30 to 49 days after the initial test. Test-retest correlations for the items were (in scale order) .46, .49, .51, and .46; scale scores correlated .54.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2007	plh0184	20829	2.89	1.03	0.40	0.66
2007	plh0185	20796	1.96	1.01	0.49	0.66
2007	plh0186R	20815	2.53	0.87	0.30	0.66
2007	plh0187	20819	2.39	1.04	0.57	0.66
2008	plh0184	19631	2.82	0.99	0.41	0.68
2008	plh0185	19602	1.94	0.98	0.50	0.68
2008	plh0186R	19605	2.52	0.86	0.36	0.68
2008	plh0187	19620	2.38	1.03	0.57	0.68
2009	plh0184	20722	2.78	1.00	0.39	0.65
2009	plh0185	20666	1.93	0.98	0.49	0.65
2009	plh0186R	20691	2.55	0.88	0.29	0.65
2009	plh0187	20689	2.37	1.02	0.56	0.65
2010	plh0184	18859	2.74	0.96	0.38	0.66
2010	plh0185	18844	1.95	0.96	0.49	0.66
2010	plh0186R	18850	2.52	0.86	0.33	0.66
2010	plh0187	18852	2.38	1.02	0.58	0.66
2011	plh0184	20969	2.75	1.01	0.40	0.65
2011	plh0185	20936	1.97	0.98	0.50	0.65
2011	plh0186R	20954	2.49	0.88	0.28	0.65

continues on next page

Table 1 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2011	plh0187	20965	2.41	1.02	0.57	0.65
2012	plh0184	20753	2.72	0.99	0.40	0.67
2012	plh0185	20741	1.91	0.96	0.50	0.67
2012	plh0186R	20739	2.45	0.85	0.35	0.67
2012	plh0187	20745	2.33	1.01	0.56	0.67
2013	plh0184	25919	2.81	1.00	0.42	0.68
2013	plh0185	25895	1.91	0.96	0.50	0.68
2013	plh0186R	25909	2.43	0.84	0.35	0.68
2013	plh0187	25921	2.35	1.01	0.58	0.68
2014	plh0184	27400	2.80	1.02	0.42	0.68
2014	plh0185	27379	1.90	0.97	0.50	0.68
2014	plh0186R	27384	2.39	0.84	0.35	0.68
2014	plh0187	27384	2.34	1.03	0.57	0.68
2015	plh0184	25338	2.79	1.00	0.42	0.67
2015	plh0185	25307	1.92	0.97	0.49	0.67
2015	plh0186R	25332	2.40	0.84	0.36	0.67
2015	plh0187	25320	2.33	1.02	0.56	0.67
2016	plh0184	24474	2.77	1.02	0.42	0.67
2016	plh0185	24451	1.96	0.98	0.49	0.67
2016	plh0186R	24464	2.40	0.84	0.32	0.67
2016	plh0187	24459	2.32	1.01	0.56	0.67
2017	plh0184	26742	2.75	1.00	0.41	0.67
2017	plh0185	26734	1.92	0.97	0.51	0.67
2017	plh0186R	26738	2.36	0.82	0.34	0.67
2017	plh0187	26733	2.31	1.01	0.55	0.67
2018	plh0184	25850	2.75	1.01	0.42	0.67
2018	plh0185	25836	1.90	0.97	0.50	0.67
2018	plh0186R	25845	2.37	0.83	0.36	0.67
2018	plh0187	25847	2.30	1.01	0.56	0.67
2019	plh0184	26013	2.72	1.02	0.42	0.67
2019	plh0185	25992	1.87	0.96	0.51	0.67
2019	plh0186R	26004	2.35	0.82	0.34	0.67
2019	plh0187	26009	2.28	1.00	0.56	0.67
2020	plh0184	26064	2.72	1.01	0.42	0.67
2020	plh0185	26063	2.06	1.03	0.49	0.67
2020	plh0186R	26062	2.38	0.84	0.36	0.67
2020	plh0187	26061	2.32	1.01	0.56	0.67

1.2 Anomie

Summary

Anomie describes the individual's subjective response to a community and social environment that is perceived to be threatening and unregulated. Anomie is expressed in an individual tendency towards loss of motivation and feelings of despair and helplessness (Srole, 1956). The four-item scale has been used in the SOEP at irregular intervals in the 90s and at regular five-year intervals since 2008.

Theoretical Background

Anomie refers to a condition of normlessness, that is, a lack of social norms. Durkheim (1897, 1951) introduced

the concept of anomie in sociology to describe the erosion of social norms and societal rules under conditions of far-reaching structural change—for example, the conditions that arise in times of rapid social and economic transformation. The result is a breakdown of bonds between the individual and the community or society. Merton (1938) applied and expanded the concept of anomie in his theory of deviant behavior. He extended Durkheim's understanding by observing the factors that lead to anomie. In Merton's view, anomie may occur when (1) cultural goals and desires are prescribed as normative for a society as a whole; (2) the legitimate means used to achieve these goals are strictly regulated; and (3) these legitimate means are unequally distributed in the society. Anomie is then the result of a state in which the individual adheres to the society's main cultural ideas and principles but does not possess the legitimate means to attain them. The result may be various forms of deviant behavior such as criminal acts. Durkheim (1897, 1951) treated anomie primarily as a social condition, whereas Merton (1938) shifted the focus to the individual. Srole (1956) followed on Merton's (1938) understanding, contributing the social psychological construct of anomia to the constellation of themes surrounding anomie. Anomia relates to the individual, psychological side of a social condition that is perceived to be anomie. In this regard, the concept of anomia shows certain similarities with external locus of control.

Scale Development

The anomie scale taken from the German Welfare Survey (Duttenhöfer & Schröder, 1996) was shortened for the SOEP survey and one positive item was added.

References

- Durkheim, E. (1951). *Suicide, a study in sociology*. Glencoe, Ill.: Free Press.
- Duttenhöfer, S. & Schröder, H. (1996). *Die Wohlfahrtssurveys 1978-1993 - Variablenübersicht*. Zuma-Technischer Bericht 94/11. Mannheim.
- Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.
- Srole, L. (1956). Social integration and certain corollaries: An exploratory study. *American Sociological Review*, 21, 709-716.

Items

To what extent do the following statements apply to you (Wie sehr stimmen die folgenden Aussagen für Sie persönlich):

1. When I think about the future, I'm actually quite optimistic. (Wenn ich an die Zukunft denke, bin ich eigentlich sehr zuversichtlich.)
2. I often feel lonely. (Ich fühle mich oft einsam.)
3. I don't really enjoy my work. (Meine Arbeit macht mir eigentlich keine Freude.)
4. Things have gotten so complicated that I almost can't manage anymore. (Die Verhältnisse sind so kompliziert geworden, dass ich mich fast nicht mehr zurecht finde.)

Scale: 1 (Completely / Stimmt ganz und gar) to 4 (Not at all / Stimmt ganz und gar nicht)

Test-Retest Correlations

In 2005, this scale was included in a retest taken by a subsample ($N = 126$ completed the scale) within 30 to 49 days after the initial test. Test-retest correlations for the items were (in scale order) .39, .52, .30, and .52; scale scores correlated .60.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
1990	plh0188R	4432	2.73	0.84	0.20	0.46
1990	plh0189	4413	3.36	0.97	0.28	0.46
1990	plh0190	3430	3.31	0.88	0.23	0.46
1990	plh0191	4421	2.99	0.94	0.35	0.46
1991	plh0188R	4179	2.62	0.86	0.27	0.48

continues on next page

Table 2 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
1991	plh0189	4161	3.33	0.94	0.26	0.48
1991	plh0190	3765	3.30	0.89	0.23	0.48
1991	plh0191	4157	2.89	0.92	0.34	0.48
1992	plh0188R	11000	2.68	0.80	0.27	0.55
1992	plh0189	10991	3.28	0.93	0.36	0.55
1992	plh0190	10498	3.31	0.85	0.31	0.55
1992	plh0191	10989	3.23	0.89	0.41	0.55
1993	plh0188R	13106	2.55	0.82	0.21	0.56
1993	plh0189	13098	3.25	0.94	0.37	0.56
1993	plh0190	12198	3.20	0.87	0.35	0.56
1993	plh0191	13061	3.10	0.93	0.44	0.56
1995	plh0188R	13698	2.77	0.75	0.29	0.59
1995	plh0189	13685	3.22	0.92	0.38	0.59
1995	plh0190	12791	3.26	0.83	0.37	0.59
1995	plh0191	13653	3.21	0.87	0.45	0.59
1996	plh0188R	13464	2.71	0.77	0.30	0.59
1996	plh0189	13468	3.23	0.90	0.38	0.59
1996	plh0190	12594	3.24	0.82	0.37	0.59
1996	plh0191	13429	3.20	0.84	0.45	0.59
1997	plh0188R	13227	2.50	0.79	0.25	0.57
1997	plh0189	13205	3.27	0.90	0.37	0.57
1997	plh0190	12101	3.23	0.82	0.37	0.57
1997	plh0191	13190	3.18	0.86	0.44	0.57
2008	plh0188R	19614	2.62	0.77	0.31	0.60
2008	plh0189	19608	3.16	0.88	0.40	0.60
2008	plh0190	17957	3.25	0.81	0.36	0.60
2008	plh0191	19549	3.22	0.84	0.46	0.60
2013	plh0188R	19068	2.87	0.71	0.34	0.62
2013	plh0189	19076	3.24	0.83	0.41	0.62
2013	plh0190	17163	3.29	0.83	0.39	0.62
2013	plh0191	19009	3.35	0.83	0.46	0.62
2018	plh0188R	25769	2.82	0.76	0.28	0.59
2018	plh0189	25814	3.21	0.86	0.38	0.59
2018	plh0190	22900	3.24	0.85	0.37	0.59
2018	plh0191	25709	3.30	0.83	0.44	0.59

1.3 Basic Social Justice Orientations Scale

Summary

The Basic Social Justice Orientations (BSJO) is a short scale to measure individuals' support for equality, need, equity, and entitlement, which are four basic distributive principles in justice research (Hülle/Liebig/May 2017). After validation and use in several population surveys (LINOS-1, SOEP-IS 2012, ALLBUS 2014, ESS round nine), the module became part of the SOEP questionnaire program from 2019 onwards.

Theoretical Background

Starting as a equity theory (Adams 1963) the principles of justice were extended by a “multi-principle approach” in the mid-1970s, including equality and need (Deutsch 1975), and by the emphasis on entitlement (Miller 1976). These four principles of distributive justice form the four dimensions of the Basic Social Justice Orientations (BSJO) scale, which

is used to analyze normative attitudes towards the resolution of distributive problems in society (Hülle/Liebig/May 2017). The dimension of equality implies a conception of justice according to which everyone receives an equal share of benefits and burdens. Within the 2nd dimension—equity—the distribution of benefits and burdens is considered equitable if these are linked to current individual contributions and efforts. The needs principle represents the 3rd dimension and corresponds to the idea of sharing benefits according to people's individual needs. The 4th dimension is the principle of entitlement. According to this principle, ascriptive characteristics (such as social origin) or status characteristics acquired in the past (such as occupational status) form entitlements on the basis of which benefits and burdens are to be distributed.

Scale Development

Pretests in LINOS-1, SOEP-IS 2012 and for the main survey of ALLBUS 2014 not only verified the validity of the items, they also reduced the number of items from 12 to 8 by using the criterion of factorial validity, so that each dimension was then covered by 2 items (Hülle/Liebig/May 2017). In ALLBUS 2014 two items ("It is just if all people have the same living conditions" and "It is just if income and wealth are equally distributed among the members of our society") measured equality, two items ("A society is just if it takes care of those who are poor and needy" and "It is just if people taking care of their children or their dependent relatives receive special support and benefits") measured need, two items ("It is just if hard working people earn more than others" and "It is just if every person receives only that which has been acquired through their own efforts") measured equity, and two items ("It is just if members of respectable families have certain advantages in their lives" and "It is fair if people on a higher level of society have better living conditions than those on the lower level") measured entitlement (Sauer et al. 2014). For the European Social Survey round nine (2018/2019) previous results of the BSJO scale were used to develop and include a four-item-version with one item per dimension (Adriaans et al. 2020). In 2019, the SOEP included the ultra-brief version of with the plan to replicate them every 5 years in the questionnaire program. However, a focus module on perceptions of inequality was conducted in the SOEP 2021 (Adriaans et al. 2021). The BSJO scale was repeated in 2021 as a complement to the content of this module.

References

- Adams, J. S. (1963). *Towards an understanding of inequity*. *The Journal of Abnormal and Social Psychology*, 67(5), 422–436.
- Adriaans, J., Bohmann, S., Targa, M., Liebig, S., Hinz, T., Jasso, G., ... & Sabbagh, C. (2020). *Justice and fairness in europe: Topline results from round 9 of the european social survey*.
- Adriaans, J., Griese, F., Auspurg, K., Bledow, N., Bohmann, S., Busemeyer, M. R., ... & Verwiebe, R. (2021). *Dokumentation zum Entwicklungsprozess des Moduls "Einstellungen zu sozialer Ungleichheit" im SOEP (v38)* (No. 1071). *SOEP Survey Papers*.
- Deutsch, M. (1975). *Equity, equality, and need: What determines which value will be used as the basis of distributive justice?* *Journal of Social Issues*, 31(3), 137–149.
- Hülle, S., Liebig, S., & May, M. J. (2018). *Measuring attitudes toward distributive justice: The basic social justice orientations scale*. *Social Indicators Research*, 136(2), 663-692.
- Miller, D. (1976). *Social justice*. Oxford: Clarendon Press.
- Valet, P., May, M., Sauer, C., & Liebig, S. (2014). *LINOS-1: Legitimation of inequality over the life-span*.

Items

People have different ideas about what makes a society just. What's your opinion about the following statements? (Es gibt unterschiedliche Vorstellungen darüber, wann eine Gesellschaft gerecht ist. Wie ist Ihre persönliche Meinung zu den folgenden Aussagen?)

1. A society is just when people who work hard earn more than others / Es ist gerecht, wenn Personen, die hart arbeiten, mehr verdienen als andere (Equity)
2. A society is just when people from respected families have advantages in life / Es ist gerecht, wenn Personen, die aus angesehenen Familien stammen, dadurch Vorteile im Leben haben (Entitlement)

3. A society is just when it takes care of the weak and needy / Eine Gesellschaft ist gerecht, wenn sie sich um die Schwachen und Hilfsbedürftigen kümmert (Need)
4. A society is just when the income and wealth in society are equally distributed among all people. / Es ist gerecht, wenn Einkommen und Vermögen in unserer Gesellschaft an alle Personen gleich verteilt werden. (Equality)

Scale: 1 (Disagree completely / Stimme überhaupt nicht zu) to 7 (Agree completely / Stimme voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2019	plh0396i01	25841	6.28	1.08	0.21	0.21
2019	plh0396i02	25792	2.09	1.45	0.12	0.21
2019	plh0396i03	25856	6.19	1.11	0.05	0.21
2019	plh0396i04	25742	3.10	1.91	0.08	0.21

1.4 Cognitive Competencies

1.4.1 Symbol-Digit Test and Animal Naming Task

Summary

The two ultra-short cognitive performance tasks allow for reliable assessment of general intellectual ability and distinguish between two components of intellectual functioning: cognitive mechanics and pragmatics (e.g., Lindenberger & Baltes, 1997). Each test takes 90 seconds and is completed on a laptop. The respondent completes the Symbol-Digit Test him/herself, whereas the interviewer documents the answers to the Animal Naming Task. Both tasks therefore require the survey mode of Computer Assisted Personal Interviewing (CAPI).

Theoretical Background

Cognitive mechanisms are hard-wired, biologically based capacities for information processing and are measured with the Symbol-Digit Test (SDT). The study of cognitive mechanics deals with differences in cognitive performance, for example, in the speed, accuracy, processing capacity, coordination, and inhibition of basic cognitive processes. Prime examples include perceptual speed, working memory, and the capacity for deductive reasoning. The cognitive mechanics usually develop in a process continuing up to early adulthood, then begin to decline gradually and may deteriorate more rapidly in some areas in old age. Cognitive pragmatics are education- and experience-related competencies, which are measured with the Animal Naming Task (ANT). The development of cognitive pragmatics is the result of investments in the development of cognitive mechanics in selected behavioral areas early in the life course (e.g., in educational trajectories, in training). The cognitive pragmatics develop continuously throughout life, reaching their peak late in the life course and declining only marginally in old age. Unsurprisingly, the cognitive abilities that build on pragmatic intellectual abilities (e.g., knowledge, vocabulary, wisdom) usually correlate much more strongly with socio-economic resources such as education, income, and occupational prestige, whereas the development of basic cognitive mechanisms over the life course is much more strongly affected by individual sensory and psychomotor resources (Baltes, Lindenberger & Staudinger, 1998).

Scale Development

The individual tests of perceptual speed (Symbol-Digit Test) and word fluency (Animal Naming Test) were modified for use with a computer-assisted survey mode. The decisive factor in this was the need to be able to use the tests without any special interviewer training and to reduce sources of error in the framework of Computer-Assisted Personal Interviewing (CAPI) as much as possible. Further information on the development of the tests can be found in Lang (2005), Lang, Weiss, Stocker and von Rosenbladt (2007), and in Schupp, Herrmann, Jaensch and Lang (2008).

References

Baltes, P. B., Lindenberger, U. & Staudinger, U. M. (1998). *Life-span theory in developmental psychology*. In R. M. Lerner (Ed.), *Handbook of child psychology (5th edition, Vol. 1: Theoretical models of human development, pp. 1029 – 1143)*. New York: Wiley.

Lang, F. R. (2005). *Erfassung des kognitiven Leistungspotenzials und der “Big Five” mit Computer-Assisted-Personal-Interviewing (CAPI): Zur Reliabilität und Validität zweier ultrakurzer Tests und des BFI-S (Assessment of cognitive capabilities and the Big Five with Computer-Assisted Personal Interviewing (CAPI): Reliability and validity)*. German Institute of Economic Research. Berlin: DIW Berlin.

Lang, F. R., Weiss, D., Stocker, A., & von Rosenbladt, B. (2007). *Assessing cognitive capacities in Computer-Assisted Survey Research: Two ultra-short tests of intellectual ability in the German Socio-Economic Panel (SOEP)*. Schmollers Jahrbuch, 127, 183-192.

Lindenberger, U., & Baltes, P. B. (1997). *Intellectual functioning in old and very old age: Cross- sectional results from the Berlin Aging Study*. Psychology and Aging, 12, 410-432.

Schupp, J., Herrmann, S., Jaensch, P., & Lang, F. R. (2008). *Erfassung kognitiver Leistungspotentiale Erwachsener im Sozio-ökonomischen Panel (SOEP)*. Berlin: DIW Berlin.

Items

Symbol-Digit Test & Animal Naming Task

1. In 30 seconds.
2. In 30-60 seconds.
3. In 60-90 seconds.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2006	f99z30r	5790	8.09	4.09	0.86	0.94
2006	f99z60rneu	5790	9.05	4.10	0.91	0.94
2006	f99z90rneu	5790	8.61	3.62	0.86	0.94
2012	f99z30r	7342	8.97	3.82	0.78	0.90
2012	f99z60rneu	7342	10.22	3.55	0.85	0.90
2012	f99z90rneu	7342	9.98	3.07	0.77	0.90
2016	f99z30r	18155	9.50	6.13	0.39	0.68
2016	f99z60rneu	18155	10.62	3.72	0.65	0.68
2016	f99z90rneu	18155	10.25	3.23	0.61	0.68
2006	f96t30g	5790	11.83	6.02	0.40	0.65
2006	f96t60gneu	5790	7.18	4.60	0.57	0.65
2006	f96t90gneu	5790	5.06	4.19	0.47	0.65
2012	f96t30g	1285	12.64	5.18	0.40	0.68
2012	f96t60gneu	1285	8.86	4.44	0.58	0.68
2012	f96t90gneu	1285	6.34	4.14	0.52	0.68
2016	f96t30g	809	11.99	4.83	0.46	0.70
2016	f96t60gneu	809	8.88	4.18	0.60	0.70
2016	f96t90gneu	809	6.53	3.93	0.52	0.70

1.4.2 Multiple-Choice Vocabulary Intelligence Test (MWT)

Summary

The Multiple-Choice Vocabulary Intelligence Test (Mehrfachwahl-Wortschatz-Intelligenztest; MWT; Lehrl, 2005) aims to measure the education- and experience-related cognitive pragmatics. The test asks for knowledge and is therefore only minimally influenced by currently available cognitive capacities. The test takes about 5 minutes. The respondents are asked to find the existing and commonly known word in 37 groups of five words each with four words in each group being fictive and newly constructed (multiple-choice). The 37 groups are ordered by difficulty and the test is finished after three incorrect classifications.

Scale Development

The Multiple-Choice Vocabulary Intelligence Test (Version A) was modified for use with a computer-assisted survey mode. After pretesting in 2011 the test was introduced into the SOEP in 2012 ($N = 6,864$, $M = 28.14$, $SD = 6.98$).

References

Lehrl, S. (1991). *Mehrfachwahl-Wortschatz-Intelligenztest MWT-A; (Parallelform zum MWT-B)*. Erlangen: perimed-Fachbuch-Verl.-Ges.

Items

The MWT items are not allowed to be published.

1.4.3 I-S-T 2000 R

Summary

In the year 2006, the SOEP included its first cognition test for adolescents in the range of SOEP survey instruments. Since then, the test has been carried out annually with each new cohort of adolescents. A specially designed questionnaire is used to measure adolescents' cognitive mechanics based on the I-S-T 2000 test in three modules (word analogies, number sequences, and matrices). In strict adherence to the test criteria, interviewer-based surveying is compulsory. Also, the use and especially design and structure of the questionnaire require that the test be conducted by an interviewer and that the time be monitored.

Theoretical Background

The cognitive test measures adolescents' cognitive mechanics in three different modules. Cognitive mechanics refer to the hard-wired, biologically based capacities for information processing. The task set "word analogies" measures respondents' verbal cognitive potentials. Respondents are asked to assign words to a given sequence of words according to a specific rule. The test uses the individual's own vocabulary to measure combinatory ability. The task set "number sequences" measures the numerical cognitive potential of the respondents. These tasks focus primarily on the adolescents' abstract combinatory ability and logical thinking. The task set "matrices" measures the figural cognitive abilities of the respondents.

Scale Development

To study the cognitive performance potential of adolescents, we developed a questionnaire based on the I-S-T 2000-Test (Amthauer, Brocke, Liepmann & Beauducel, 2001) that is appropriate for an individual panel survey. The modifications have been described in detail by Solga et al. (2005). Further information on test development can be found in Schupp and Herrmann (2009).

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.

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

Items

I-S-T 2000 R

1. Word analogies.
2. Number sequences.
3. Matrices.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2006-2020	analog	3570	8.18	3.65	0.53	0.69
2006-2020	rechenz	3545	12.59	4.91	0.50	0.69
2006-2020	matrize	3562	9.78	3.43	0.54	0.69

1.5 Conspiracy Mentality

Summary

Conspiracy mentality has been measured in the SOEP in 2021 using the 5-item Conspiracy Mentality Questionnaire (CMQ) - designed to assess the general propensity to believe in conspiracy theories. It has been included in the SOEP in 2021.

Theoretical Background

Conspiracy theories provide alternative explanations for important world events and have rapidly gained ground in public discourse throughout the past century. In addition, there is increasing evidence for the existence of stable individual differences in people's propensity to believe in conspiracy theories and the effect of such differences on both attitudes and behavior. If a person believes in one conspiracy theory, he or she will also be more likely to believe in other conspiracy theories (Swami et al., 2010). Individual differences in conspiracy mentality have important consequences as they predict prejudice against powerful societal groups. Consequences may be political disengagement or critical health behaviors such as vaccination uptake (Kata, 2010) and adherence to medication regimens (Bogart, Wagner, Galvan, & Banks, 2010).

Scale Development

The CMQ was developed and validated by Bruder et al. (2012) for integration in comparable international panel studies or surveys. It has been used to test cross-cultural differences in a large international sample ($N = 7,766$) and both its convergent and discriminant validity have been tested in four studies. The CMQ has proven to be the strongest predictor for beliefs in specific conspiracy theories, even when controlling for a broad range of other individual differences measures (Bruder et al., 2012). The SOEP has included the CMQ in its original form in 2021.

References

Bogart, L. M., Wagner, G., Galvan, F. H., & Banks, D. (2010). Conspiracy beliefs about HIV are related to antiretroviral treatment nonadherence among African American men with HIV. *Aids-Journal of Acquired Immune Deficiency Syndromes*, 53, 648-655.

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, 4, 255.

Kata, A. (2010). *A postmodern Pandora's box: Anti-vaccination misinformation on the Internet*. *Vaccine*, 28, 1709-1716.

Swami, V., Chamorro Premuzic, T., & Furnham, A. (2010). *Unanswered questions: A preliminary investigation of personality and individual difference predictors of 9/11 conspiracist beliefs*. *Applied Cognitive Psychology*, 24, 749-761.

Items

How would you rate the following statements? Please indicate the probability on a scale from 0% to 100%. 0% means: you certainly do not believe that to be true. 100% means: you definitely believe this to be true. You can use the values in between to grade the probability. (Wie beurteilen Sie die folgenden Aussagen? Bitte geben Sie die Wahrscheinlichkeit auf einer Skala von 0% bis 100% an. 0% bedeutet; Das halten Sie mit Sicherheit nicht für wahr. 100% bedeutet: Das halten Sie mit Sicherheit für wahr. Mit den Werten dazwischen können Sie die Wahrscheinlichkeit abstimmen.)

1. Many very important things happen in the world, which the public is never informed about / Es geschehen viele sehr wichtige Dinge in der Welt, über die die Öffentlichkeit nie informiert wird
2. Politicians usually do not tell us the true motives for their decisions / Politiker geben uns normalerweise keine Auskunft über die wahren Motive ihrer Entscheidungen
3. Government agencies closely monitor all citizens/ Regierungsbehörden überwachen alle Bürger genau
4. Events which superficially seem to lack a connection are often the result of secret activities/ Ereignisse, die auf den ersten Blick nicht miteinander in Verbindung zu stehen scheinen, sind oft das Ergebnis geheimer Aktivitäten
5. There are secret organizations that greatly influence political decisions / Es gibt geheime Organisationen, die großen Einfluss auf politische Entscheidungen haben

Scale: 0% (certainly not / mit Sicherheit nicht) to 100% (certain / mit Sicherheit)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2021	plh0425i01	17673	6.17	2.90	0.56	0.84
2021	plh0425i02	17526	6.12	2.52	0.57	0.84
2021	plh0425i03	17473	3.88	2.90	0.65	0.84
2021	plh0425i04	16976	3.60	2.86	0.74	0.84
2021	plh0425i05	17246	4.06	3.24	0.69	0.84

1.6 Effort-Reward Imbalance Model

Summary

The Effort-Reward Imbalance Model is designed to measure occupational and job stress. In this model, stress is conceptualized as high work-related effort coupled with low control over job-related rewards. The model also considers the personality trait of excessive willingness to overexert oneself, which exacerbates the negative health consequences of occupational stress. The SOEP uses a shortened version of the ERI questionnaire comprising a total of 16 four- or five-level items. The ERI questionnaire has been used in the SOEP at regular five-year intervals since 2006.

Theoretical Background

The ERI model is a newly developed instrument used to measure job stress and its negative health consequences (Siegrist, 1996). Job stress is conceptualized as the relation between demands and efforts on the one hand and rewards on the other. This conceptualization is based on the assumption that job relations are subject to the general social norm of reciprocity. The general reciprocity norm states that social interaction (here the performance of job tasks) always takes place in expectation of appropriate compensation. If this expectation is not fulfilled over the long term—that is, if the reciprocity norm is violated—in many cases the interaction will be terminated. The termination of employment relationships is often not possible on short notice or without far-reaching consequences, which means that

employment relationships often have to be maintained while violating the norm of reciprocity. The resulting imbalance between high perceived demands and low perceived rewards is referred to as a “gratification crisis.” Gratification crises lead to lower job satisfaction and high stress levels, and thus constitute a risk factor for numerous psycho-social and stress-related illnesses (Siegrist, 1996). Alongside these external factors in work stress, the ERI model also contains an intrinsic dimension, “overcommitment,” or the excessive willingness to overexert oneself. This is based on the hypothesis that people with an excessive willingness to overexert themselves suffer more severely from gratification crises than individuals with a lower willingness to overexert themselves.

Scale Development

In the previous version, the instrument only contained 23 items. With the goal of achieving a more broadly applicable instrument, it was shortened to 16 items and used for the first time in this form in the 2006 SOEP questionnaire. Overcommitment was not shortened in the SOEP version, since the scale is already the product of various validation studies.

References

Department of Medical Sociology, Duesseldorf University (2008). Effort-reward imbalance at work: Theory, measurement and evidence. Düsseldorf.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. Journal of Occupational Health Psychology, 1, 27.

Items

Please indicate to what degree you agree with the following statements (Bitte geben Sie an, in welchem Maße Sie den folgenden Aussagen zustimmen):

Effort

1. I have constant time pressure due to a heavy workload. (Aufgrund des hohen Arbeitsaufkommens besteht häufig großer Zeitdruck.)
2. I have many interruptions and disturbances while performing my job. (Bei meiner Arbeit werde ich häufig unterbrochen und gestört.)
3. Over the past few years, my job has become more and more demanding. (Im Laufe der letzten beiden Jahre ist meine Arbeit immer mehr geworden.)

Scale: 1 (Yes / Ja) to 2 (No / Nein); 1 (Not at all / Gar nicht) to 4 (Very heavily / Sehr stark) is recoded to 1 to 5

Reward

1. I receive the respect I deserve from my superior. (Ich erhalte von meinen Vorgesetzten die Anerkennung, die ich verdiene.) (R)
2. My job promotion prospects are poor. (Die Aufstiegschancen in meinem Betrieb sind schlecht.) (R)
3. I have experienced or I expect to experience an undesirable change in my work situation. (Ich erfahre – oder erwarte – eine Verschlechterung meiner Arbeitssituation.) (R)
4. My job security is poor. (Mein eigener Arbeitsplatz ist gefährdet.) (R)
5. Considering all my efforts and achievements, I receive the respect and prestige I deserve at work. (Wenn ich an all die erbrachten Leistungen und Anstrengungen denke, halte ich die erfahrene Anerkennung für angemessen.) (R)
6. Considering all my efforts and achievements, my job promotion prospects are adequate. (Wenn ich an all die erbrachten Leistungen und Anstrengungen denke, halte ich meine persönlichen Chancen des beruflichen Fortkommens für angemessen.) (R)
7. Considering all my efforts and achievements, my salary / income is adequate. (Wenn ich an all die erbrachten Leistungen denke, halte ich mein Gehalt / meinen Lohn für angemessen.) (R)

Scale: 1 (Yes / Ja) to 2 (No /Nein); 1 (Not at all / Gar nicht) to 4 (Very heavily / Sehr stark) is recoded to 1 to 5

Overcommitment

1. At work, I easily get into time pressure. (Beim Arbeiten komme ich leicht in Zeitdruck.)
2. I often am already thinking about work-related problems when I wake up. (Es passiert mir oft, dass ich schon beim Aufwachen an Arbeitsprobleme denke.)
3. When I get home, it is easy to switch off from thinking about work. (Wenn ich nach Hause komme, fällt mir das Abschalten von der Arbeit sehr leicht.) (R)
4. Those closest to me say I sacrifice too much for my career. (Diejenigen, die mir am nächsten stehen sagen, dass ich mich für meinen Beruf zu sehr aufopfere.)
5. Work seldom lets go of me; it stays in my head all evening. (Die Arbeit lässt mich selten los, das geht mir abends im Kopf rum.)
6. If I put off something that needs to be done that day, I can't sleep at night. (Wenn ich etwas verschiebe, was ich eigentlich heute tun müsste, kann ich nachts nicht schlafen.)

Scale: 1 (Yes / Ja) to 2 (No /Nein); 1 (Not at all / Gar nicht) to 4 (Very heavily / Sehr stark) is recoded to 1 to 5

Coding

Please note that effort and reward are measured by two questions in the SOEP that have to be recoded to a five-point Likert scale. The first of these questions asks whether the content of the items applies to the respondent. Depending on the answer to this first question, the level of emotional burden is then evaluated in a second four-step question. An affirmative answer to the reward item "I get the recognition I deserve from my superiors" is encoded with the highest value (5), while a negative answer is encoded depending on the burden: No reward but no burden is encoded with the value 4. No reward and a high burden is encoded with 1 on the five-point Likert scale. The same procedure applies for effort items. When recoding, attention to the five-point scale is required because of the inverse direction of some reward items. A negative answer to an inverse reward item—for example, "The opportunities for advancement in my company are bad"—is coded with the highest value (5) for reward. An affirmative answer to this inverse reward item must be encoded with 1, 2, 3, or 4 depending on how burdened the person feels. For example: An affirmative answer to "advancement in company is bad" and a high rating for burden equals 1 for reward on the five-point Likert scale. The Effort-Reward Ratio (ERR) is calculated by the formula $ERR = e/(r*c)$, where "e" stands for total effort, "r" stands for total reward, and "c" is a correction factor for the ratio of the number of items used. In this case, "c" equals 3/7 because effort is measured with 3 items and reward is measured with 7 items. Thus, the total effort score ranges from 3 to 15, as three effort items with a five-point Likert scale are used in SOEP. High values correspond to high perceived effort, low values to low effort. The total score for reward is constructed analogously and ranges between 7 and 35 for seven reward items. Low values mean low reward. A ERR value close to 0 means low perceived effort at high perceived reward. A ERR value greater than 1 indicates the opposite. In this case, there is an effort-reward imbalance.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2006	eri1	12315	2.43	1.31	0.61	0.74
2006	eri2	12313	2.19	1.29	0.51	0.74
2006	eri3	12232	2.39	1.31	0.57	0.74
2011	eri1	11594	2.36	1.30	0.61	0.74
2011	eri2	11581	2.23	1.28	0.53	0.74
2011	eri3	11444	2.35	1.31	0.57	0.74
2012	eri1	5130	2.34	1.31	0.57	0.71
2012	eri2	5131	2.07	1.26	0.48	0.71
2012	eri3	4976	2.29	1.28	0.55	0.71
2016	eri1	592	2.21	1.29	0.63	0.77
2016	eri2	592	2.20	1.28	0.55	0.77

continues on next page

Table 7 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2016	eri3	586	2.36	1.29	0.62	0.77
2006	eri4	11594	4.31	1.07	0.58	0.79
2006	eri5	11809	3.83	1.19	0.51	0.79
2006	eri6	12195	4.25	1.29	0.50	0.79
2006	eri7	12179	4.48	1.15	0.40	0.79
2006	eri8	11720	4.30	1.07	0.61	0.79
2006	eri9	11592	4.24	1.10	0.61	0.79
2006	eri10	11872	3.77	1.31	0.46	0.79
2011	eri4	10868	4.30	1.09	0.63	0.80
2011	eri5	10900	3.92	1.16	0.53	0.80
2011	eri6	11524	4.47	1.12	0.46	0.80
2011	eri7	11499	4.70	0.90	0.33	0.80
2011	eri8	11156	4.28	1.09	0.66	0.80
2011	eri9	10910	4.28	1.09	0.64	0.80
2011	eri10	11273	3.90	1.31	0.50	0.80
2012	eri4	4713	4.38	1.04	0.62	0.78
2012	eri5	4775	4.04	1.11	0.50	0.78
2012	eri6	5042	4.52	1.06	0.45	0.78
2012	eri7	5033	4.73	0.89	0.33	0.78
2012	eri8	4757	4.35	1.04	0.64	0.78
2012	eri9	4623	4.30	1.06	0.62	0.78
2012	eri10	4884	3.80	1.32	0.42	0.78
2016	eri4	543	4.36	1.05	0.65	0.80
2016	eri5	555	4.01	1.05	0.52	0.80
2016	eri6	585	4.58	1.01	0.47	0.80
2016	eri7	589	4.72	0.87	0.36	0.80
2016	eri8	550	4.35	1.03	0.66	0.80
2016	eri9	533	4.28	1.06	0.68	0.80
2016	eri10	567	3.93	1.24	0.43	0.80
2006	plb0112	12348	2.40	0.88	0.45	0.79
2006	plb0113	12346	2.16	0.95	0.67	0.79
2006	plb0114R	12328	2.29	0.94	0.41	0.79
2006	plb0115	12299	2.26	0.94	0.50	0.79
2006	plb0116	12347	2.18	0.92	0.72	0.79
2006	plb0117	12340	1.97	0.88	0.47	0.79
2011	plb0112	11624	2.33	0.89	0.45	0.79
2011	plb0113	11621	2.12	0.96	0.68	0.79
2011	plb0114R	11601	2.27	0.96	0.43	0.79
2011	plb0115	11571	2.23	0.96	0.52	0.79
2011	plb0116	11609	2.13	0.92	0.74	0.79
2011	plb0117	11615	1.93	0.88	0.49	0.79
2012	plb0112	5149	2.47	0.95	0.42	0.77
2012	plb0113	5149	2.05	0.98	0.64	0.77
2012	plb0114R	5138	2.18	0.99	0.41	0.77
2012	plb0115	5117	2.14	0.98	0.51	0.77
2012	plb0116	5140	2.06	0.94	0.70	0.77
2012	plb0117	5134	1.84	0.90	0.43	0.77
2016	plb0112	15107	2.37	0.92	0.42	0.77
2016	plb0113	15106	2.00	0.95	0.65	0.77

continues on next page

Table 7 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2016	plb0114R	15087	2.16	0.99	0.42	0.77
2016	plb0115	14975	2.10	0.97	0.50	0.77
2016	plb0116	15105	2.00	0.92	0.71	0.77
2016	plb0117	15084	1.80	0.87	0.44	0.77

Note

It should be noted that effort and reward are measured by two questions that have to be recoded to a five-point Likert scale in the SOEP data. Consequently, ERI1 to ERI10 refers to the following variable labels: ERI1 (plb0118/19), ERI2 (plb0120/21), ERI3 (plb0122/23), ERI4 (plb0130/31), ERI5 (plb0124/25), ERI6 (plb0126/27), ERI7 (plb0128/29), ERI8 (plb0132/33), ERI9 (plb0134/35), ERI10 (plb0136/37).

1.7 Impulsiveness & Patience

Summary

The measures of impulsiveness and patience are simple and ultra-short survey measures with the distinct advantage of gathering information on time preferences that are behaviorally relevant while at the same time being cheap to measure on a large and representative scale. Impulsiveness and patience has been measured at regular five-year intervals since 2008.

Theoretical Background

Essentially, all economic decisions involve a time dimension and thus a trade-off between different payoffs or costs that accrue at different points in time. Patience (or the rate of time preference) is the central preference parameter that shapes such decisions over time.

Scale Development

So far, there is still no reliable measure of patience in large-scale representative surveys, since direct measures of patience are typically elicited in laboratory experiments among particular (student) subject pools only. To fill this gap, a survey measure of patience and impulsiveness has been included in the SOEP. The measures for impulsiveness and patience were evaluated with an incentive-compatible intertemporal choice experiment for impatience. Individuals who state that they are more impatient also exhibit a higher degree of impatience in the incentivized choice experiment (see Vischer et al., 2013).

References

Vischer, T., Dohmen, T., Falk, A., Huffman, D., Schupp, J., Sunde, U., & Wagner, G. G. (2013). *Validating an ultra-short survey measure of patience*. *Economics Letters*, 120, 142-145.

Items

How would you describe yourself (Wie schätzen Sie sich persönlich ein):

Impulsiveness

1. Do you generally think things over for a long time before acting – in other words, are you not impulsive at all? Or do you generally act without thinking things over a long time – in other words, are you very impulsive? (Sind Sie im Allgemeinen ein Mensch, der lange überlegt und nachdenkt, bevor er handelt, also gar nicht impulsiv ist? Oder sind Sie ein Mensch, der ohne lange zu überlegen handelt, also sehr impulsiv ist?)

Scale: 0 (Not at all impulsive / Gar nicht impulsiv) to 10 (Very impulsive / Sehr impulsiv)

Patience

2. Are you generally an impatient person, or someone who always shows great patience? (Sind Sie im Allgemeinen ein Mensch, der ungeduldig ist, oder der immer sehr viel Geduld aufbringt?)

Scale: 0 (Very impatient / Sehr ungeduldig) to 10 (Very patient / Sehr geduldig)

Items and Scale Statistics

year	variable	count	mean	sd
2008	plh0254	19635	5.09	2.19
2008	plh0253	19643	6.07	2.28
2013	plh0254	19107	5.18	2.21
2013	plh0253	19114	6.18	2.34
2018	plh0254	25910	5.03	2.30
2018	plh0253	25936	6.00	2.45

1.8 Life Goals

Summary

Respondents' life goals have been measured in the SOEP in 1990, 1992, 1995, since 2004 at four-year intervals and since 2016 at five-year intervals. They have been used with ten items that can be grouped into three scales (success, family life, and altruism).

Theoretical Background

Life goals can be thought of as "relatively long-term, value-laden life objectives" (Meier et al., 1959). They have been conceptualized as "organizers" of developmental self-regulation that individuals use to influence their own development as they adapt to the constraints of a given situation (Heckhausen, 1999). Individual life goals correspond to societal values to the extent that they are aligned with cultural preferences, if not culturally prescribed norms. A classic example is the goal of material success as embodied in the achievement of money, power, and security, which in turn lead to prestige and social recognition. However, overarching non-monetary goals such as "the good life" or "personal development" are also taking on an increasingly important role in individuals' lives (Meier et al., 1959). Research on life goals has investigated their impact on individuals' future orientations and their occupational, educational, and family-related decision making (Chang et al., 2006). Life goals also play a prominent role in motivational theories of life-span development, which focus on goal commitment, planning, and eventual goal attainment (Heckhausen et al., 2010). Another strand of research is concerned with the prioritization of life goals and perceived control over goal attainment (Heckhausen, 1999). Recent evidence that life goals play a role in life satisfaction has contributed to the research on subjective well-being and life satisfaction (Headey 2008).

Scale Development

The items are based (albeit with some changes of wording) on a classification of goals and measures initially developed by Kluckhohn and Strodtbeck (1961) and translated into German by Bielenski and Strümpel (1988). More information on the development of the scale is given by Headey (2008).

References

- Bielenski, H. & Strümpel, B. (1988). *Eingeschränkte Erwerbsarbeit bei Frauen und Männern. Fakten - Wünsche - Realisierungschancen*. Berlin: Edition Sigma.
- Chang, E. S., Chen, C, Greenberger, E., Dooley, D., & Heckhausen, J. (2006). *What do they want in life?: The life goals of a multi-ethnic, multi-generational sample of high school seniors*. *Journal of Youth and Adolescence*, 35, 302-313.
- Headey, B. W. (2008). *Life goals matter to happiness: A revision of set-point theory*. *Social Indicators Research*, 86, 213-231.

Heckhausen, J. (1999). Developmental regulation in adulthood: Age-normative and sociostructural constraints as adaptive challenges. New York: Cambridge University Press.

Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. Psychological Review, 117, 32-60.

Kluckhohn, F. R., & Strodtbeck, F. L. (1961). Variations in value orientations. Evanston, Illinois: Row, Peterson.

Meier, D. L., & Bell, W. (1959). Anomia and differential access to the achievement of life goals. American Sociological Review, 24, 189-202.

Items

Are the following things currently ... for you (Sind für Sie persönlich die folgenden Dinge heute ...):

Success

1. Being able to afford to buy things for myself (Sich etwas leisten können).
2. Being fulfilled (Sich selbst verwirklichen).
3. Being successful in my career (Erfolg im Beruf haben).
4. Seeing the world and/or traveling extensively (Die Welt sehen, viele Reisen machen).

Scale: 1 (Very important / Sehr wichtig) to 4 (Not at all important / Ganz unwichtig)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
1990	plh0104	7136	2.07	0.62	0.36	0.60
1990	plh0106	7101	2.15	0.76	0.45	0.60
1990	plh0107	6845	2.18	0.92	0.43	0.60
1990	plh0112	7143	2.47	0.84	0.31	0.60
1992	plh0104	11018	1.96	0.62	0.38	0.61
1992	plh0106	10927	2.13	0.79	0.47	0.61
1992	plh0107	10672	2.11	0.95	0.44	0.61
1992	plh0112	11008	2.47	0.83	0.30	0.61
1995	plh0104	11663	1.98	0.61	0.36	0.61
1995	plh0106	11585	2.09	0.76	0.49	0.61
1995	plh0107	11200	2.07	0.90	0.45	0.61
1995	plh0112	11639	2.54	0.81	0.30	0.61
2004	plh0104	21933	1.98	0.59	0.37	0.61
2004	plh0106	21809	2.15	0.75	0.48	0.61
2004	plh0107	20840	2.13	0.87	0.43	0.61
2004	plh0112	21917	2.56	0.82	0.30	0.61
2008	plh0104	19632	2.01	0.60	0.37	0.63
2008	plh0106	19547	2.23	0.77	0.50	0.63
2008	plh0107	18612	2.21	0.90	0.45	0.63
2008	plh0112	19596	2.64	0.82	0.33	0.63
2010	plh0104	7788	2.06	0.66	0.39	0.59
2010	plh0106	7768	2.05	0.71	0.45	0.59
2010	plh0107	7785	2.06	0.71	0.41	0.59
2010	plh0112	7780	2.58	0.81	0.27	0.59
2012	plh0104	27925	2.06	0.63	0.36	0.61
2012	plh0106	27807	2.13	0.74	0.49	0.61
2012	plh0107	26216	2.16	0.86	0.44	0.61
2012	plh0112	27903	2.56	0.83	0.29	0.61

continues on next page

Table 9 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2016	plh0104	24603	2.06	0.63	0.35	0.62
2016	plh0106	24483	2.14	0.74	0.48	0.62
2016	plh0107	23229	2.20	0.85	0.45	0.62
2016	plh0112	24580	2.49	0.84	0.33	0.62

Items

Are the following things currently ... for you (Sind für Sie persönlich die folgenden Dinge heute ...):

Family Life

1. Owning a house (Ein eigenes Haus haben).
2. Having a happy marriage/relationship (Eine glückliche Ehe / Partnerschaft haben).
3. Having children (Kinder haben).

Scale: 1 (Very important / Sehr wichtig) to 4 (Not at all important / Ganz unwichtig)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
1990	plh0108	7125	2.39	0.99	0.32	0.56
1990	plh0109	7077	1.44	0.74	0.40	0.56
1990	plh0110	7067	1.88	0.88	0.42	0.56
1992	plh0108	10947	2.41	1.01	0.31	0.56
1992	plh0109	10936	1.40	0.73	0.42	0.56
1992	plh0110	10888	1.79	0.90	0.41	0.56
1995	plh0108	11592	2.33	0.98	0.28	0.54
1995	plh0109	11568	1.39	0.71	0.40	0.54
1995	plh0110	11529	1.77	0.89	0.40	0.54
2004	plh0108	21811	2.32	0.98	0.31	0.55
2004	plh0109	21730	1.43	0.69	0.41	0.55
2004	plh0110	21572	1.80	0.89	0.39	0.55
2008	plh0108	19534	2.41	0.98	0.30	0.54
2008	plh0109	19464	1.45	0.70	0.39	0.54
2008	plh0110	19391	1.76	0.88	0.38	0.54
2010	plh0108	7786	2.28	0.92	0.24	0.47
2010	plh0109	7786	1.27	0.53	0.37	0.47
2010	plh0110	7783	1.34	0.56	0.34	0.47
2012	plh0108	27801	2.41	0.98	0.29	0.52
2012	plh0109	27663	1.45	0.70	0.38	0.52
2012	plh0110	27612	1.67	0.84	0.35	0.52
2016	plh0108	24490	2.38	0.98	0.28	0.51
2016	plh0109	24380	1.46	0.71	0.38	0.51
2016	plh0110	24331	1.65	0.84	0.34	0.51

Items

Are the following things currently ... for you (Sind für Sie persönlich die folgenden Dinge heute ...):

Altruism

1. Being there for others (Für andere da sein).
2. Spending a lot of time with friends (Viel mit Freunden zusammen sein).

3. Being politically and/or socially involved (Sich politisch, gesellschaftlich einsetzen).

Scale: 1 (Very important / Sehr wichtig) to 4 (Not at all important / Ganz unwichtig)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
1990	plh0105	7142	1.90	0.59	0.19	0.40
1990	plh0090	7136	2.13	0.71	0.27	0.40
1990	plh0111	7125	2.99	0.76	0.25	0.40
1992	plh0105	11010	1.88	0.60	0.27	0.46
1992	plh0090	10993	2.10	0.71	0.33	0.46
1992	plh0111	10953	3.16	0.73	0.26	0.46
1995	plh0105	11644	1.82	0.59	0.24	0.43
1995	plh0090	11619	2.09	0.70	0.32	0.43
1995	plh0111	11597	3.16	0.71	0.24	0.43
2004	plh0105	21926	1.83	0.58		
2004	plh0111	21830	2.93	0.75		
2008	plh0105	19626	1.83	0.57		
2008	plh0111	19518	3.10	0.75		
2010	plh0105	7788	1.51	0.55		
2010	plh0111	7771	2.69	0.79		
2012	plh0105	27910	1.71	0.57		
2012	plh0111	27853	2.81	0.77		
2016	plh0105	24604	1.69	0.57		
2016	plh0111	24520	2.79	0.78		

1.9 Life Satisfaction

Summary

General life satisfaction has been measured with an individual item in the SOEP on an annual basis since 1984. Domain-specific life satisfaction was initially measured with seven items (1984-1990), and since 2008 with ten items. Items 1 to 5 can be combined into one scale in all survey years (Schimmack, Krause, Wagner, & Schupp, 2009). In addition, satisfaction in 11 further domains is surveyed at irregular intervals.

Theoretical Background

Since its inception, the SOEP has included cognitive measures of well-being. The first measure is the global 11-point rating of life satisfaction (Schimmack, Schupp, & Wagner, 2008). This item is used almost exclusively as a measure of well-being in the SOEP. The reasons for its popularity are its high face validity and the widespread use of life satisfaction ratings in the well-being literature. Single-item measures of life satisfaction are a reasonably valid and common way to measure general life satisfaction: moderate associations with other well-being measures, including written interviews, informant reports, and measures of daily affect are reported by Sandvik, Diener, and Seidlitz (1993). Research using the World Value Survey (<http://www.worldvaluessurvey.org>) found single-item measures of life satisfaction to be positively related to affect balance and positive affect, and inversely related to negative affect (Suh et al., 1998). The second measure is the average of various domain satisfactions that are routinely assessed in the SOEP (health, household income, dwelling, and leisure time). This measure has two drawbacks. First, it does not weigh domains by their subjective importance. Second, the measure fails to capture aspects of well-being that are not covered by the domains included in the survey (Schimmak, 2008). A key advantage of this measure is that it relies not solely on respondents' ability to summarize and weigh all relevant aspects of their lives in response to a single question about satisfaction with life in general.

Scale Development

Information on the further development, reliability, and validity of the items can be found in Kroh (2006), in Schimmack (2008) and in Schimmack, Krause, Wagner, & Schupp (2009).

References

- Kroh, M. (2006). *An experimental evaluation of popular well-being measures*. Berlin: DIW Berlin.
- Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, 61, 317–342.
- Schimmack, U., Schupp, J., & Wagner, G. G. (2008). The influence of environment and personality on the affective and cognitive component of subjective well-being. *Social Indicators Research*, 89, 41-60.
- Schimmack, U., Krause, P., Wagner, G. G., & Schupp, J. (2009). Stability and change of Well Being: An experimentally enhanced Latent State-Trait-Error Analysis. *Social Indicators Research*, 95, 19-31.
- Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality and Social Psychology*, 74, 482–493.

Items

1. How satisfied are you with your life, all things considered? (Wie zufrieden sind Sie gegenwärtig, alles in allem, mit Ihrem Leben?) How satisfied are you with (Wie zufrieden sind Sie):
2. your health (mit ihrer Gesundheit)?
3. your household income (mit dem Einkommen Ihres Haushalts)?
4. your dwelling (mit Ihrer Wohnung)?
5. your free time (mit Ihrer Freizeit / in den Jahren 1995, 1996: mit Ihrer Freizeittätigkeit)?
6. your job (mit ihrer Arbeit)?
7. your housework (mit ihrer Tätigkeit im Haushalt)?
8. the child care available (mit den vorhandenen Möglichkeiten der Kinderbetreuung)?
9. your personal income (mit Ihrem persönlichen Einkommen)?
10. your family life (mit Ihrem Familienleben)?
11. your sleep (mit Ihrem Schlaf)?

Scale: 0 (Completely dissatisfied / Ganz und gar unzufrieden) to 10 (Completely satisfied / Ganz und gar zufrieden)

Test-Retest Correlations

In 2005, 2006 and 2009, item 1 to 5 were included in retests taken by subsamples within 30 to 49 days after the initial test. Pooled across the years (minimal N = 603), test-retest correlations were (in scale order, item 1 to 5) .66, .64, .71, .67, and .56. The test-retest correlation of the scale based on these five items was .77.

Items and Scale Statistics

year	variable	count	mean	sd
1984	plh0182	12192	7.43	2.14
1984	plh0171	12224	7.00	2.67
1984	plh0175	12042	6.41	2.62
1984	plh0177	12167	7.60	2.54
1984	plh0178	12172	7.29	2.55
1984	plh0173	7024	7.65	2.28
1984	plh0174	7843	6.95	2.44
1985	plh0182	11050	7.24	2.05

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
1985	plh0171	11035	6.93	2.47
1985	plh0175	10872	6.46	2.46
1985	plh0177	10979	7.59	2.38
1985	plh0178	11006	7.14	2.44
1985	plh0173	6338	7.52	2.14
1985	plh0174	6433	6.95	2.26
1986	plh0182	10611	7.29	1.94
1986	plh0171	10618	6.89	2.44
1986	plh0175	10507	6.50	2.35
1986	plh0177	10587	7.56	2.29
1986	plh0178	10595	7.01	2.44
1986	plh0173	6169	7.41	2.12
1986	plh0174	6388	6.86	2.20
1987	plh0182	10482	7.14	1.96
1987	plh0171	10498	6.85	2.39
1987	plh0175	10400	6.52	2.28
1987	plh0177	7943	7.89	2.08
1987	plh0178	10459	7.07	2.37
1987	plh0173	6155	7.40	2.07
1987	plh0174	6363	6.91	2.11
1988	plh0182	9980	7.08	1.96
1988	plh0171	10001	6.78	2.39
1988	plh0175	9905	6.51	2.29
1988	plh0177	9978	7.52	2.24
1988	plh0178	9978	6.92	2.37
1988	plh0173	5837	7.25	2.09
1988	plh0174	6113	6.80	2.12
1989	plh0182	9679	7.10	1.94
1989	plh0171	9683	6.71	2.42
1989	plh0175	9600	6.53	2.25
1989	plh0177	9653	7.48	2.24
1989	plh0178	9651	6.85	2.37
1989	plh0173	5692	7.24	2.03
1989	plh0174	6065	6.69	2.13
1990	plh0182	13904	7.05	1.88
1990	plh0171	13940	6.75	2.43
1990	plh0175	13813	6.27	2.32
1990	plh0177	13890	7.29	2.43
1990	plh0178	9482	7.09	2.15
1990	plh0173	9079	7.22	2.15
1990	plh0174	6393	6.69	2.13
1990	plh0179	1483	7.59	2.65
1991	plh0182	13535	6.95	1.90
1991	plh0171	13643	6.75	2.34
1991	plh0175	13531	6.19	2.40
1991	plh0177	13622	7.29	2.32
1991	plh0178	13605	6.59	2.49
1991	plh0173	8534	6.96	2.28
1992	plh0182	13307	6.92	1.82

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
1992	plh0171	13349	6.81	2.32
1992	plh0175	13257	6.12	2.26
1992	plh0177	13307	7.14	2.31
1992	plh0178	13314	6.64	2.38
1992	plh0173	8050	7.23	1.98
1993	plh0182	13113	6.88	1.88
1993	plh0171	13146	6.66	2.31
1993	plh0175	12831	6.15	2.30
1993	plh0177	13095	7.22	2.32
1993	plh0178	13102	6.58	2.42
1993	plh0173	7786	7.05	2.06
1993	plh0174	8623	6.51	2.12
1994	plh0182	13344	6.86	1.85
1994	plh0171	13383	6.60	2.31
1994	plh0175	13096	6.05	2.33
1994	plh0177	13333	7.30	2.27
1994	plh0178	13323	6.55	2.43
1994	plh0173	7803	7.00	2.07
1994	plh0174	8986	6.51	2.12
1995	plh0182	13696	6.89	1.83
1995	plh0171	13709	6.67	2.25
1995	plh0175	13449	6.12	2.29
1995	plh0177	13626	7.29	2.24
1995	plh0178	13678	6.80	2.22
1995	plh0173	8537	6.89	2.20
1995	plh0174	9429	6.52	2.11
1996	plh0182	13489	6.90	1.78
1996	plh0171	13497	6.62	2.24
1996	plh0175	13242	6.18	2.27
1996	plh0177	13426	7.36	2.19
1996	plh0178	13455	6.79	2.33
1996	plh0173	8367	6.88	2.16
1996	plh0174	9294	6.54	2.06
1997	plh0182	13257	6.79	1.79
1997	plh0171	13250	6.59	2.21
1997	plh0175	12980	6.01	2.24
1997	plh0177	13170	7.35	2.13
1997	plh0178	13202	6.73	2.33
1997	plh0173	8073	6.85	2.12
1997	plh0174	9201	6.50	2.05
1997	plh0179	3612	6.53	2.40
1998	plh0182	14631	6.95	1.78
1998	plh0171	14615	6.65	2.23
1998	plh0175	14300	6.11	2.28
1998	plh0177	14527	7.48	2.08
1998	plh0178	14575	6.83	2.30
1998	plh0173	8762	6.89	2.15
1998	plh0174	10202	6.56	2.06
1998	plh0179	3811	6.67	2.43

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
1999	plh0182	14054	6.97	1.78
1999	plh0171	14044	6.61	2.24
1999	plh0175	13767	6.18	2.25
1999	plh0177	13964	7.53	2.04
1999	plh0178	13993	6.86	2.29
1999	plh0173	8555	6.90	2.12
1999	plh0174	9996	6.52	2.05
1999	plh0179	3746	6.63	2.42
2000	plh0182	24510	7.09	1.78
2000	plh0171	24534	6.76	2.27
2000	plh0175	24069	6.40	2.30
2000	plh0177	24405	7.72	2.02
2000	plh0178	24467	7.01	2.29
2000	plh0173	13485	7.05	2.20
2000	plh0174	17626	6.60	2.11
2000	plh0179	6064	6.61	2.62
2001	plh0182	22299	7.10	1.74
2001	plh0171	22270	6.77	2.24
2001	plh0175	21971	6.49	2.24
2001	plh0177	22194	7.74	1.95
2001	plh0178	22244	7.02	2.25
2001	plh0173	13262	7.06	2.16
2001	plh0174	16297	6.62	2.08
2001	plh0179	4482	6.54	2.70
2002	plh0182	23844	7.05	1.74
2002	plh0171	23838	6.75	2.21
2002	plh0175	23443	6.50	2.22
2002	plh0177	23723	7.78	1.91
2002	plh0178	23770	7.00	2.20
2002	plh0173	14486	7.04	2.14
2002	plh0174	17140	6.57	2.06
2002	plh0179	4257	6.53	2.54
2003	plh0182	22568	6.96	1.78
2003	plh0171	22571	6.73	2.19
2003	plh0175	22229	6.34	2.29
2003	plh0177	22494	7.76	1.92
2003	plh0178	22522	7.02	2.19
2003	plh0173	13465	6.96	2.17
2003	plh0174	16753	6.59	2.02
2003	plh0179	9420	6.33	2.47
2004	plh0182	21964	6.80	1.82
2004	plh0171	21940	6.61	2.24
2004	plh0175	21522	6.22	2.30
2004	plh0177	21858	7.85	1.86
2004	plh0178	21873	6.98	2.18
2004	plh0173	12964	6.87	2.21
2004	plh0174	16460	6.56	1.99
2004	plh0179	3986	6.35	2.59
2004	plh0176	21197	5.65	2.60

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
2005	plh0182	21040	6.95	1.83
2005	plh0171	21041	6.64	2.24
2005	plh0175	20710	6.25	2.34
2005	plh0177	20968	7.82	1.89
2005	plh0178	20993	6.98	2.24
2005	plh0173	12329	6.85	2.22
2005	plh0174	15904	6.58	2.03
2005	plh0179	3800	6.30	2.74
2005	plh0176	20340	5.65	2.66
2006	plh0182	22284	6.91	1.80
2006	plh0171	22306	6.64	2.23
2006	plh0175	21975	6.23	2.33
2006	plh0177	22230	7.81	1.89
2006	plh0178	22254	6.98	2.25
2006	plh0173	12865	6.89	2.19
2006	plh0174	17048	6.62	2.02
2006	plh0179	3650	6.37	2.71
2006	plh0176	21678	5.66	2.62
2006	plh0180	21971	7.71	1.98
2007	plh0182	20834	6.95	1.78
2007	plh0171	20843	6.58	2.20
2007	plh0175	20560	6.26	2.27
2007	plh0177	20761	7.82	1.82
2007	plh0178	20793	6.96	2.21
2007	plh0173	12260	6.85	2.16
2007	plh0174	16068	6.64	1.98
2007	plh0179	3485	6.40	2.70
2007	plh0176	20286	5.63	2.59
2007	plh0180	20523	7.68	1.97
2008	plh0182	19643	6.98	1.75
2008	plh0171	19655	6.56	2.18
2008	plh0175	19361	6.29	2.28
2008	plh0177	19598	7.96	1.77
2008	plh0178	19625	7.08	2.13
2008	plh0173	11644	6.90	2.10
2008	plh0174	15114	6.68	1.94
2008	plh0179	2924	6.78	2.53
2008	plh0176	19131	5.70	2.56
2008	plh0180	19526	7.80	1.99
2008	plh0172	19652	6.82	2.26
2009	plh0182	20733	6.98	1.78
2009	plh0171	20760	6.57	2.23
2009	plh0175	20484	6.40	2.30
2009	plh0177	20701	7.91	1.82
2009	plh0178	20728	7.13	2.15
2009	plh0173	12323	6.88	2.21
2009	plh0174	16271	6.78	1.96
2009	plh0179	3121	6.78	2.76
2009	plh0176	20360	5.79	2.61

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
2009	plh0180	20650	7.84	1.99
2009	plh0172	20759	6.83	2.27
2010	plh0182	26674	7.25	1.74
2010	plh0171	26678	6.80	2.24
2010	plh0175	26387	6.35	2.36
2010	plh0177	26623	7.79	1.98
2010	plh0178	26643	6.93	2.25
2010	plh0173	16095	7.01	2.24
2010	plh0174	21913	6.82	2.00
2010	plh0179	7397	7.05	2.68
2010	plh0176	26119	5.74	2.69
2010	plh0180	26545	8.00	1.95
2010	plh0172	26676	6.83	2.31
2011	plh0182	26131	7.18	1.74
2011	plh0171	26127	6.73	2.24
2011	plh0175	25821	6.45	2.34
2011	plh0177	26071	7.79	1.95
2011	plh0178	18427	7.17	2.16
2011	plh0173	16459	7.07	2.17
2011	plh0174	21705	6.79	1.96
2011	plh0179	7313	7.41	2.42
2011	plh0176	25225	5.91	2.62
2011	plh0180	25888	8.01	1.90
2011	plh0172	26134	6.81	2.30
2012	plh0182	26733	7.19	1.74
2012	plh0171	26750	6.73	2.21
2012	plh0175	26431	6.54	2.30
2012	plh0177	26695	7.81	1.92
2012	plh0178	19510	7.22	2.14
2012	plh0173	16624	7.13	2.07
2012	plh0174	22362	6.83	1.94
2012	plh0179	6770	7.49	2.28
2012	plh0176	25855	6.01	2.58
2012	plh0180	26416	8.02	1.88
2012	plh0172	26748	6.80	2.29
2013	plh0182	30884	7.31	1.75
2013	plh0171	30918	6.83	2.25
2013	plh0175	30613	6.59	2.30
2013	plh0177	30878	7.77	2.00
2013	plh0178	18896	7.26	2.13
2013	plh0173	19386	7.17	2.10
2013	plh0174	21663	6.84	1.96
2013	plh0179	6147	7.58	2.25
2013	plh0176	25018	6.14	2.56
2013	plh0180	25525	8.00	1.88
2013	plh0172	25959	6.79	2.27
2014	plh0182	27367	7.25	1.73
2014	plh0171	27439	6.75	2.21
2014	plh0175	27043	6.66	2.26

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
2014	plh0177	27362	7.81	1.95
2014	plh0178	27382	7.05	2.21
2014	plh0173	17322	7.14	2.10
2014	plh0174	22853	6.89	1.96
2014	plh0179	6417	7.42	2.26
2014	plh0176	26475	6.11	2.56
2014	plh0180	27136	8.00	1.86
2014	plh0172	27442	6.79	2.30
2015	plh0182	27120	7.38	1.73
2015	plh0171	25354	6.75	2.19
2015	plh0175	25008	6.79	2.20
2015	plh0177	25278	7.84	1.92
2015	plh0178	25295	7.08	2.18
2015	plh0173	15832	7.18	2.02
2015	plh0174	21234	6.89	1.92
2015	plh0179	5317	7.52	2.20
2015	plh0176	26212	6.24	2.53
2015	plh0180	25098	7.97	1.88
2015	plh0172	25357	6.81	2.23
2016	plh0182	28941	7.36	1.81
2016	plh0171	28928	6.91	2.27
2016	plh0175	24156	6.85	2.19
2016	plh0177	24417	7.85	1.92
2016	plh0178	24424	7.09	2.16
2016	plh0173	15362	7.22	1.98
2016	plh0174	20826	6.91	1.90
2016	plh0179	4883	7.48	2.15
2016	plh0176	24314	6.33	2.50
2016	plh0180	24230	8.00	1.84
2016	plh0172	24480	6.76	2.26
2017	plh0182	32420	7.34	1.77
2017	plh0171	32322	6.91	2.29
2017	plh0175	26422	6.89	2.15
2017	plh0177	26679	7.84	1.92
2017	plh0178	26702	7.11	2.12
2017	plh0173	17096	7.19	1.98
2017	plh0174	23368	6.90	1.91
2017	plh0179	4503	7.40	2.23
2017	plh0176	28895	6.36	2.46
2017	plh0180	26464	7.96	1.86
2017	plh0172	26761	6.69	2.24
2018	plh0182	30241	7.40	1.75
2018	plh0171	30201	6.85	2.29
2018	plh0175	25582	6.85	2.17
2018	plh0177	25791	7.82	1.92
2018	plh0178	25796	7.11	2.14
2018	plh0173	16616	7.16	1.99
2018	plh0174	22729	6.87	1.91
2018	plh0179	4259	7.26	2.30

continues on next page

Table 12 – continued from previous page

year	variable	count	mean	sd
2018	plh0176	29128	6.24	2.48
2018	plh0180	25586	7.95	1.87
2018	plh0172	25857	6.63	2.26
2019	plh0182	29823	7.54	1.71
2019	plh0171	29885	6.92	2.23
2019	plh0175	25735	7.18	2.14
2019	plh0177	25949	8.00	1.87
2019	plh0178	25959	7.22	2.13
2019	plh0173	16873	7.38	1.92
2019	plh0174	22859	7.00	1.91
2019	plh0179	4063	7.46	2.25
2019	plh0176	28998	6.64	2.40
2019	plh0180	25681	8.02	1.85
2019	plh0172	26028	6.76	2.22
2020	plh0182	30397	7.59	1.67
2020	plh0171	30423	7.04	2.22
2020	plh0175	25697	7.11	2.13
2020	plh0177	25969	7.92	1.92
2020	plh0178	25989	7.11	2.17
2020	plh0173	17006	7.26	1.99
2020	plh0174	22942	7.01	1.93
2020	plh0179	4480	7.02	2.58
2020	plh0176	28962	6.59	2.40
2020	plh0180	25614	7.90	1.95
2020	plh0172	26071	6.73	2.23

Items

How satisfied are you with (Wie zufrieden sind Sie):

1. Your social security (soziale Sicherung)?
2. School education (Ausbildung)?
3. Duration of leisure (Freizeitumfang)?
4. Living standard (Lebensstandard)?
5. Your area (Wohngegend)?
6. The supply of goods and services in your area (Angebot von Waren und Dienstleistungen)?
7. The environmental conditions in your area (Umweltzustand)?
8. Local access to public transport (mit dem Angebot an Waren und Dienstleistungen hier am Ort)?
9. Democracy as it exists in Germany (Demokratie in Deutschland)?
10. Social life (Freundes-/Bekanntenkreis)?
11. Your volunteer work in clubs, associations, or other social service organizations (ehrenamtliche Tätigkeit)?
12. The level of social justice in Germany (mit der Verwirklichung der sozialen Gerechtigkeit in Deutschland)?

Scale: 0 (Completely dissatisfied / Ganz und gar unzufrieden) to 10 (Completely satisfied / Ganz und gar zufrieden)

Items and Scale Statistics

year	variable	count	mean	sd
1987	plh0155	10281	6.75	2.15
1989	plh0164	8647	6.75	2.37
1990	plh0153	9482	6.72	2.41
1990	plh0162	4435	6.36	2.13
1990	plh0156	4427	6.70	3.00
1990	plh0157	4430	3.07	2.44
1990	plh0160	4436	3.02	2.61
1991	plh0162	13624	6.80	2.04
1991	plh0156	13606	7.32	2.35
1991	plh0157	13625	6.64	2.56
1991	plh0160	13635	5.63	2.51
1992	plh0155	13144	6.29	2.04
1992	plh0162	13309	6.66	1.98
1992	plh0157	13319	6.98	2.36
1992	plh0160	13321	5.64	2.29
1993	plh0164	11155	6.74	2.30
1993	plh0162	13118	6.86	1.98
1993	plh0160	13131	5.51	2.22
1994	plh0156	13350	7.39	2.19
1994	plh0157	13351	6.72	2.47
1994	plh0160	13354	6.29	2.16
1995	plh0153	13674	6.58	2.49
1995	plh0162	13694	6.88	1.97
1995	plh0160	13692	5.95	2.12
1996	plh0162	13477	7.01	1.90
1996	plh0157	13450	6.66	2.48
1996	plh0160	13477	6.15	2.04
1997	plh0155	12945	5.22	2.31
1997	plh0162	13227	6.65	1.90
1997	plh0160	13219	6.09	1.98
1998	plh0162	14604	6.88	1.88
1998	plh0157	14551	6.54	2.47
1998	plh0160	14582	6.34	1.97
1998	plh0159	14475	6.32	2.57
1999	plh0162	14027	7.00	1.87
1999	plh0156	14015	7.46	1.92
1999	plh0157	13972	6.55	2.48
1999	plh0160	14020	6.87	1.88
2000	plh0164	22649	7.02	2.13
2000	plh0162	24504	7.19	1.84
2000	plh0157	24388	6.44	2.70
2000	plh0160	24451	6.64	1.93
2001	plh0162	22252	7.19	1.79
2001	plh0157	22186	6.43	2.64
2001	plh0160	22221	6.75	1.87
2002	plh0155	23378	5.63	2.19
2002	plh0162	23817	7.12	1.81
2002	plh0160	23794	6.44	1.87
2003	plh0162	22561	7.07	1.84
2003	plh0157	22468	6.40	2.57

continues on next page

Table 13 – continued from previous page

year	variable	count	mean	sd
2003	plh0160	22522	6.73	1.81
2003	plh0159	22356	6.38	2.56
2004	plh0164	20447	7.01	2.09
2004	plh0162	21896	7.05	1.84
2004	plh0157	21829	6.31	2.61
2005	plh0162	21023	7.07	1.89
2005	plh0157	20962	6.41	2.63
2005	plh0152_v2	20871	5.07	2.42
2006	plh0162	22285	7.19	1.89
2006	plh0181	22233	7.53	1.87
2007	plh0155	20597	5.27	2.19
2007	plh0167	5071	6.75	2.55
2008	plh0164	18154	7.28	2.03
2009	plh0167	4721	6.89	2.45
2010	plh0152_v2	26443	5.41	2.33
2011	plh0181	26028	7.75	1.87
2012	plh0155	19249	6.27	2.10
2012	plh0181	7161	8.05	1.75
2013	plh0162	24032	7.52	1.92
2013	plh0181	6822	8.05	1.74
2014	plh0164	25414	7.53	2.08
2015	plh0355	24881	5.05	2.23
2016	plh0152_v2	24066	5.80	2.42
2016	plh0181	24375	7.68	1.84
2017	plh0155	26192	6.80	1.99
2017	plh0156	26676	7.97	1.81
2018	plh0162	25788	7.64	1.82
2019	plh0164	24325	7.76	1.97
2020	plh0152_v2	25631	6.34	2.35

1.10 Locus of Control

Summary

The concept of locus of control describes the extent to which individuals believe they can determine events in their own lives, or conversely, the extent to which they feel dependent on factors that are outside of their control (Rotter, 1966). Locus of Control has been measured in SOEP in the years 1999, 2005, 2010, 2015, and 2020.

Theoretical Background

Locus of control may be internally or externally oriented. Individuals with an internal locus of control believe that their lives are the result of their own decisions and their own behavior. Individuals with an external locus of control believe that the things that happen to them in their lives are outside their personal control. For example, people with an external locus of control tend to avoid situations in which they feel overwhelmed. People with an internal locus of control tend to set higher goals for themselves, to persevere in difficult situations, and to pursue their goals successfully (Strauser, Ketz, & Keim, 2002).

Scale Development

The Locus of Control Scale was developed by Helmut Nolte (Nolte et al., 1997). In the original conception, it covered four dimensions: 1. Internal locus of control (3 Items), 2. External locus of control (E, 5 Items), 3. Attitudes about

fairness or justice (1 Item) and 4. Individual vs. collective orientation (1 Item). Seven of the 10 items can be combined into an overall scale with good reliability (Specht, Egloff, & Schmukle, 2013).

References

- Nolte, H., Weischer, C., Wilkesmann, U., Maetzel, J., & Tegethoff, H. G. (1997). *Kontrolleinstellungen zum Leben und zur Zukunft. Auswertung eines neuen, sozialpsychologischen Itemblocks im Sozioökonomischen Panel. Ruhr-Universität Bochum: Diskussionspapiere aus der Fakultät für Sozialwissenschaften*.
- Rotter, J. B. (1996). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1-28.
- Specht, J., Egloff, B., & Schmukle, S. C. (2013). Everything under control? The effects of age, gender, and education on trajectories of perceived control in a nationally representative German sample. *Developmental Psychology*, 49, 353-364.
- Strauser, D. R., Ketz, K., & Keim, J. (2002). The relationship between self-efficacy, locus of control and work personality. *The Journal of Rehabilitation*, 68, 20-26.

Items

The following statements apply to different attitudes towards life and the future. To what degree do you personally agree with the following statements (Die folgenden Aussagen kennzeichnen verschiedene Einstellungen zum Leben und zur Zukunft. In welchem Maße stimmen Sie persönlich den einzelnen Aussagen zu):

1. How my life goes depends on me (Wie mein Leben verläuft, hängt von mir selbst ab).
2. Compared to other people, I have not achieved what I deserve (Im Vergleich mit anderen habe ich nicht das erreicht, was ich verdient habe).
3. What a person achieves in life is above all a question of fate or luck (Was man im Leben erreicht, ist in erster Linie eine Frage von Schicksal oder Glück).
4. If a person is socially or politically active, he/she can have an effect on social conditions (Wenn man sich sozial oder politisch engagiert, kann man die sozialen Verhältnisse beeinflussen).
5. I frequently have the experience that other people have a controlling influence over my life (Ich mache häufig die Erfahrung, dass andere über mein Leben bestimmen).
6. One has to work hard in order to succeed (Erfolg muss man sich hart erarbeiten).
7. If I run up against difficulties in life, I often doubt my own abilities (Wenn ich im Leben auf Schwierigkeiten stoße, zweifle ich oft an meinen Fähigkeiten).
8. The opportunities that I have in life are determined by the social conditions (Welche Möglichkeiten ich im Leben habe, wird von den sozialen Umständen bestimmt).
9. Innate abilities are more important than any efforts one can make (Wichtiger als alle Anstrengungen sind die Fähigkeiten, die man mitbringt).
10. I have little control over the things that happen in my life (Ich habe wenig Kontrolle über die Dinge, die in meinem Leben passieren).

Scale: 1 (Not at all / Stimme überhaupt nicht zu) to 7 (Absolutely / Stimme voll zu); in 1999: 1 (Absolutely / Simme voll zu) to 4 (Not at all / Stimme überhaupt nicht zu)

Test-Retest Correlations

In 2005, this scale was included in a retest taken by a subsample ($N = 160$) within 30 to 49 days after the initial test. Test-retest correlations for the scale-relevant items 1, 2, 3, 5, 7, 8, and 10 were .45, .47, .45, .33, .43, .26, .21; scale scores correlated .56.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
1999	plh0379_v1R	14026	3.26	0.71	0.31	0.69
1999	plh0378_v1	13926	2.85	0.86	0.41	0.69
1999	plh0380_v1	13976	2.67	0.85	0.38	0.69
1999	plh0386_v1	13979	2.99	0.83	0.47	0.69
1999	plh0383_v1	13975	2.94	0.79	0.43	0.69
1999	plh0384_v1	13969	2.28	0.74	0.29	0.69
1999	plh0381_v1	13971	3.14	0.77	0.52	0.69
2005	plh0379_v2	20992	5.44	1.38	0.28	0.69
2005	plh0378_v2R	20813	4.70	1.80	0.41	0.69
2005	plh0380_v2R	20918	4.33	1.70	0.38	0.69
2005	plh0386_v2R	20939	4.86	1.73	0.47	0.69
2005	plh0383_v2R	20932	4.66	1.69	0.40	0.69
2005	plh0384_v2R	20844	3.46	1.51	0.33	0.69
2005	plh0381_v2R	20929	5.24	1.57	0.54	0.69
2010	plh0379_v2	18845	5.44	1.32	0.30	0.70
2010	plh0378_v2R	18686	4.72	1.78	0.42	0.70
2010	plh0380_v2R	18786	4.45	1.66	0.37	0.70
2010	plh0386_v2R	18799	4.90	1.70	0.49	0.70
2010	plh0383_v2R	18785	4.83	1.64	0.42	0.70
2010	plh0384_v2R	18755	3.51	1.46	0.33	0.70
2010	plh0381_v2R	18799	5.29	1.51	0.55	0.70
2015	plh0379_v2	26984	5.59	1.30	0.26	0.68
2015	plh0378_v2R	26539	4.76	1.77	0.40	0.68
2015	plh0380_v2R	26895	4.33	1.70	0.35	0.68
2015	plh0386_v2R	26924	4.96	1.70	0.46	0.68
2015	plh0383_v2R	26903	4.72	1.67	0.41	0.68
2015	plh0384_v2R	26757	3.56	1.50	0.31	0.68
2015	plh0381_v2R	26936	5.28	1.53	0.52	0.68
2016	plh0379_v2	3920	5.60	1.73	0.05	0.50
2016	plh0378_v2R	3737	3.75	2.13	0.21	0.50
2016	plh0380_v2R	3981	3.38	2.12	0.26	0.50
2016	plh0386_v2R	4011	5.30	2.10	0.30	0.50
2016	plh0383_v2R	3899	4.50	2.13	0.33	0.50
2016	plh0384_v2R	3763	2.87	1.78	0.19	0.50
2016	plh0381_v2R	3924	4.20	2.09	0.31	0.50
2020	plh0379_v2	25993	5.63	1.22	0.26	0.68
2020	plh0378_v2R	25558	4.94	1.74	0.42	0.68
2020	plh0380_v2R	25913	4.51	1.62	0.36	0.68
2020	plh0386_v2R	25932	5.03	1.65	0.46	0.68
2020	plh0383_v2R	25886	4.72	1.64	0.41	0.68
2020	plh0384_v2R	25797	3.62	1.47	0.30	0.68
2020	plh0381_v2R	25934	5.29	1.49	0.53	0.68

Note

In 1999 a different scale format was used. Therefore, means and standard deviations cannot be compared without transformations. Although the questionnaire contains 10 items, only a subset of 7 items can be aggregated into a scale with acceptable internal consistency (cf. Specht et al., 2013). Scale is scored so that higher values indicate an internal locus of control.

1.11 Loneliness

Summary

Loneliness has been measured in the SOEP since 2013 in four-year intervals using the 3-item short version of the UCLA loneliness scale developed by Hughes et al. (2004). In addition, loneliness has been assessed in both waves of the soep-cov survey.

Theoretical Background

Loneliness describes the perceived discrepancy between one's desired and one's actual relationships, in quantity and especially in quality (Peplau & Perlman 1982). Thus, loneliness is subjective and different from objective measures of social isolation. Loneliness increases the risk for morbidity and all-cause mortality (Hawley & Cacioppo, 2010; Luo, Hawley, Waite, & Cacioppo, 2012). In fact, according to a meta-analysis, the mortality risk of lonely people increases by 26 percent (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). For these reasons, loneliness has been termed a major health risk by the world health organization and research on loneliness is of major interest to many disciplines in the social sciences.

Scale Development

The SOEP assesses loneliness using the 3-item short version of the UCLA loneliness scale (Russel, 1996) developed by Hughes et al (2004). The items were translated by into German by an bilingual expert. Details on the scale development and validation can be found in Hughes et al. (2004).

References

- Hawley, L. C., & Cacioppo, J. T. (2010). *Loneliness matters: A theoretical and empirical review of consequences and mechanisms*. *Annals of Behavioral Medicine*, 40(2), 218-227.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). *Loneliness and social isolation as risk factors for mortality: a meta-analytic review*. *Perspectives on Psychological Science*, 10(2), 227-237.
- Hughes, M. E., Waite, L. J., Hawley, L. C., & Cacioppo, J. T. (2004). *A short scale for measuring loneliness in large surveys: Results from two population-based studies*. *Research on Aging*, 26(6), 655-672.
- Luo, Y., Hawley, L. C., Waite, L. J., & Cacioppo, J. T. (2012). *Loneliness, health, and mortality in old age: A national longitudinal study*. *Social Science & Medicine*, 74(6), 907-914.
- Peplau, L. A., & Perlman, D. (1982). *Perspectives on loneliness*. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 1-20). New York: John Wiley & Sons.
- Russell, D. W. (1996). *UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure*. *Journal of Personality Assessment*, 66(1), 20-40.

Items

How often do you feel... (Wie oft haben Sie das Gefühl, ...)

1. that you lack companionship? (... dass Ihnen die Gesellschaft anderer fehlt?)
2. left out? (... außen vor zu sein?)
3. isolated from others? (... dass Sie sozial isoliert sind?)

Answers: 1 = very often (Sehr oft), 2 = often (Oft), 3 = sometimes (Manchmal), 4 = seldom (Selten), 5 = never (Nie); all items need to be reversed before forming the composite score.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2013	plj0587	25762	3.62	0.94	0.56	0.78

continues on next page

Table 15 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2013	plj0588	25684	3.96	0.89	0.68	0.78
2013	plj0589	25738	4.37	0.89	0.61	0.78
2016	plj0587	4281	3.07	1.34	0.54	0.78
2016	plj0588	4218	3.56	1.27	0.68	0.78
2016	plj0589	4260	3.67	1.31	0.62	0.78
2017	plj0587	29718	3.61	1.00	0.56	0.79
2017	plj0588	29632	3.92	0.96	0.68	0.79
2017	plj0589	29665	4.30	0.96	0.64	0.79
2018	plj0587	424	3.16	1.35	0.60	0.81
2018	plj0588	424	3.66	1.30	0.73	0.81
2018	plj0589	426	3.85	1.27	0.66	0.81
2019	plj0587	277	2.96	1.27	0.44	0.71
2019	plj0588	276	4.00	1.12	0.60	0.71
2019	plj0589	277	4.03	1.13	0.57	0.71

1.12 Narcissistic Admiration and Rivalry Questionnaire Short Scale (NARQ-S)

Summary

The Narcissistic Admiration and Rivalry Questionnaire Short Scale (NARQ-S) was developed to assess the agentic (admiration) and antagonistic (rivalry) aspects of narcissism (Back et al., 2013). It is included in the SOEP in 2018 and 2023 at five-year intervals.

Theoretical Background

Narcissism is best understood as a multidimensional construct, incorporating agentic aspects such as dominance, charm, self-assuredness, and humor as well as antagonistic aspects such as selfishness, hostility, entitlement, and arrogance. The narcissistic admiration and rivalry concept (NARC) is a self-regulatory process model of grandiose narcissism that differentiates these two interrelated dimensions of narcissism: narcissistic admiration (agentic aspects driven by self-enhancement) and narcissistic rivalry (antagonistic aspects driven by self-defense). The Narcissistic Admiration and Rivalry Questionnaire (NARQ) assesses the agentic (admiration) and antagonistic (rivalry) aspects of narcissism according to the NARC and was developed and validated by Back et al. (2013). The NARQ-S consists of six items, three for each dimension, that can be answered on a six-point Likert-type scale ranging from 1 (not at all) to 6 (agree completely). Each dimension has three subscales that are measured by one item each and contain content addressing narcissists' affective-motivational, cognitive, and behavioral processes. For admiration, these subscales are grandiosity, strive for uniqueness, and charmingness. The rivalry dimension consists of the subscales devaluation, strive for supremacy, and aggressiveness. A total score of the NARQ-S can be calculated in cases where researchers are interested in a global assessment of grandiose narcissism. However, calculating and using the admiration and rivalry dimensions of NARQ-S is recommended because they provide a nuanced insight into the (at times paradoxical) effects of narcissism.

Scale Development

For each dimension of the NARQ-S, item inclusion was based on the highest factor loading of the respective subscale of the NARQ (Back et al., 2013). A validation study by Leckelt et al. (2018) used data from a large convenience sample (total N = 11,937) as well as data from a large representative sample (total N = 4,433) that included responses to other narcissism measures as well as related constructs, including the other Dark Triad traits, Big Five personality traits, and self-esteem. The study sought to validate the factor structure, provide representative descriptive data and reliability estimates, assess the reliability across the trait spectrum, and examine the nomological network of the NARQ-S. Results suggest that the NARQ-S shows a robust factor structure and is a reliable and valid short measure of the agentic and

antagonistic aspects of grandiose narcissism. The SOEP has included the NARQ-S with both subscales in its original form. It has been included in 2018 and 2023 at five-year intervals.

References

- Back, M. D., Küfner, A. C. P., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. A. (2013). *Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism*. *Journal of Personality and Social Psychology*, 105, 1013–1037.
- Leckelt, M., Wetzel, E., Gerlach, T. M., Ackerman, R.A., Miller, J.D., Chopik, W.J., Penke, L., Geukes, K., Küfner, A. C. P., Huttelman, R., Richter, D., Renner, K.-H., Allroggen, M., Brecheen, C., Campbell, W. K., Grossmann, I. & Back, M. D. (2018). Validation of the Narcissistic Admiration and Rivalry Questionnaire Short Scale (NARQ-S) in convenience and representative samples. *Psychological Assessment*, 30, 86–96.

Items

Please indicate how much the following statements apply to you using a response format ranging from “1 = not agree at all” to “6 = agree completely”. (Wie sehr treffen die folgenden Aussagen auf Sie zu? Antworten Sie bitte anhand der folgenden Skala. Der Wert 1 bedeutet: trifft überhaupt nicht zu, der Wert 6 bedeutet: trifft vollkommen zu. Mit den Werten dazwischen können Sie Ihre Einschätzung abstimmen.)

1. Being a very special person gives me a lot of strength / Ich ziehe viel Kraft daraus, eine ganz besondere Person zu sein (ADM-1)
2. I manage to be the center of attention with my outstanding contributions / Mit meinen besonderen Beiträgen schaffe ich es, im Mittelpunkt zu stehen (ADM-2)
3. I react annoyed if another person steals the show from me / Ich reagiere generell, wenn eine andere Person mir die Schau stiehlt (RIV-1)
4. I deserve to be seen as a great personality / Ich habe es verdient, als große Persönlichkeit angesehen zu werden (ADM-3)
5. I want my rivals to fail / Ich will, dass meine Konkurrenten scheitern (RIV-2)
6. Most people are somehow losers / Die meisten Menschen sind ziemliche Versager (RIV-3)

Scale: 1 (not agree at all / trifft überhaupt nicht zu) to 6 (agree completely / trifft vollkommen zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2018	plh0361	25187	2.60	1.50	0.57	0.78
2018	plh0362	25192	2.40	1.35	0.59	0.78
2018	plh0363	25283	1.76	1.10	0.52	0.78
2018	plh0364	25128	2.07	1.30	0.62	0.78
2018	plh0365	25169	1.61	1.08	0.45	0.78
2018	plh0366	25124	1.86	1.11	0.39	0.78

1.13 Optimism/Pessimism – Attitudes toward the Future

Summary

The SOEP measured respondents' attitudes toward the future with an individual item in 1999, 2005, 2009, 2014, and 2019.

Theoretical Background

For pragmatic reasons and to save time, surveys usually measure attitudes about the future and future orientations by asking respondents whether they see the future positively or negatively, that is, optimistically or pessimistically. In the analysis of attitudes toward the future, questions on the nature and emergence of future orientations are of interest (e.g., whether attitudes about the future are less positive in adults than in young people, or whether young women are less optimistic about the future than young men; Trommsdorff, 1994). Furthermore, making assumptions about the future makes it possible to plan and anticipate one's future actions. Attitudes about the future should therefore provide the basis for decisions and planning behavior.

Scale Development

The question about attitudes toward the future was included in the SOEP on the recommendation of Gisela Trommsdorff. Additional information on the validity of this individual item can be found in Trommsdorff (1994).

References

Trommsdorff, G. (1994). *Zukunft als Teil individueller Handlungsorientierungen*. In E. Holst, J. P. Rinderspacher & J. Schupp (Hrsg.), *Erwartungen an die Zukunft. Zeithorizonte und Wertewandel in der sozialwissenschaftlichen Diskussion* (pp. 45-76). Frankfurt a. M.: Campus.

Items

When you think about the future (Wenn Sie an die Zukunft denken):

1. Are you ... (Sind Sie da ...)

Scale: 1 (optimistic / optimistisch) to 4 (pessimistic / pessimistisch)

Test-Retest Correlations

In 2009, this item was included in a retest taken by a subsample ($N = 174$) within 30 to 49 days after the initial test. Test-retest correlation was .60.

Items and Scale Statistics

year	variable	count	mean	sd
1999	plh0244	13989	1.99	0.80
2005	plh0244	20981	2.17	0.81
2009	plh0244	20699	2.23	0.81
2014	plh0244	27275	1.89	0.75
2019	plh0244	25816	1.94	0.75

1.14 Parenting Goals

Summary

The questions on parenting goals were taken from Kohn (1977). The 18 items can be combined into two scales: "autonomy" and "conformity." Parenting goals have been measured in the SOEP since 2010 in the questionnaire for parents of children between the ages of 7 and 8.

Theoretical Background

Kohn (1977) found an association between parenting goals (conformity and autonomy) and the parents' social class: Working-class parents emphasized discipline, manners, cleanliness, good behavior in school, honesty, and obedience, whereas middle-class parents emphasized consideration, interest in why and how things happen, responsibility, and self-control. This suggests that lower-class parents place more value on conformity and higher-class parents place more value on personal autonomy. The different values of parents from different social classes regarding childrearing are transferred to their children through their own behavior and shape their children's social character.

Scale Development

The scale measuring parenting goals was taken from the German General Social Survey (ALLBUS). Further information on the scale can be found in Terwey (2000).

References

Kohn, M. (1977). *Class and conformity: A study in values*. Chicago: University of Chicago Press.

Terwey, M. (2000). ALLBUS: A German General Social Survey. *Schmollers Jahrbuch*, 120, 151-158.

Items

In the following, we will list a few traits and abilities that parents can foster in their children through their approach to parenting. How important do you consider the following parenting goals? That the child... (Im Folgenden werden einige Eigenschaften und Fähigkeiten genannt, die man durch Erziehung fördern kann. Für wie wichtig halten Sie persönlich die folgenden Erziehungsziele? Dass das Kind...)

Autonomy / Selbstständigkeit

1. Is interested in how and why things happen (sich dafür interessiert, wie und warum bestimmte Dinge passieren)
2. Is honest (ehrlich ist)
3. Is responsible (verantwortungsbewusst ist)
4. Has good judgment (ein gutes Urteilsvermögen besitzt)
5. Strives to achieve his/her goals (sich bemüht, seine Ziele zu erreichen)
6. Learns to overcome obstacles in life (lernt, sich im Leben auch gegen Widerstände durchzusetzen).

Scale: 1 (Not at all important / Überhaupt nicht wichtig) to 5 (Very important / Sehr wichtig)

Obedience / Conformity (Gehorsam / Konformität)

1. Is good in school (ein guter Schüler wird)
2. Gets along with other children (sich gut mit anderen Kindern versteht)
3. Behaves like normal girl/boy (sich wie ein normales Mädchen bzw. wie ein normaler Junge verhält)
4. Has good manners (gute Umgangsformen hat)
5. Has good self-control (Selbstbeherrschung besitzt)
6. Is considerate of others (auf andere Rücksicht nimmt)
7. Obeys his/her parents (seinen Eltern gehorcht)
8. Is neat and clean (ordentlich und sauber ist)
9. Fits in well in groups (sich gut in Gruppen einfügen kann)
10. Is satisfied with his/her own abilities (zufrieden mit dem ist, was es hat und kann)
11. Learns to avoid risks in life (lernt, Risiken im Leben zu meiden)
12. Is liked by others, friendly (von anderen gemocht wird, liebenswert ist)

Scale: 1 (not at all important / überhaupt nicht wichtig) to 5 (very important / sehr wichtig)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2010-2020	edgoal3	14854	4.50	0.60	0.44	0.77
2010-2020	edgoal5	14879	4.82	0.42	0.43	0.77
2010-2020	edgoal8	14879	4.63	0.53	0.59	0.77

continues on next page

Table 18 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2010-2020	edgoal11	14842	4.44	0.61	0.57	0.77
2010-2020	edgoal13	14878	4.54	0.56	0.55	0.77
2010-2020	edgoal15	14855	4.53	0.59	0.53	0.77
2010-2020	edgoal1	14896	4.37	0.67	0.52	0.86
2010-2020	edgoal2	14903	4.56	0.55	0.45	0.86
2010-2020	edgoal4	14814	4.10	0.96	0.56	0.86
2010-2020	edgoal6	14890	4.57	0.57	0.57	0.86
2010-2020	edgoal7	14868	4.36	0.65	0.61	0.86
2010-2020	edgoal9	14869	4.58	0.56	0.48	0.86
2010-2020	edgoal10	14862	4.29	0.70	0.60	0.86
2010-2020	edgoal12	14878	4.24	0.70	0.64	0.86
2010-2020	edgoal14	14861	4.27	0.65	0.60	0.86
2010-2020	edgoal16	14854	4.39	0.72	0.43	0.86
2010-2020	edgoal17	14825	3.72	1.02	0.59	0.86
2010-2020	edgoal18	14859	3.97	0.80	0.60	0.86

1.15 Parenting Role

Summary

The questions on the parenting role were taken from the Panel Analysis of Intimate Relationships and Family Dynamics (pairfam) project's parenting questionnaire (Wendt et. al., 2011). The ten items can be combined into three scales: "autonomy," "hostile attributions," and "willingness to make sacrifices." The questions on the parenting role have been asked in the SOEP since 2010 in the questionnaire for parents of children aged 7-8 years.

Theoretical Background

The four items assessing "autonomy in the parenting role" are based on an instrument developed by Skinner and Regan (1992). The negative items measure the parents' feelings of irksome dependence in their interaction with the child. Furthermore, it is assumed that the feeling of autonomy in the parenting role is also expressed as positive feelings towards the child. The three items of the scale "hostile attributions" are newly developed by pairfam and measure the parental disposition to interpret the child's behavior as intentionally hostile or egoistic. The scale "willingness to make sacrifices" is an adapted version from the AGAPE scale developed by Bierhoff, Grau, & Ludwig (1993) to assess parents' willingness to make sacrifices in their relationship with their child.

Scale Development

Information on the scale development can be found in the documentation provided by pairfam (Wendt et. al., 2011).

References

- Bierhoff, H. W., Grau, I., & Ludwig, A. (1993). *Marburger Einstellungsindex für Liebesstile (MEIL)*. Göttingen: Hogrefe.
- Skinner, E. A., & Regan, C. (1992). *Parenting sense of autonomy*. Technical Report. University of Rochester, Rochester, NY.
- Wendt, E.-V., Schmahl, F., Thönnissen, C., Schaer, M., & Walper, S. (2011). *Scales Manual of the German Family Panel. pairfam (Panel Analysis of Intimate Relationships and Family Dynamics)*. Bremen, Chemnitz, Munich.

Items

Autonomy

1. I have the feeling that taking care of my child/my children takes up all my strength and that my whole life revolves around it (R) (Ich habe das Gefühl, dass Betreuung und Erziehung meines Kindes mich völlig in Beschlag nehmen, mein ganzes Leben bestimmen).
2. I wish I didn't feel so trapped by my parental duties (R) (Ich wünschte, ich würde mich durch meine Elternpflichten nicht so gefangen fühlen).
3. When I am with my child/children there is nothing else I'd rather be doing (Wenn ich mit meinem Kind zusammen bin, gibt es nichts anderes, was ich lieber täte).
4. I look forward to spending time with my child/children (Ich freue mich darauf, mit meinem Kind zusammen zu sein).

Scale: 1 (Not at all / stimme überhaupt nicht zu) to 5 (Absolutely / stimme voll und ganz zu)

Hostile Attributions

1. When my child disobeys and breaks rules, he/she just wants to annoy me (Wenn mein Kind nicht gehorcht und etwas Verbotenes tut, will es mich ärgern).
2. If there are any problems with the way I raise my child, then it's my child's fault (Wenn es Probleme in der Erziehung gibt, liegt das an meinem Kind).
3. It seems to me that when my child misbehaves, he/she does it intentionally (Ich denke, wenn mein Kind sich falsch verhält, macht es das mit Absicht).

Scale: 1 (Not at all / stimme überhaupt nicht zu) to 5 (Absolutely / stimme voll und ganz zu)

Readiness to Make Sacrifices

1. I am usually willing to sacrifice my own desires to satisfy those of my child (Gewöhnlich bin ich bereit, meine eigenen Wünsche denen meines Kindes zu opfern).
2. I would put up with anything for the good of my child (Ich würde alles aushalten für das Wohl meines Kindes).
3. I often stop what I am doing to offer help to my child (Ich lasse oft alles stehen und liegen, um mein Kind zu unterstützen).

Scale: 1 (Not at all / Stimme überhaupt nicht zu) to 5 (Absolutely / Stimme voll und ganz zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2010-2020	bepar3R	14814	3.57	1.14	0.37	0.52
2010-2020	bepar4R	14778	3.89	1.05	0.49	0.52
2010-2020	bepar6	14834	3.88	0.99	0.16	0.52
2010-2020	bepar10	14868	4.63	0.59	0.28	0.52
2010-2020	bepar2	14829	2.03	1.06	0.47	0.64
2010-2020	bepar5	14809	1.59	0.81	0.38	0.64
2010-2020	bepar8	14825	1.73	0.87	0.53	0.64
2010-2020	bepar1	14849	3.98	0.88	0.45	0.65
2010-2020	bepar7	14828	4.32	0.85	0.47	0.65
2010-2020	bepar9	14856	3.72	0.97	0.46	0.65

1.16 Parenting Style

Summary

The questions on the parenting style were taken from the Panel Analysis of Intimate Relationships and Family Dynamics (pairfam) project's parenting questionnaire (Wendt et. al., 2011). The 18 items can be combined into six scales: "emotional warmth," "inconsistent parenting," "monitoring," "negative communication," "psychological control," and "strict control." The questions on parenting style have been asked in the SOEP since 2010 in the questionnaire for parents of children aged 7-8 years.

Theoretical Background

The scale "emotional warmth" comprises three items indicating the degree of affirmative attention and care in parenting. The items are based on mothers' and fathers' actual parenting behavior (see the corresponding scale of Jaursch, 2003, based on Perris et al., 1980, and Schuhmacher, Eisemann, & Brähler, 1999). The scale "inconsistent parenting" comprises three items indicating the degree of inconsistent behavior in parenting. The items are based on a questionnaire on parenting from Reichle and Franiek (2005). The scale "monitoring" comprises three items indicating the degree to which parents are informed about their child's activities and social contacts. The items are based on a questionnaire on parenting from Reichle and Franiek (2005). The scale "negative communication" comprises three items indicating the degree to which parents behave negatively toward their child. The items are based on the instrument developed by Schwarz, Walper, Gödde, and Jurasic (1997). The scale "psychological control" consists of three items. The items assess negative intrusive thoughts, feelings, and behavior of parents toward their child and are a shortened and adapted version of the scale "psychological pressure" from the "Zurich Brief Questionnaire for the Assessment of Parental Behaviors" (Reitzle et al. 2001). The scale "strict control" comprises three items indicating harsh control and authoritarian behavior of parents. The items are based on the instrument of Schwarz et al. (1997).

Scale Development

Information on the scale development can be found in the documentation of pairfam (Wendt et. al., 2011).

References

- Perris, C., Jacobsson, L., Lindström, H., von Knorring, L., & Perris, H. (1980). *Development of a new inventory for assessing memories of parental rearing behaviour*. Acta Psychiatrica Scandinavica, 61, 265-274.
- Jaursch, Stefanie, 2003. *Erinnertes und aktuelles Erziehungsverhalten von Müttern und Vätern: Intergenerationale Zusammenhänge und kontextuelle Faktoren*. Dissertation. Friedrich-Alexander-Universität Erlangen-Nürnberg.
- Reichle, B., & Franiek, S. (2005). *Erziehungsstil aus Elternsicht - Erweiterte deutsche Version des Alabama Parenting Questionnaire (EDAPQ) (Expanded German Version of the Alabama Parenting Questionnaire)*. Hochschule Ludwigshafen: Institut für Pädagogische Psychologie und Soziologie.
- Reitzle, M., Winkler Metzke, C., & Steinhausen, H.-C. (2001). *Eltern und Kinder: Der Zürcher Kurzfragebogen zum Erziehungsverhalten (Zurich Brief Questionnaire for the Assessment of Parental Behaviors)*. Diagnostika, 47, 196-207.
- Schumacher, J., Eisemann, M., & Brähler, E. (1999). *Rückblick auf die Eltern: Der Fragebogen zum erinnerten elterlichen Erziehungsverhalten (FEE)*. Diagnostika, 45, 194-204.
- Schwarz, B., Walper, S., Gödde, M., & Jurasic, S. (1997). *Dokumentation der Erhebungsinstrumente der 1. Haupterhebung (überarb. Version)*. Berichte aus der Arbeitsgruppe "Familienentwicklung nach der Trennung," 14.
- Wendt, E.-V., Schmahl, F., Thönnissen, C., Schaer, M., & Walper, S.). *Scales Manual of the German Family Panel. pairfam (Panel Analysis of Intimate Relationships and Family Dynamics)*. Bremen, Chemnitz, Munich.

Items

Emotional Warmth

1. I show my child with words and gestures that I care about him/her (Ich zeige meinem Kind mit Worten und Gesten, dass ich es gerne habe).
2. I console child up when he/she is sad (Ich tröste mein Kind, wenn es traurig ist).
3. I praise my child (Ich lobe mein Kind).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Inconsistent Parenting

1. I reduce punishments or end them early (Ich schwäche eine Bestrafung ab oder hebe sie vorzeitig auf).
2. I threaten my child with a punishment but don't actually follow through (Ich drohe meinem Kind eine Strafe an, bestrafe es aber dann doch nicht).
3. I find it hard to set and keep consistent rules for my child (Es fällt mir schwer in meiner Erziehung konsequent zu sein).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Monitoring

1. I try to actively influence my child's circle of friends (Ich versuche den Freundeskreis meines Kindes aktiv zu beeinflussen).
2. When my child goes out, I ask what he/she did and experienced (Wenn mein Kind unterwegs war, frage ich nach, was es getan und erlebt hat).
3. When my child goes out, I know exactly where he/she is (Wenn mein Kind außer Haus ist, weiß ich genau, wo es sich aufhält).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Negative Communication

1. I criticize my child (Ich kritisiere mein Kind).
2. I yell at my child when he/she does something wrong (Ich schreie mein Kind an, wenn es etwas falsch gemacht hat).
3. I scold my child when I am angry at him/her (Ich beschimpfe mein Kind, weil ich wütend auf es bin).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Psychological Control

1. I am disappointed and sad when my child misbehaves (Ich bin enttäuscht und traurig, wenn sich mein Kind schlecht benommen hat).
2. I think my child is ungrateful when he/she does not obey me (Ich halte mein Kind für undankbar, wenn es mir nicht gehorcht).
3. I don't talk to my child for a while when he/she does something wrong (Ich rede eine Zeit lang nicht mit meinem Kind, wenn es etwas angestellt hat).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Strict Control

1. I tend to be a strict parent (Ich bin eher streng zu meinem Kind).
2. If my child does something against my will, I punish him/her (Wenn mein Kind etwas gegen meinen Willen tut, bestrafe ich es).
3. I make it clear to my child that he/she is not to break my rules or question my decisions (Ich gebe meinem Kind zu verstehen, dass es sich meinen Anordnungen und Entscheidungen nicht widersetzen soll).

Scale: 1 (Never / nie) to 5 (Frequently / sehr häufig)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2010-2020	edbeh1	14673	4.47	0.64	0.55	0.73
2010-2020	edbeh8	14652	4.50	0.68	0.54	0.73
2010-2020	edbeh13	14634	4.36	0.66	0.56	0.73
2010-2020	edbeh5	14635	2.47	1.00	0.55	0.69
2010-2020	edbeh16	14518	2.66	0.98	0.50	0.69
2010-2020	edbeh18	14617	2.47	0.95	0.47	0.69
2010-2020	edbeh3	14653	4.34	0.71	0.29	0.36
2010-2020	edbeh6	14636	4.45	0.78	0.27	0.36
2010-2020	edbeh15	14604	2.18	1.05	0.11	0.36
2010-2020	edbeh2	14649	3.08	0.73	0.35	0.62
2010-2020	edbeh9	14654	2.26	0.83	0.51	0.62
2010-2020	edbeh14	14627	1.85	0.84	0.44	0.62
2010-2020	edbeh10	14600	1.54	0.76	0.38	0.51
2010-2020	edbeh11	14636	1.48	0.80	0.31	0.51
2010-2020	edbeh17	14610	2.69	0.91	0.29	0.51
2010-2020	edbeh4	14645	2.63	0.81	0.42	0.55
2010-2020	edbeh7	14627	2.95	0.90	0.33	0.55
2010-2020	edbeh12	14574	2.95	1.00	0.33	0.55

1.17 Patient Health Questionnaire – 4 (PHQ-4)

Summary

The Patient Health Questionnaire-4 (PHQ-4) is an ultra-brief screening instrument to assess the two leading symptoms of a depression and anxiety (Kroenke et al., 2009). It is included in the SOEP in its original form in 2016 and since 2019 at two-year intervals.

Theoretical Background

The Patient Health Questionnaire-4 (PHQ-4) is an ultra-brief screening instrument to assess the two leading symptoms of a depression and anxiety. It was developed and validated by Kroenke et al. (2009) to account for the fact that those two mental disorders are the most prevalent mental disorders in the general population, both are often comorbid, and patients that are affected by either or both of the disorders often lack the concentration to fill in long and detailed questionnaires. The PHQ-4 consists of four items that can be answered on a four-point Likert-type scale (0 = not at all, 1 = several days, 2 = more than half days, 3 = nearly every day). Two items measure the core symptoms of depression and form the PHQ-2 subscale of the PHQ-4. Two items measure the core symptoms of anxiety and form the GAD-2 subscale of the PHQ-4. Both subscales have independently been shown to be good brief screening tools. The total PHQ-4 score complements the subscale scores as an overall measure of symptom burden, as well as functional impairment and disability. An elevated PHQ-4 score is not diagnostic, but is, instead, an indicator for further inquiry to establish the presence or absence of a clinical disorder warranting treatment.

Scale Development

The two-item PHQ-2 measures anhedonia (“little interest or pleasure in doing things”) and depressed mood (“Feeling down, depressed or hopeless”) over the past two weeks. The final sum score of both item ranges from 0 to 6. Scores of 3 and above indicate a depressive disorder with a sensitivity of 79 % and a specificity of 86 %. The two-item GAD-2 measures general irritability (“feeling nervous, anxious, or on edge”) and worries (“not being able to stop or control worrying”) over the past two weeks. The GAD-2 final sum scores also range from 0 to 6. A cutoff of 3 has reasonable sensitivity for generalized anxiety disorder (88%), panic disorder (76%), and social anxiety disorder

(70%), and moderate sensitivity for posttraumatic stress disorder (59%), and good specificity (81%–83%) for all four disorders. The SOEP has included the PHQ-4 with both subscales in its original form. It has been included since 2016 at two- or three-year intervals. So far it has been assessed in 2016, 2019, and 2021. In addition, it has been assessed in both soep-cov survey waves.

References

- Arroll B, Goodyear-smith F, Crengle S, et al. (2010). Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. *Annals of Family Medicine*, 8, 4, 348-53.
- Kroenke K, Spitzer RL, Williams JB. (2003). The Patient Health Questionnaire-2: validity of a two-item depression screener. *Medical Care*, 1284-1292.
- Kroenke, K., Spitzer, R. L., Williams, J. B. W., Löwe, B. (2009) An ultra-brief screening scale for anxiety and depression: the PHQ-4. *Psychosomatics*, 50, 613-21.
- Löwe, B., Wahl, I., Rose, M., Spitzer, C., Glaesmer, H., Wingenfeld, K., ... & Brähler, E. (2010). A 4-item measure of depression and anxiety: validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of affective disorders*, 122(1-2), 86-95.

Items

Over the last two weeks, how often have you been bothered by any if the following problems? (Jetzt geht es um die letzten zwei Wochen. Wie oft fühlen Sie sich da durch die folgenden Beschwerden beeinträchtigt?)

1. Little interest or pleasure in doing things / Wenig Interesse oder Freude an Ihren Tätigkeiten (PAQ-2)
2. Feeling down, depressed, or hopeless / Niedergeschlagenheit, Schwermut oder Hoffnungslosigkeit (PAQ-2)
3. Feeling nervous, anxious, or on edge / Nervosität, Ängstlichkeit oder Anspannung. (GAD-2)
4. Unable to stop or control worrying / Nicht in der Lage sein, Sorgen zu stoppen oder zu kontrollieren. (GAD-2)

Answers: 1 = not at all (überhaupt nicht), 2 = several days (an einzelnen Tagen), 3 = more than half days (an mehr als der Hälfte der Tage), 4 = nearly every day ((fast) jeden Tag); Items need to be recoded to 0 to 3 instead of 1 to 4.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2016	plh0339	28550	1.71	0.74	0.51	0.80
2016	plh0340	28678	1.53	0.74	0.70	0.80
2016	plh0341	28720	1.66	0.75	0.63	0.80
2016	plh0342	28585	1.45	0.73	0.64	0.80
2019	plh0339	29339	1.61	0.76	0.56	0.82
2019	plh0340	29450	1.43	0.71	0.72	0.82
2019	plh0341	29462	1.51	0.72	0.65	0.82
2019	plh0342	29412	1.32	0.65	0.65	0.82

1.18 Personality – Big Five

1.18.1 Big Five (Adults)

Summary

The Big Five concept makes it possible to describe human personality traits in terms of individually differing behaviors and experiences. At the heart of this approach lies the assumption that there exist five broad, non-overlapping dimensions of personality that can be used to describe human personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism. The scale consists of 15 items measuring the “Big Five” and was used in the SOEP

in 2005, 2009, 2013, and 2017. From 2009 on the scale was extended by one additional item measuring openness. In 2019 the concept was used ahead of its regular interval because both, sample P (“Top Shareholder Sample”) and sample Q (Sample P “LGB**”) started in that year. The next replication is in 2023.

Theoretical Background

The Big Five Model of personality traits, or the “Five-Factor Model,” is a psychological approach aimed at comprehensively describing the human personality. According to this model, intra-individual personality differences can be measured in five broad dimensions – the so-called “Big Five.” Personality traits are coherent and constant structures of feelings, thoughts, and forms of behavior that influence psychological conditions and individual actions (Costa & McCrae, 1985). The Five-Factor Model assumes that values in these different dimensions vary from one individual to the next, but that the basic structure of the personality, at least for individuals from Western cultures, remains constant. The five personality dimensions are: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Individuals with high openness to experience describe themselves as having a lively imagination, being original and creative, and appreciating artistic and aesthetic experiences. Individuals with high conscientiousness describe themselves as highly motivated, success-oriented, thorough in their work, and as completing their tasks effectively and efficiently. Individuals with high extroversion see themselves as communicative, talkative, open, and outgoing. In contrast, introverted individuals describe themselves as reserved or shy. Individuals with high values for neuroticism describe themselves as nervous, often worried, and as having difficulties dealing with stress. The antithesis of neuroticism is emotional stability. Finally, individuals with high agreeableness describe themselves as considerate and friendly, willing to forgive, and as not being unkind to others. The Big Five approach has its origins in two distinct traditions in psychology: first, in the psycho- lexical tradition of Allport (1937) and Cattell (1946), and second, in the differential diagnosis or clinical tradition of personality research pioneered by Stern (1911) and Eysenck (1947). Both lines of research were ultimately brought together into a single model and formalized by Costa and McCrae (1985). Since then, the validity of this approach has been confirmed in a number of studies of different groups of individuals from different countries including the USA, England, Germany, Spain, Sweden, and China.

Scale Development

For reasons of space and time, the SOEP required a short and efficient scale that is nevertheless capable of reflecting the basic structure of the Five-Factor Model in a robust and reliable way. The choice of items was made based on five criteria: (1) the conditions and limitations that result from the SOEP questionnaire, (2) the aim of achieving balanced coverage of the basic personality dimensions, (3) the internal consistency of the scale, (4) the dimensionality of the items, and (5) the correspondence with other, established measurement instruments. The guideline in developing the short scale was to use at least three items per latent construct. The development and validation of the scale took place in the framework of a SOEP pretest, which represents an independent representative survey of the resident population of Germany. The items were taken from the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003) and the BFI-25. The BFI-25 was developed based on a principal component analysis carried out with the entire inventory by John et al. (1991): the five items for each personality dimension with the highest factor loadings were included. Further information can be found in Gerlitz und Schupp (2005) and in Lang et al. (2011).

References

- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Henry Holt.
- Cattell, R. B. (1946). *Description and measurement of personality*. Oxford, England: World Book Company.
- Costa, P. T. & McCrae, R. R. (1985). *The NEO personality inventory: Manual, form S and form R*. Psychological Assessment Resources.
- Eysenck, H. J. (1947). *Dimensions of personality*. London: Routledge & Kegan Paul.
- Gerlitz, J.-Y., & Schupp, J. (2005). *Zur Erhebung der Big-Five-basierten Persönlichkeitsmerkmale im SOEP (The measurement of the Big Five personality traits in the SOEP)*. Berlin: DIW Berlin.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). *A very brief Measure of the Big-Five Personality Domains*. *Journal of Research in Personality*, 37, 504-528.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The “Big Five” Inventory – Versions 4a and 54*. Berkeley, University of California: Institute of Personality and Social Research.

John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (2. ed., pp. 102-138). New York: 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, 548-567.

Stern, W. (1911). Die differentielle Psychologie in ihren methodischen Grundlagen. Leipzig: Barth.

Items

I see myself as someone who (Ich bin jemand, der):

Openness

1. is original, comes up with new ideas (originell ist, neue Ideen einbringt).
2. values artistic, aesthetic experiences (künstlerische, ästhetische Erfahrungen schätzt).
3. has an active imagination (eine lebhafte Phantasie, Vorstellungen hat).
4. is eager for knowledge (wissbegierig ist).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0215	20909	4.57	1.44	0.46	0.63
2005	plh0220	20892	4.11	1.82	0.39	0.63
2005	plh0225	20954	4.80	1.53	0.47	0.63
2009	plh0255	20675	5.34	1.35	0.45	0.67
2009	plh0215	20603	4.51	1.44	0.49	0.67
2009	plh0225	20642	4.70	1.55	0.49	0.67
2009	plh0220	20565	3.99	1.85	0.42	0.67
2012	plh0215	7140	4.89	1.34	0.44	0.62
2012	plh0220	7080	4.11	1.89	0.37	0.62
2012	plh0225	7133	4.98	1.52	0.44	0.62
2012	plh0255	7141	5.52	1.25	0.39	0.62
2013	plh0220	18939	4.25	1.83	0.41	0.66
2013	plh0225	19014	4.83	1.50	0.48	0.66
2013	plh0255	19045	5.48	1.26	0.44	0.66
2013	plh0215	18992	4.67	1.39	0.47	0.66
2017	plh0255	29457	5.64	1.26	0.44	0.66
2017	plh0215	29395	4.82	1.43	0.45	0.66
2017	plh0225	29383	4.98	1.55	0.47	0.66
2017	plh0220	29189	4.44	1.87	0.43	0.66
2019	plh0255	25934	5.56	1.24	0.43	0.65
2019	plh0220	25784	4.26	1.90	0.40	0.65
2019	plh0225	25901	4.81	1.56	0.47	0.65
2019	plh0215	25884	4.70	1.40	0.46	0.65

Conscientiousness

1. does a thorough job (gründlich arbeitet).
2. tends to be lazy (R) (eher faul ist).
3. does things effectively and efficiently (Aufgaben wirksam und effizient erledigt).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0212	20962	6.18	1.03	0.53	0.62
2005	plh0218R	20945	5.74	1.53	0.37	0.62
2005	plh0222	20916	5.78	1.13	0.45	0.62
2009	plh0212	20628	6.14	1.06	0.50	0.59
2009	plh0218R	20615	5.57	1.58	0.33	0.59
2009	plh0222	20609	5.75	1.15	0.43	0.59
2012	plh0212	7150	6.14	0.96	0.49	0.60
2012	plh0218R	7146	5.60	1.57	0.37	0.60
2012	plh0222	7134	5.80	1.03	0.45	0.60
2013	plh0212	19020	6.16	0.99	0.49	0.58
2013	plh0218R	18997	5.54	1.59	0.32	0.58
2013	plh0222	19004	5.79	1.08	0.43	0.58
2017	plh0212	29410	6.12	1.01	0.51	0.61
2017	plh0218R	29461	5.45	1.64	0.39	0.61
2017	plh0222	29416	5.81	1.07	0.46	0.61
2019	plh0212	25914	6.11	1.02	0.50	0.59
2019	plh0218R	25884	5.50	1.60	0.34	0.59
2019	plh0222	25911	5.75	1.09	0.45	0.59

Extraversion

1. is communicative, talkative (kommunikativ, gesprächig ist).
2. is outgoing, sociable (aus sich herausgehen kann, gesellig ist).
3. is reserved (R) (zurückhaltend ist).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0213	20991	5.50	1.34	0.54	0.66
2005	plh0219	20977	5.09	1.45	0.53	0.66
2005	plh0223R	20987	3.90	1.63	0.36	0.66
2009	plh0213	20661	5.43	1.37	0.54	0.66
2009	plh0219	20634	4.98	1.46	0.53	0.66
2009	plh0223R	20624	3.91	1.59	0.36	0.66
2012	plh0213	7149	5.74	1.24	0.54	0.68
2012	plh0219	7146	5.26	1.40	0.54	0.68
2012	plh0223R	7140	4.21	1.63	0.42	0.68
2013	plh0213	19039	5.55	1.30	0.54	0.66
2013	plh0219	19024	5.15	1.41	0.54	0.66
2013	plh0223R	19029	3.87	1.59	0.36	0.66
2017	plh0213	29502	5.63	1.33	0.55	0.66
2017	plh0219	29469	5.25	1.45	0.53	0.66
2017	plh0223R	29388	3.98	1.66	0.36	0.66
2019	plh0213	25944	5.56	1.33	0.57	0.69
2019	plh0219	25892	5.10	1.45	0.55	0.69

continues on next page

Table 24 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2019	plh0223R	25927	4.09	1.62	0.41	0.69

Agreeableness

1. is sometimes somewhat rude to others (R) (manchmal etwas grob zu anderen ist).
2. has a forgiving nature (verzeihen kann).
3. is considerate and kind to others (rücksichtsvoll und freundlich mit anderen umgeht).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0214R	20974	5.07	1.66	0.29	0.51
2005	plh0217	20974	5.51	1.32	0.27	0.51
2005	plh0224	21005	5.79	1.10	0.45	0.51
2009	plh0214R	20649	4.96	1.64	0.29	0.50
2009	plh0217	20658	5.38	1.35	0.27	0.50
2009	plh0224	20662	5.70	1.12	0.43	0.50
2012	plh0214R	7146	4.86	1.72	0.23	0.42
2012	plh0217	7148	5.54	1.29	0.19	0.42
2012	plh0224	7142	5.79	1.04	0.39	0.42
2013	plh0214R	19019	4.96	1.67	0.28	0.48
2013	plh0217	19042	5.43	1.32	0.26	0.48
2013	plh0224	19035	5.80	1.06	0.41	0.48
2017	plh0214R	29465	5.02	1.72	0.32	0.51
2017	plh0217	29484	5.55	1.36	0.28	0.51
2017	plh0224	29481	5.91	1.05	0.43	0.51
2019	plh0214R	25916	5.04	1.67	0.29	0.49
2019	plh0217	25912	5.39	1.38	0.25	0.49
2019	plh0224	25946	5.82	1.05	0.43	0.49

Neuroticism

1. worries a lot (sich oft Sorgen macht).
2. gets nervous easily (leicht nervös wird).
3. is relaxed, handles stress well (R) (entspannt ist, mit Stress gut umgehen kann).

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0216	20977	4.72	1.67	0.35	0.60
2005	plh0221	20964	3.71	1.73	0.49	0.60
2005	plh0226R	20975	3.45	1.51	0.39	0.60
2009	plh0216	20673	4.35	1.68	0.40	0.62
2009	plh0221	20650	3.61	1.68	0.49	0.62
2009	plh0226R	20650	3.52	1.50	0.40	0.62
2012	plh0216	7152	4.71	1.71	0.41	0.63

continues on next page

Table 26 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2012	plh0221	7143	3.58	1.70	0.50	0.63
2012	plh0226R	7139	3.42	1.51	0.42	0.63
2013	plh0216	19040	4.24	1.68	0.39	0.62
2013	plh0221	19019	3.65	1.69	0.50	0.62
2013	plh0226R	19036	3.41	1.48	0.41	0.62
2017	plh0216	29490	4.42	1.76	0.36	0.59
2017	plh0221	29481	3.60	1.72	0.46	0.59
2017	plh0226R	29465	3.33	1.55	0.38	0.59
2019	plh0216	25940	3.97	1.77	0.45	0.66
2019	plh0221	25932	3.39	1.67	0.53	0.66
2019	plh0226R	25933	3.38	1.51	0.43	0.66

Test-Retest Correlations

The Big Five inventory was included in retests taken by subsamples in 2005 and 2009 within 30 to 49 days after the initial test. Pooled across both occasions, test-retest correlations were .64 for the 3-item version of openness (N = 325) and .66 for the 4-item version (N = 167); .53 for conscientiousness; .64 for extraversion; .57 for agreeableness; and .62 for neuroticism.

1.18.2 Big Five (Youth)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2006-2020	jl0368	6964	4.86	1.35	0.41	0.60
2006-2020	jl0373	6896	4.02	1.89	0.38	0.60
2006-2020	jl0378	6962	5.23	1.52	0.41	0.60
2006-2020	jl0380	6941	5.11	1.42	0.35	0.60
2006-2020	jl0365	6972	5.28	1.34	0.58	0.67
2006-2020	jl0371R	6967	4.10	1.80	0.42	0.67
2006-2020	jl0375	6958	5.24	1.22	0.50	0.67
2006-2020	jl0366	6979	5.23	1.52	0.63	0.74
2006-2020	jl0372	6953	5.14	1.48	0.60	0.74
2006-2020	jl0376R	6963	4.15	1.75	0.48	0.74
2006-2020	jl0367R	6958	4.70	1.64	0.25	0.47
2006-2020	jl0370	6970	5.58	1.28	0.25	0.47
2006-2020	jl0377	6971	5.82	1.10	0.41	0.47
2006-2020	jl0369	6970	4.49	1.73	0.36	0.57
2006-2020	jl0374	6970	3.96	1.69	0.45	0.57
2006-2020	jl0379R	6966	3.49	1.53	0.33	0.57

1.18.3 Big Five (13-14 year olds, self-report)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2016-2020	char14	2825	4.77	1.52	0.41	0.59
2016-2020	char19	2796	4.03	2.12	0.37	0.59
2016-2020	char24	2823	5.23	1.65	0.41	0.59
2016-2020	char26	2783	4.97	1.57	0.34	0.59
2016-2020	char11	2828	5.06	1.38	0.60	0.70
2016-2020	char17R	2827	4.15	1.89	0.43	0.70
2016-2020	char21	2827	4.99	1.37	0.57	0.70
2016-2020	char12	2829	5.28	1.52	0.52	0.64
2016-2020	char18	2809	4.96	1.57	0.50	0.64
2016-2020	char22R	2817	4.18	1.78	0.35	0.64
2016-2020	char13R	2824	5.16	1.56	0.30	0.52
2016-2020	char16	2830	5.49	1.46	0.29	0.52
2016-2020	char23	2829	5.81	1.21	0.44	0.52
2016-2020	char15	2827	3.57	1.88	0.36	0.55
2016-2020	char20	2828	3.47	1.74	0.45	0.55
2016-2020	char25R	2822	3.50	1.59	0.27	0.55

1.18.4 Big Five (11-12 year olds, self-report)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2014-2020	char14	4290	4.85	1.57	0.42	0.58
2014-2020	char19	4269	4.35	2.07	0.35	0.58
2014-2020	char24	4306	5.41	1.61	0.39	0.58
2014-2020	char26	4255	5.02	1.63	0.31	0.58
2014-2020	char11	4319	4.94	1.41	0.56	0.68
2014-2020	char17R	4320	4.54	1.85	0.42	0.68
2014-2020	char21	4293	4.91	1.46	0.54	0.68
2014-2020	char12	4310	5.38	1.51	0.46	0.57
2014-2020	char18	4257	5.05	1.54	0.43	0.57
2014-2020	char22R	4294	4.29	1.81	0.29	0.57
2014-2020	char13R	4301	5.25	1.58	0.31	0.53
2014-2020	char16	4316	5.64	1.44	0.29	0.53
2014-2020	char23	4316	5.86	1.19	0.47	0.53
2014-2020	char15	4310	3.44	1.88	0.35	0.51
2014-2020	char20	4304	3.41	1.74	0.41	0.51
2014-2020	char25R	4286	3.74	1.61	0.23	0.51

1.18.5 Big Five (9-10 year olds & 5-6 year olds, parent reports)

References

Asendorpf, J. B., & van Aken, M. A. G. (2003). *Validity of Big Five personality judgments in childhood: A 9 year longitudinal study*. European Journal of Personality, 17, 1-17.

Weinert, S., Asendorpf, J. B., Beelmann, A., Doil, H., Frevert, S., Lohaus, A., & Hasselhorn, M. (2007). *Expertise zur Erfassung von psychologischen Personmerkmalen bei Kindern im Alter von fünf Jahren im Rahmen des SOEP*. Berlin: DIW Berlin.

Items

How would you rank your child in comparison to other children of the same age (Wie würden Sie Ihr Kind im Vergleich zu anderen Kindern gleichen Alters beurteilen):

Openness/Intellect

1. Child is not that interested – hungry for knowledge (ist wenig interessiert – ist wissensdurstig).
2. Child understands quickly – needs more time (begreift schnell – braucht mehr Zeit).

Scale: 0 to 10

Conscientiousness

1. Child is tidy – untidy (ist unordentlich – ist ordentlich).
2. Child is focused – easy to distract (ist konzentriert – ist leicht ablenkbar).

Scale: 0 to 10

Extraversion

1. Child is talkative – quiet (ist gesprächig – ist still).
2. Child is withdrawn – sociable (ist zurückgezogen – ist kontaktfreudig).

Scale: 0 to 10

Agreeableness

1. Child is good-natured – irritable (ist gutmütig – ist reizbar).
2. Child is obstinate – compliant (ist trotzig – ist fügsam).

Scale: 0 to 10

Neuroticism

1. Child is self-confident – insecure (hat Selbstvertrauen – ist unsicher).
2. Child is fearful – fearless (ist ängstlich – ist unängstlich).

Scale: 0 to 10

Items and Scale Statistics

year	variable	count	mean	sd
2012-2020	char7	7112	7.68	2.27
2012-2020	char4R	7112	6.95	2.86
2012-2020	char5	7122	5.03	2.90
2012-2020	char2R	7100	5.44	3.12
2012-2020	char1bR	7124	7.26	2.63
2012-2020	char9	7110	7.60	2.33

continues on next page

Table 30 – continued from previous page

year	variable	count	mean	sd
2012-2020	char6R	7092	7.00	2.67
2012-2020	char3	7097	5.84	2.57
2012-2020	char8	7109	3.46	2.71
2012-2020	char10R	7108	3.69	2.58

Items and Scale Statistics

year	variable	count	mean	sd
2008-2020	char7	7385	8.27	1.99
2008-2020	char4R	7388	7.54	2.48
2008-2020	char5	7403	5.62	2.60
2008-2020	char2R	7386	6.07	2.82
2008-2020	char1bR	7398	7.63	2.49
2008-2020	char9	7379	7.88	2.19
2008-2020	char6R	7376	7.15	2.44
2008-2020	char3	7376	5.71	2.46
2008-2020	char8	7383	3.16	2.59
2008-2020	char10R	7388	3.61	2.51

1.18.6 Big Five (2-3 year olds, parent reports)**References**

Asendorpf, J. B., & van Aken, M. A. G. (2003). *Validity of Big Five personality judgments in childhood: A 9 year longitudinal study*. European Journal of Personality, 17, 1-17.

Weinert, S., Asendorpf, J. B., Beelmann, A., Doil, H., Frevert, S., Lohaus, A., & Hasselhorn, M. (2007). *Expertise zur Erfassung von psychologischen Personmerkmalen bei Kindern im Alter von fünf Jahren im Rahmen des SOEP*. Berlin: DIW Berlin.

Items

How would you rank your child in comparison to other children of the same age (Wie würden Sie Ihr Kind im Vergleich zu anderen Kindern gleichen Alters beurteilen):

Openness/Intellect

1. Quick at learning new things – needs more time (begreift eher schnell – braucht mehr Zeit).

Scale: 0 to 10

Conscientiousness

1. Focused – easily distracted (ist konzentriert – ist leicht ablenkbar).

Scale: 0 to 10

Extraversion

1. Shy – outgoing (ist eher schüchtern – ist eher kontaktfreudig).

Scale: 0 to 10

Agreeableness

1. Obstinate – obedient (ist eher trotzig – ist eher fügsam/folgsam).

Scale: 0 to 10

Items and Scale Statistics

year	variable	count	mean	sd
2005-2020	char4	7018	2.25	2.31
2005-2020	char2	7006	4.15	2.66
2005-2020	char1a	7020	7.49	2.46
2005-2020	char3	7001	4.89	2.50

1.19 Reciprocity

Summary

Reciprocity is understood as the tendency to respond in kind to the actions of other people, that is, to respond to actions directed at oneself by acting in the same or a similar way (Fehr & Schmidt, 2005; Perugini et al., 2003). A distinction is drawn here between negative and positive reciprocity. Negative reciprocity is the tendency to respond to bad treatment by another person in a similarly negative way. Positive reciprocity relates to the tendency to respond positively to a positive experience. Reciprocity was measured in the SOEP in 2005, 2010, 2015, and 2020.

Theoretical Background

The scale is designed to measure reciprocity as an internalized norm within individuals. Reciprocity is understood as the tendency to respond to the actions of other people in kind, that is, to respond to actions directed at oneself by acting in the same or a similar way (Fehr & Schmidt, 2005; Perugini et al., 2003). The action may either have already occurred or be expected in the future. The concept of reciprocity can be used on three levels: 1. To describe real patterns of social exchange in society, 2. To describe the belief of social actors themselves that (and to what extent), from their point of view, relationships are regulated by the norm of reciprocity, 3. To describe the extent to which reciprocity is a norm that governs social actors in their daily interactions and internalized by individuals (Gouldner, 1960). Gouldner also argues that reciprocity is a basic norm that can be found in all historically known societies. Negative reciprocity can be distinguished from positive reciprocity. Negative reciprocity describes the tendency to respond negatively to negative treatment by another person and thus to negatively sanction this behavior. Positive reciprocity describes the tendency to approve and positively sanction positive interpersonal experiences, that is, to return favors. This distinction is required because different individuals respond more or less sensitively to positive or negative experiences and tend toward more or less positive or negative sanctions. Thus, individuals may be careful to always return favors but may at the same time (possibly motivated by Christian norms of forgiveness) refrain from taking revenge or imposing penalties on others (Perugini et al. 2003). Empirically, positive and negative reciprocity are uncorrelated (Egloff, Richter & Schmukle, 2013). Both positive and negative reciprocity could be of interest in research on the motives for providing support of various kinds to friends and relatives or to engage in volunteer work, behavior in dilemma situations (game theory), and on forms of reciprocity as determinants of stability in social relationships.

Scale Development

The original scale (Perugini et al., 2003) consists of 27 items (nine per subscale) that were shortened for use in a survey to a total of nine (three per subscale), taking the three items with the highest factor loadings for each of the subscales. The three original dimensions could not, however, be extracted by means of principal component analysis in the 2004 SOEP pretest: the dimension “belief in reciprocity” is comprised of the dimensions “positive reciprocity” and “negative reciprocity.” That is, the theoretically postulated dimension “belief in reciprocity” is not empirically orthogonal to behavior. Thus, only the two factors “negative reciprocity” and “positive reciprocity” can be found consistently in the sample. Thus, in the shortened version of the questionnaire, only the six items in these two dimensions were used in the main SOEP survey. Further information on scale development and validity can be found in Dohmen et al. (2008, 2009).

References

Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2008). *Representative trust and reciprocity: Prevalence and determinants*. *Economic Inquiry*, 46, 81-90.

Dohmen, T., Falk, A., Huffmann, D., & Sunde, U. (2009). *Homo reciprocans: Survey evidence on behavioral outcomes*. *Economic Journal*, 119, 592 - 612.

Egloff, B., Richter, D., & Schmukle, S. C. (2013). *Need for conclusive evidence that positive and negative reciprocity are unrelated. Comment on Yamagishi, T., et al. (2012) Rejection of unfair offers in the ultimatum game is no evidence of strong reciprocity*. *Proceedings of the National Academy of Sciences of the USA*, 110, 786.

Fehr, E. & Schmidt, K. M. (2006). *The economics of fairness, reciprocity and altruism. Experimental evidence and new theories*. *Handbook of the Economics of Giving, Altruism and Reciprocity*, 615-691.

Gouldner, A. W. (1960). *The Norm of Reciprocity: A Preliminary Statement*. *American Sociological Review*, 25, 161-178.

Perugini, M., Gallucci, M., Presaghi, F., & Ercolani, A. P. (2003). *The personal norm of reciprocity*. *European Journal of Personality*, 17, 251-283.

Items

To what degree do the following statements apply to you personally (In welchem Maße treffen die folgenden Aussagen auf Sie persönlich zu):

Positive

1. If someone does me a favor, I am prepared to return it (Wenn mir jemand einen Gefallen tut, bin ich bereit, dies zu erwidern)
2. I go out of my way to help somebody who has been kind to me in the past (Ich stenge mich besonders an, um jemandem zu helfen, der mir früher schon mal geholfen hat)
3. I am ready to assume personal costs to help somebody who helped me in the past (Ich bin bereit, Kosten auf mich zu nehmen, um jemanden zu helfen, der mir früher geholfen hat)

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Test-Retest Correlations

Positive reciprocity was included in a retest taken by subsamples ($N = 158$) in 2005 within 30 to 49 days after the initial test. Test-retest correlations of the items were (in scale order) .25, .35, and .36; test-retest correlation of scale scores was .42.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0206i01	21015	6.45	0.88	0.41	0.64
2005	plh0206i04	20975	5.90	1.17	0.55	0.64
2005	plh0206i06	20949	5.28	1.48	0.45	0.64
2010	plh0206i01	18857	6.42	0.90	0.38	0.61
2010	plh0206i04	18822	5.88	1.18	0.50	0.61
2010	plh0206i06	18800	5.22	1.49	0.43	0.61
2015	plh0206i01	26987	6.40	0.94	0.35	0.61
2015	plh0206i04	26967	5.90	1.18	0.52	0.61
2015	plh0206i06	26877	5.31	1.49	0.43	0.61
2016	plh0206i01	4400	6.79	0.77	0.31	0.55
2016	plh0206i04	4393	6.78	0.71	0.46	0.55
2016	plh0206i06	4345	6.45	1.12	0.37	0.55
2017	plh0206i01	2883	6.82	0.62	0.31	0.56
2017	plh0206i04	2874	6.75	0.71	0.45	0.56

continues on next page

Table 33 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2017	plh0206i06	2854	6.42	1.16	0.45	0.56
2018	plh0206i01	426	6.81	0.62	0.28	0.53
2018	plh0206i04	422	6.72	0.84	0.44	0.53
2018	plh0206i06	422	6.34	1.29	0.40	0.53
2019	plh0206i01	280	6.71	0.76	0.52	0.71
2019	plh0206i04	277	6.48	1.16	0.61	0.71
2019	plh0206i06	279	6.14	1.38	0.54	0.71
2020	plh0206i01	30344	6.42	0.96	0.38	0.65
2020	plh0206i04	30309	5.97	1.19	0.55	0.65
2020	plh0206i06	30253	5.57	1.40	0.48	0.65

Items

To what degree do the following statements apply to you personally (In welchem Maße treffen die folgenden Aussagen auf Sie persönlich zu):

Negative

1. If I suffer a serious wrong, I will take revenge as soon as possible, no matter what the cost (Wenn mir schweres Unrecht zuteilwird, werde ich mich um jeden Preis bei der nächsten Gelegenheit dafür rächen)
2. If somebody puts me in a difficult position, I will do the same to him/her (Wenn mich jemand in eine schwierige Lage bringt, werde ich das Gleiche mit ihm zu machen)
3. If somebody offends me, I will offend him/her back (Wenn mich jemand beleidigt, werde ich mich ihm gegenüber beleidigend verhalten)

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Test-Retest Correlations

Negative reciprocity was included in a retest taken by a subsample ($N = 158$) in 2005 within 30 to 49 days after the initial test. Test-retest correlations of the items were (in scale order) .44, .42, and .58; test-retest correlation of scale scores was .64.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005	plh0206i02	20947	3.21	1.73	0.71	0.83
2005	plh0206i03	20925	2.88	1.63	0.73	0.83
2005	plh0206i05	20952	3.24	1.73	0.61	0.83
2010	plh0206i02	18822	3.18	1.69	0.70	0.82
2010	plh0206i03	18785	2.83	1.59	0.73	0.82
2010	plh0206i05	18805	3.12	1.70	0.59	0.82
2015	plh0206i02	26921	2.77	1.67	0.68	0.81
2015	plh0206i03	26936	2.47	1.53	0.73	0.81
2015	plh0206i05	26939	2.85	1.70	0.56	0.81
2016	plh0206i02	4298	1.86	1.67	0.58	0.75
2016	plh0206i03	4324	1.58	1.35	0.64	0.75
2016	plh0206i05	4341	1.89	1.65	0.55	0.75
2017	plh0206i02	2815	1.68	1.47	0.56	0.72
2017	plh0206i03	2842	1.62	1.43	0.57	0.72
2017	plh0206i05	2857	1.85	1.65	0.50	0.72
2018	plh0206i02	413	1.90	1.67	0.52	0.68

continues on next page

Table 34 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2018	plh0206i03	414	1.76	1.62	0.57	0.68
2018	plh0206i05	421	2.32	2.00	0.42	0.68
2019	plh0206i02	271	2.12	1.68	0.58	0.75
2019	plh0206i03	276	2.02	1.60	0.65	0.75
2019	plh0206i05	276	2.43	1.88	0.53	0.75
2020	plh0206i02	30253	2.57	1.60	0.67	0.79
2020	plh0206i03	30278	2.30	1.47	0.70	0.79
2020	plh0206i05	30285	2.72	1.67	0.55	0.79

1.20 Risk Aversion

Summary

The global and dimension-specific measurement of risk aversion consists of seven items and was used in the SOEP in 2004 and 2009. An individual item on general risk aversion has been included in the SOEP at two-year intervals since 2004 and annually since 2008.

Theoretical Background

Risks and uncertainties play a role in almost all important life decisions. In their pioneering work on the subject, Kahneman and Tversky (1979) developed a theoretical foundation for the analysis of risk attitudes in the form of “Prospect Theory.” This theory describes the process of decision making in situations of uncertainty, and postulates that the consequences of a decision are evaluated relative to a reference point as either gains or losses, also considering the probability of their occurrence. Here, individual risk attitudes affect not only how individuals evaluate the potential gains and losses but also how they evaluate the respective probabilities of the event’s occurrence. In the economic research, individual risk attitudes are used to explain decisions about financial investments, labor market behavior and success, and health behavior (e.g., Dohmen et al., 2011). More recent work in the field of educational sociology has studied the influence of individual risk aversion on educational decisions (Hartlaub & Schneider, 2013).

Scale Development

The scale was first piloted in the 2003 SOEP pretest and was then used in the 2004 main SOEP survey. Simultaneously to the SOEP pretest, a behaviorally oriented experiment on risk attitudes was carried out with respondents (see Dohmen et al., 2011). In this experiment, respondents were shown a table consisting of 20 text lines and were given the task of deciding in each line whether they would prefer to receive a fixed amount of money or take part in a lottery with a 50% chance of winning 300 euros. In the case of the “safe” option, the amount paid increased progressively from one line to the next (0 euros in the first, 10 euros in the second, and so on up to 190 euros in line 20). Since the expected lottery winnings would be 150 euros, more risk-averse respondents should take the safe option below this value, while risk-seeking participants can be expected to decide for the lottery even with safe options of 160, 170, 180, or 190 euros. The amount paid for the safe option at the time of switching to this option was regressed on the value of the questionnaire on risk aversion. Here, the behavior in the experiment could be predicted well based on the survey responses ($\beta = .61$, $p < .001$).

References

- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual Risk Attitudes: Measurement, Determinants and Behavioral Consequences. *Journal of the European Economic Association*, 9, 522-550.
- Hartlaub, V. & Schneider, T. (2013). Educational choice and risk preferences: How important is relative vs. individual risk preference? *Manuscript submitted for publication.*
- Kahneman, D. & Tversky, A. (1979). Prospect Theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 47, 263-291.

Items

How do you see yourself (Wie schätzen Sie sich persönlich ein):

Risk Aversion in General

1. Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? (Sind Sie im Allgemeinen ein risikobereiter Mensch oder versuchen Sie, Risiken zu vermeiden?)

Scale: 0 (Risk averse / Gar nicht risikobereit) to 10 (Fully prepared to take risks / Sehr risikobereit)

Test-Retest Correlations

Risk aversion in general was included in retests taken by subsamples in 2005, 2006, and 2009 within 30 to 49 days after the respective initial tests. Test-retest correlation pooled across all three waves (N = 607) was .60.

Items and Scale Statistics

year	variable	count	mean	sd
2004	plh0204_v2	21881	4.42	2.38
2006	plh0204_v2	22210	4.77	2.29
2008	plh0204_v2	19639	4.46	2.31
2009	plh0204_v2	20707	3.74	2.21
2010	plh0204_v2	26628	4.42	2.35
2011	plh0204_v2	21011	4.54	2.27
2012	plh0204_v2	27903	4.86	2.26
2013	plh0204_v2	19117	4.51	2.40
2014	plh0204_v2	27275	4.77	2.42
2015	plh0204_v2	27116	4.87	2.44
2016	plh0204_v2	28765	4.86	2.61
2017	plh0204_v2	32247	4.66	2.60
2018	plh0204_v2	30132	4.29	2.62
2019	plh0204_v2	29792	4.99	2.57
2020	plh0204_v2	30334	4.84	2.61

year	variable	count	mean	sd
2006-2020	jl0349	6994	5.88	2.24

year	variable	count	mean	sd
2016-2020	char30	2855	4.89	2.48

year	variable	count	mean	sd
2014-2020	char30	4340	5.09	2.57

Items

How would you rate your willingness to take risks in the following areas? How is it ... (Wie würden Sie Ihre Risikobereitschaft in Bezug auf die folgenden Bereiche einschätzen? Wie ist das ...):

Risk Aversion in different Domains

1. While driving (beim Autofahren)?
2. In financial matters (bei Geldanlagen)?
3. During leisure and sport (bei Freizeit und Sport)?
4. In your occupation (bei Ihrer beruflichen Karriere)?

5. With your health (bei Ihrer Gesundheit)?
6. Your faith in other people (bei Vertrauen in fremde Menschen)?

Scale: 0 (Risk averse / Gar nicht risikobereit) to 10 (Fully prepared to take risks / Sehr risikobereit)

Test-Retest Correlations

Risk aversion in different domains was included in a retest of a subsample ($N = 120$) in 2009 within 30 to 49 days after the respective initial tests. Test-retest correlation of the items were (in scale order) .67, .48, .58, .69, .51, and .37; scale scores had a test-retest correlation of .69.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2004	plh0197	20604	2.93	2.53	0.63	0.85
2004	plh0198	21691	2.41	2.23	0.62	0.85
2004	plh0199	21574	3.49	2.61	0.68	0.85
2004	plh0200	19902	3.60	2.71	0.68	0.85
2004	plh0201	21868	2.93	2.47	0.65	0.85
2004	plh0202	21890	3.35	2.40	0.50	0.85
2009	plh0197	19426	2.98	2.57	0.62	0.82
2009	plh0198	20472	1.90	2.14	0.56	0.82
2009	plh0199	20274	3.20	2.63	0.67	0.82
2009	plh0200	18077	3.21	2.72	0.64	0.82
2009	plh0201	20696	2.71	2.44	0.63	0.82
2009	plh0202	20712	3.23	2.39	0.43	0.82
2014	plh0197	25254	3.51	2.63	0.60	0.82
2014	plh0198	26442	2.37	2.25	0.59	0.82
2014	plh0199	26791	3.82	2.60	0.65	0.82
2014	plh0200	23532	3.87	2.65	0.64	0.82
2014	plh0201	27254	3.21	2.46	0.63	0.82
2014	plh0202	27290	3.57	2.41	0.44	0.82

1.21 Self Esteem

Summary

Global self-esteem—a person's overall evaluation or appraisal of his or her worth—was measured in the SOEP in 2010, 2015, and 2020 with an individual item.

Theoretical Background

Self-esteem is a central construct in psychology and has value both as a predictor variable (e.g., for the occurrence of various life events) and as a target variable with great potential significance for numerous research questions.

Scale Development

In the SOEP, following on the paper by Robins, Hendin, & Trzesniewski (2001), an individual item was used to measure self-esteem.

References

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*, 151-161.

Items

To what degree do the following statements apply to you personally (In welchem Maße treffen die folgenden Aussagen auf Sie persönlich zu):

1. I have a positive attitude toward myself (Ich habe eine positive Einstellung zu mir selbst).

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd
2010	plh0206i11	18817	5.58	1.28
2015	plh0206i11	26964	5.65	1.29
2016	plh0206i11	4195	6.27	1.18
2017	plh0206i11	2743	6.34	1.17
2018	plh0206i11	418	6.39	1.11
2019	plh0206i11	279	6.35	1.02
2020	plh0206i11	30301	5.74	1.29

year	variable	count	mean	sd
2010-2020	j11380	5822	5.28	1.44

year	variable	count	mean	sd
2016	char27	2814	5.21	1.50

year	variable	count	mean	sd
2014-2020	char27	4264	5.24	1.44

1.22 Sources of Social Inequality

Summary

The scale measures respondents' attributions of upward mobility and success in society to the use of legitimate or illegitimate means, whereby the categories of "legitimate" and "illegitimate" are evaluated from the perspective of the prevailing universalistic ideology of meritocratic achievement. The scale has been used in the SOEP youth questionnaire since 2001.

Theoretical Background

The scale measures a non-normative aspect: namely, beliefs about the extent to which success can be achieved by specific means. Theoretically, the scale is implicitly oriented toward measuring respondents' perceptions of legitimacy or their critique of the social status assignment process. The legitimization of existing social inequality is necessary for the functioning of a society, independent of the form that this legitimization takes. In German society, as in most Western societies, social inequalities are legitimized meritocratically, that is, inequalities are considered justified if they are based on non-ascriptive characteristics such as individual abilities and achievements, as expressed, for example, in educational degrees. To this end, it must be determined, first, whether the individual supports the normative basis for this meritocratic ideology, and second, to what extent the respondent views these normative standards as being realized in the society. The second, cognitive aspect is measured with the items described below. Both aspects together allow for an estimation of whether the inequality that exists in a society is perceived as legitimate or as worthy of criticism.

Scale Development

For the SOEP surveys, 11 items from the original scale by Sandberger (1983) were selected. Item 11 (having the right gender) was added later.

References

Sandberger, J.-U. (1983). *Zwischen Legitimation und Kritik. Vorstellungen von Akademikern, Studenten und Bevölkerung zur sozialen Ungleichheit*. Zeitschrift für Soziologie, 12, 181-202.

Items

In your opinion, what are the most important factors for achieving success and improving one's social situation in Germany (Wovon hängt es Ihrer Meinung nach in Deutschland tatsächlich ab, ob jemand Erfolg hat und sozial aufsteigt):

Legitimate instruments (Legitime Mittel)

1. Working hard (Man muss sich anstrengen und fleißig sein)
2. Being gifted and intelligent (Man muss begabt und intelligent sein)
3. Having good training in a specialized field (Man muss gute Fachkenntnisse auf seinem Spezialgebiet haben)
4. Having good grades at school (Man muss einen möglichst guten Schulabschluss haben)
5. Being dynamic and exhibiting initiative (Man muss dynamisch sein und Initiative haben)

Scale: 1 (I agree completely/Stimme voll zu) to 4 (I don't agree at all/Stimme überhaupt nicht zu)

Illegitimate instruments (Illegitime Mittel)

1. Exploiting others (Man muss andere ausnutzen)
2. Being from the right family (Man muss aus der richtigen Familie stammen)
3. Having a lot of money and assets (Man muss Geld und Vermögen haben)
4. Being tough and ruthless (Man muss rücksichtslos und hart sein)
5. Having connections to the right people (Man muss Beziehungen zu den richtigen Leuten haben)
6. Being politically active in the right party (Man muss sich auf der richtigen Seite politische engagieren)
7. Having the right gender; men have better career opportunities (Man muss das richtige Geschlecht haben; Männer haben bessere Aufstiegschancen)

Scale: 1 (I agree completely / Stimme voll zu) to 4 (I don't agree at all / Stimme überhaupt nicht zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2001-2020	jl0337	8965	1.44	0.58	0.31	0.62
2001-2020	jl0339	8940	1.97	0.71	0.40	0.62
2001-2020	jl0341	8936	1.64	0.65	0.40	0.62
2001-2020	jl0343	8963	1.60	0.70	0.39	0.62
2001-2020	jl0348	8901	1.71	0.64	0.37	0.62
2001-2020	jl0338	8928	3.27	0.81	0.53	0.78
2001-2020	jl0340	8914	2.69	0.92	0.55	0.78
2001-2020	jl0342	8937	2.81	0.85	0.58	0.78
2001-2020	jl0344	8932	3.08	0.85	0.56	0.78
2001-2020	jl0345	8932	2.05	0.79	0.53	0.78
2001-2020	jl0346	8773	2.93	0.79	0.39	0.78
2001-2020	jl0347	8894	3.01	0.89	0.41	0.78

1.23 Strengths and Difficulties Questionnaire (SDQ)

Summary

The Strengths and Difficulties Questionnaire (SDQ; Goodman 1997; German version by Woerner et al. 2002) captures the child's behavior on five scales "hyperactivity," "emotional problems," "prosocial behavior," "conduct problems," and "peer problems." The Strengths and Difficulties Questionnaire has been given to parents of children aged 5-6 years since 2008 and to parents of children aged 9-10 years since 2012. Since 2014, children aged 11-12 years fill in the questionnaire themselves.

Theoretical Background

The SDQ is currently one of the most frequently used screening instruments for child and adolescent mental health throughout the world. The instrument includes four problem subscales of five items each that also yield a total difficulties score, in addition to a prosocial dimension.

Scale Development

The scale was shortened for the SOEP to 17 items for the bioage06 questionnaire and to 18 items for the bioage10 questionnaire. The answer format was modified to seven levels. For the 11-12 year olds, the full version of the SDQ with an answer format of three levels was used.

References

- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. Journal of Child Psychology and Psychiatry, 38, 581-586.*
- Woerner, W., Becker, A., Friedrich, C., Klasen, H., Goodman, R. & Rothenberger, A. (2002). Normierung und Evaluation der deutschen Elternversion des Strengths and Difficulties Questionnaire (SDQ): Ergebnisse einer repräsentativen Felderhebung. Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie, 30, 105-112.*

1.23.1 Strengths and Difficulties Questionnaire (5-6 year olds & 9-10 year olds, parent reports)

Items

To what extent do the following statements apply to your child (Inwieweit treffen folgende Aussagen auf ihr Kind zu):

Hyperactivity

1. Child is agitated, hyperactive, cannot sit still (ist unruhig, überaktiv, kann nicht lange stillsitzen)
2. Child is fidgety (ist ständig zappelig)
3. Child is easily distracted and lacks concentration (ist leicht ablenkbar, unkonzentriert)
4. Child finishes tasks, is able to concentrate (führt Aufgaben zu Ende; kann sich lange konzentrieren)
5. Child thinks before acting (Denkt nach bevor es handelt)

Scale: 1 (Does not apply at all / Trifft überhaupt nicht zu) to 7 (Applies completely / Trifft voll zu)

Emotional Problems

1. Child is often unhappy or dejected (unglücklich, niedergeschlagen)
2. Child is nervous or clingy in new situations, loses self-confidence easily (ist nervös oder anklammernd in neuen Situationen; verliert leicht das Selbstvertrauen)
3. Child has many fears, becomes frightened easily (hat viele Ängste; fürchtet sich leicht)

Scale: 1 (Does not apply at all / Trifft überhaupt nicht zu) to 7 (Applies completely / Trifft voll zu)

Prosocial Behavior

1. Child is considerate (ist rücksichtsvoll)
2. Child likes to share with others (sweets, toys, crayons) (teilt gerne mit anderen Kindern (Süßigkeiten, Spielzeug, Buntstifte usw.))
3. Child is helpful if others are hurt, sick, or sad (ist hilfsbereit, wenn andere verletzt, krank oder betrübt sind)
4. Child helps others of his/her own accord (parents, teachers, other children) (hilft anderen oft freiwillig (Eltern, Erziehern, anderen Kindern))

Scale: 1 (Does not apply at all / Trifft überhaupt nicht zu) to 7 (Applies completely / Trifft voll zu)

Conduct Problems

1. Child often has tantrums, has a temper (hat oft Wutanfälle, ist aufbrausend)
2. Child quarrels a lot with other children, picks on them (streitet oft, schikaniert Kinder)

Scale: 1 (Does not apply at all / Trifft überhaupt nicht zu) to 7 (Applies completely / Trifft voll zu)

Peer Problems

1. Child is a loner, usually plays by him/herself (ist ein Einzelgänger, spielt meist alleine)
2. Child is popular with other children (ist im Allgemeinen bei anderen Kindern beliebt)
3. Child is often made fun of or picked on by other children (wird von anderen gehänselt oder schikaniert)
4. Child gets along better with adults than with other children (kommt besser mit Erwachsenen aus)

Scale: 1 (Does not apply at all / Trifft überhaupt nicht zu) to 7 (Applies completely / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2008-2020	behav2	5877	3.25	1.89	0.59	0.78
2008-2020	behav7	5842	2.80	1.78	0.63	0.78
2008-2020	behav11	5859	3.30	1.75	0.60	0.78
2008-2020	behav17R	5871	3.20	1.65	0.51	0.78
2008-2020	behav9	5887	1.99	1.34	0.39	0.64
2008-2020	behav12	5862	2.91	1.73	0.48	0.64
2008-2020	behav16	5876	2.65	1.66	0.49	0.64
2008-2020	behav1	5864	5.52	1.28	0.45	0.68
2008-2020	behav3	5882	5.57	1.38	0.45	0.68
2008-2020	behav6	5871	5.96	1.28	0.48	0.68
2008-2020	behav14	5869	5.53	1.41	0.47	0.68
2008-2020	behav4	5876	2.90	1.72		
2008-2020	behav8	5877	2.11	1.40		
2008-2020	behav5	5880	2.29	1.63	0.37	0.57
2008-2020	behav10R	5869	2.10	1.17	0.35	0.57
2008-2020	behav13	5866	1.73	1.13	0.40	0.57
2008-2020	behav15	5846	2.82	1.65	0.33	0.57

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2012-2020	behav2	5821	3.07	1.96	0.57	0.81
2012-2020	behav7	5802	2.64	1.81	0.61	0.81
2012-2020	behav11	5799	3.43	1.92	0.67	0.81
2012-2020	behav17R	5804	3.22	1.78	0.61	0.81
2012-2020	behav18R	5796	3.29	1.61	0.54	0.81
2012-2020	behav9	5821	2.10	1.45	0.45	0.69
2012-2020	behav12	5794	2.74	1.73	0.52	0.69
2012-2020	behav16	5811	2.46	1.62	0.54	0.69
2012-2020	behav1	5807	5.68	1.36	0.49	0.71
2012-2020	behav3	5822	5.68	1.39	0.49	0.71
2012-2020	behav6	5815	6.14	1.27	0.52	0.71
2012-2020	behav14	5803	5.60	1.45	0.50	0.71
2012-2020	behav4	5820	2.83	1.78		
2012-2020	behav8	5811	2.06	1.46		
2012-2020	behav5	5824	2.23	1.62	0.42	0.64
2012-2020	behav10R	5795	2.14	1.25	0.45	0.64
2012-2020	behav13	5798	2.01	1.42	0.47	0.64
2012-2020	behav15	5787	2.82	1.73	0.38	0.64

1.23.2 Strengths and Difficulties Questionnaire (11-12 year olds & 13-14 year olds, self-report)

Items

Hyperactivity

1. I am restless, I cannot stay still for long (Ich bin oft unruhig, ich kann nicht lange stillsitzen)
2. I am constantly fidgeting or squirming (Ich bin dauernd in Bewegung und zappelig)
3. I am easily distracted, I find it difficult to concentrate (Ich lasse mich leicht ablenken; ich finde es schwer, mich zu konzentrieren)
4. I think before I do things (Ich denke nach, bevor ich etwas tue)
5. I finish the work I'm doing. My attention is good (Was ich angefangen habe, mache ich zu Ende; ich kann mich lange genug konzentrieren)

Scale: 1 = Not True (Trifft gar nicht zu), 2 = Somewhat True (Trifft teilweise zu), 3 = Certainly True (Trifft voll zu)

Emotional Problems

1. I get a lot of headaches, stomach-aches or sickness (Ich habe häufig Kopfschmerzen oder Bauchschmerzen oder mir wird oft schlecht)
2. I worry a lot (Ich mache mir häufig Sorgen)
3. I am often unhappy, depressed or tearful (Ich bin oft unglücklich oder niedergeschlagen; ich muss häufig weinen)
4. I am nervous in new situations. I easily lose confidence (Neue Situationen machen mich nervös; ich verliere leicht das Selbstvertrauen)
5. I have many fears, I am easily scared (Ich habe viele Ängste; ich fürchte mich leicht)

Scale: 1 = Not True (Trifft gar nicht zu), 2 = Somewhat True (Trifft teilweise zu), 3 = Certainly True (Trifft voll zu)

Prosocial Behavior

1. I try to be nice to other people. I care about their feelings (Ich versuche, nett zu anderen Menschen zu sein, ihre Gefühle sind mir wichtig)
2. I usually share with others, for example CD's, games, food (Ich teile gerne mit anderen)
3. I am helpful if someone is hurt, upset or feeling ill (Ich bin hilfsbereit, wenn andere verletzt, krank oder traurig sind)
4. I am kind to younger children (Ich bin nett zu jüngeren Kindern)
5. I often offer to help others (parents, teachers, children) (Ich helfe anderen oft freiwillig (Eltern, Lehrern oder Gleichaltrigen))

Scale: 1 = Not True (Trifft gar nicht zu), 2 = Somewhat True (Trifft teilweise zu), 3 = Certainly True (Trifft voll zu)

Conduct Problems

1. I get very angry and often lose my temper (Ich werde leicht wütend; ich verliere oft meine Beherrschung)
2. I usually do as I am told (Normalerweise tue ich, was man mir sagt)
3. I fight a lot (Ich schlage mich häufig mit anderen)
4. I can make other people do what I want (Ich kann andere zwingen zu tun, was ich will)
5. I am often accused of lying or cheating (Andere behaupten oft, dass ich lüge oder mogle)
6. I take things that are not mine from home, school or elsewhere (Ich nehme Dinge, die mir nicht gehören (von zu Hause, in der Schule oder anderswo))

Scale: 1 = Not True (Trifft gar nicht zu), 2 = Somewhat True (Trifft teilweise zu), 3 = Certainly True (Trifft voll zu)

Peer Problems

1. I would rather be alone than with people of my age (Ich bin meistens für mich allein; ich beschäftige mich lieber mit mir selbst)
2. I have one good friend or more (Ich habe einen oder mehrere gute Freunde oder Freundinnen)
3. Other people my age generally like me (Im Allgemeinen bin ich bei Gleichaltrigen beliebt)
4. Other children or young people pick on me or bully me (Ich werde von anderen gehänselt oder schikaniert)
5. I get along better with adults than with people my own age (Ich komme besser mit Erwachsenen aus als mit Gleichaltrigen)

Scale: 1 = Not True (Trifft gar nicht zu), 2 = Somewhat True (Trifft teilweise zu), 3 = Certainly True (Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2014-2020	behav2_full	4342	1.78	0.69	0.55	0.70
2014-2020	behav10_full	4342	1.82	0.75	0.44	0.70
2014-2020	behav16_full	4341	1.82	0.70	0.51	0.70
2014-2020	behav22_fullIR	4342	1.72	0.60	0.36	0.70
2014-2020	behav26_fullIR	4340	1.74	0.60	0.41	0.70
2014-2020	behav3_full	4344	1.47	0.63	0.27	0.63
2014-2020	behav8_full	4337	1.76	0.70	0.40	0.63
2014-2020	behav14_full	4339	1.31	0.54	0.43	0.63
2014-2020	behav17_full	4318	1.63	0.68	0.37	0.63
2014-2020	behav25_full	4335	1.45	0.62	0.46	0.63
2014-2020	behav1_full	4344	2.67	0.50	0.39	0.64
2014-2020	behav4_full	4341	2.43	0.58	0.37	0.64

continues on next page

Table 47 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2014-2020	behav9_full	4345	2.76	0.47	0.43	0.64
2014-2020	behav18_full	4348	2.78	0.47	0.37	0.64
2014-2020	behav21_full	4341	2.44	0.57	0.40	0.64
2014-2020	behav5_full	4328	1.66	0.69	0.36	0.59
2014-2020	behav7_fullR	4335	1.69	0.56	0.24	0.59
2014-2020	behav12_full	4343	1.16	0.42	0.40	0.59
2014-2020	behav13_full	4325	1.16	0.42	0.26	0.59
2014-2020	behav19_full	4330	1.34	0.58	0.39	0.59
2014-2020	behav23_full	4338	1.13	0.39	0.34	0.59
2014-2020	behav6_full	4343	1.67	0.69	0.24	0.54
2014-2020	behav11_fullR	4349	1.14	0.41	0.33	0.54
2014-2020	behav15_full	4255	2.41	0.60	0.30	0.54
2014-2020	behav20_full	4339	1.24	0.51	0.37	0.54
2014-2020	behav24_full	4312	1.49	0.62	0.31	0.54

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2016-2020	behav2_full	2805	1.71	0.68	0.52	0.67
2016-2020	behav10_full	2793	1.69	0.72	0.39	0.67
2016-2020	behav16_full	2805	1.77	0.68	0.50	0.67
2016-2020	behav22_fullR	2799	1.68	0.58	0.34	0.67
2016-2020	behav26_fullR	2797	1.72	0.60	0.36	0.67
2016-2020	behav3_full	2803	1.46	0.63	0.32	0.67
2016-2020	behav8_full	2797	1.82	0.71	0.44	0.67
2016-2020	behav14_full	2795	1.27	0.52	0.49	0.67
2016-2020	behav17_full	2788	1.65	0.68	0.41	0.67
2016-2020	behav25_full	2803	1.40	0.60	0.50	0.67
2016-2020	behav1_full	2802	2.68	0.51	0.44	0.66
2016-2020	behav4_full	2806	2.40	0.59	0.40	0.66
2016-2020	behav9_full	2800	2.77	0.47	0.46	0.66
2016-2020	behav18_full	2807	2.75	0.48	0.37	0.66
2016-2020	behav21_full	2800	2.41	0.58	0.42	0.66
2016-2020	behav5_full	2797	1.60	0.66	0.33	0.58
2016-2020	behav7_fullR	2802	1.67	0.56	0.21	0.58
2016-2020	behav12_full	2803	1.11	0.38	0.41	0.58
2016-2020	behav13_full	2779	1.23	0.48	0.29	0.58
2016-2020	behav19_full	2797	1.28	0.54	0.35	0.58
2016-2020	behav23_full	2802	1.14	0.40	0.39	0.58
2016-2020	behav6_full	2800	1.80	0.72	0.27	0.53
2016-2020	behav11_fullR	2806	1.14	0.42	0.33	0.53
2016-2020	behav15_full	2777	2.43	0.59	0.29	0.53
2016-2020	behav20_full	2797	1.20	0.46	0.37	0.53
2016-2020	behav24_full	2787	1.54	0.64	0.27	0.53

1.24 Supportive Parenting

Summary

Supportive parenting describes a style of childrearing based on warmth, love, constructive communication, and a generally positive way of interacting in the parent-child relationship. The scale has been used in the SOEP youth questionnaires since 2001.

Theoretical Background

Parenting is not understood here as a series of techniques and abilities, but as a special form of relationship between parents and children. The concept is based on the idea that efforts by parents to create a supportive, wholesome environment have a positive impact on the cognitive and social development of the children. A supportive parenting style is part of such a supportive environment (Simons et al., 1992) and can be described as follows: Supportive parents express interest in children's activities, talk to or play games with them, provide help with everyday problems and schoolwork, express enthusiasm and praise over accomplishments, and show affection and love (Amato, 1990).

Scale Development

The scale is based on the Supportive Parenting Scale (SPS) of Simons et al. (1992), and this version was translated into German by Schwarz et al. (1997).

References

- Amato, Paul R. 1990. *Dimensions of the family environment as perceived by children: A multidimensional scaling analysis*. *Journal of marriage and family*, 52, 613–620.
- Schwarz, B., Walper, S., Gödde, M., & Jurasic, S. (1997). Dokumentation der Erhebungsinstrumente der 1. Hauptbefragung. Berichte aus der Arbeitsgruppe "Familienentwicklung nach der Trennung." University of Munich: Unpublished manuscript.
- Simons, R. L., Lorenz, F. O., Conger, R. D., & Wu, C.-I. (1992). Support from spouse as mediator and moderator of the disruptive influence of economic strain on parenting. *Child Development*, 63, 1282-1301.

Items

How often do the following situations occur with your mother and father? How often... (Wie häufig treten in Ihrer Beziehung zu Ihren Eltern die folgenden Situationen auf? Wie häufig kommt es vor...):

1. Do your parents talk to you about things you do or experience (dass Ihre Eltern mit Ihnen über Dinge sprechen, die Sie tun oder erlebt haben)?
2. Do your parents bring up things that bother or worry you (dass Ihre Eltern Dinge ansprechen, die Sie ärgern oder belasten)?
3. Do your parents ask you for your opinion before they decide something that affects you (dass Ihre Eltern nach Ihrer Meinung fragen, bevor sie etwas entscheiden, das Sie betrifft)?
4. Do your parents express their opinion when you do something that they like or approve of (dass, wenn Sie etwas tun, was Ihre Eltern gut finden, Ihre Eltern Ihnen auch zeigen, dass sie sich darüber freuen)?
5. Are you and your parents able to find a solution together to problems you have with each other (dass, wenn Sie und Ihre Eltern ein Problem miteinander haben, Sie dann gemeinsam eine Lösung finden können)?
6. Do your parents give you the impression that they really trust you (dass ihre Eltern Ihnen das Gefühl geben, dass sie Ihnen wirklich vertrauen)?
7. Do your parents ask for your opinion before they make decisions on family matters or issues (dass Ihre Eltern nach Ihrer Meinung fragen, bevor sie über Familienangelegenheiten entscheiden)?
8. Do your parents give you an explanation for their decisions (dass Ihre Eltern Ihnen gegenüber Entscheidungen begründen)?

9. Do your parents show you that they really love you (dass Ihre Eltern Ihnen zeigen, dass sie Sie wirklich lieben)?
 Scale: 1 (Very often / Sehr häufig) to 5 (Never / Nie)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2001-2018	jl0040	7831	2.25	0.93	0.51	0.83
2001-2018	jl0043	7821	2.74	1.00	0.17	0.83
2001-2018	jl0044	7812	2.31	1.08	0.53	0.83
2001-2018	jl0046	7820	1.96	0.86	0.64	0.83
2001-2018	jl0048	7775	2.33	1.00	0.60	0.83
2001-2018	jl0050	7815	1.82	0.91	0.62	0.83
2001-2018	jl0052	7778	2.48	1.05	0.61	0.83
2001-2018	jl0054	7796	2.39	1.03	0.60	0.83
2001-2018	jl0056	7808	1.71	0.87	0.61	0.83
2001-2018	jl0041	7280	2.78	1.11	0.69	0.91
2001-2018	jl1043	7270	3.14	1.08	0.40	0.91
2001-2018	jl0045	7252	2.63	1.26	0.69	0.91
2001-2018	jl0047	7271	2.30	1.10	0.78	0.91
2001-2018	jl0049	7216	2.67	1.17	0.73	0.91
2001-2018	jl0051	7248	2.16	1.15	0.77	0.91
2001-2018	jl0053	7194	2.87	1.20	0.71	0.91
2001-2018	jl0055	7232	2.71	1.19	0.73	0.91
2001-2018	jl0057	7258	2.13	1.17	0.74	0.91

1.25 Temperament

Summary

In the SOEP since 2003, two dimensions of temperament in early childhood, “affect” and “activity,” have been measured with five items assessed by one of the parents for children below the age of 2 and for those aged 2-3.

Theoretical Background

Temperament describes the way a person acts and reacts and is comprised of emotions, motor, attention-related reactions, and self-regulation. The concept of the “early childhood temperament” is used in developmental psychopathology and in the research and theory on child and youth psychiatry. Temperament characteristics are treated here as risk factors for the emergence of behavioral disorders, as characteristics influencing parental interactive behavior, and as characteristics that show heightened vulnerability to unfavorable environmental conditions.

Scale Development

Based on an expert report by Pauen & Vonderlin (2007), the Infant Behavior Questionnaire (IBQ) of Rothbart (1981; German version by Pauli-Pott, Mertesacker, & Beckmann, 2003) was used as a point of orientation for the measurement of early child temperament, but shortened significantly.

References

Pauen, S., & Vonderlin, E. (2007). *Entwicklungsdiagnostik in den ersten drei Lebensjahren Empfehlungen zum Ausbau des Erhebungsinstrumentariums über Kinder im Sozio- oekonomischen Panel (SOEP)*. Berlin: DIW Berlin.

Pauli-Pott, U., Mertesacker, B., & Beckmann, D. (2003). Ein Fragebogen zur Erfassung des frühkindlichen Temperaments im Elternurteil. *Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie*, 31, 99-110.

Rothbart, M. K. (1981). Measurement of temperament in infancy. *Child Development*, 52, 569-578.

Items

How do you see your child today (Wie sehen Sie Ihr Kind heute):

Affect

1. My child is generally happy and satisfied (Mein Kind ist meist fröhlich und zufrieden)
2. My child is easily irritated and cries frequently (Mein Kind ist leicht erregbar und weint häufig)
3. My child is difficult to console (Mein Kind ist schwer zu trösten)

Scale: 1 (Applies fully / Trifft voll zu) to 4 (Does not apply at all / Trifft gar nicht zu)

Activity

1. My child is curious and active (Mein Kind ist neugierig und aktiv)
2. (since 2007) My child is more reserved (Mein Kind ist eher zurückhaltend)
3. My child is communicative and likes to talk (Mein Kind ist gesprächig und redet gern)

Scale: 1 (Applies fully / Trifft voll zu) to 4 (Does not apply at all / Trifft gar nicht zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2003-2020	temp1	7155	1.23	0.47	0.36	0.62
2003-2020	temp2R	7130	1.67	0.72	0.52	0.62
2003-2020	temp3R	7134	1.46	0.66	0.45	0.62
2003-2020	temp4	7080	1.25	0.52		
2007-2020	temp5R	5866	1.69	0.70		

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2020	temp1	7576	1.26	0.48	0.31	0.54
2005-2020	temp2R	7549	1.94	0.76	0.41	0.54
2005-2020	temp3R	7543	1.60	0.73	0.38	0.54
2005-2020	temp4	7563	1.19	0.45		
2005-2020	temp6	7541	1.37	0.67		

1.26 Tendency to Forgive

Summary

The tendency to forgive is an individual disposition to forgive other people after being hurt or treated unjustly by them and was measured in SOEP in 2010, 2015, and 2020.

Theoretical Background

The individual tendency to forgive is the tendency to either maintain or overcome one's own anger or resentment after being personally injured: "the TTF is a simple, four-item scale designed to assess the extent to which individuals typically experience or engage in forgiveness when they have been wronged by others" (Brown, 2003). The scale is not designed to measure the process of forgiving (how or when one forgives), but to measure individual differences in the outcome of this process (to what extent an individual typically forgives). The tendency to forgive is understood as an individual disposition and not as a process linked to specific situations or actions. As a construct, the tendency to forgive shows similarities to other constructs such as revenge, feelings of aggression, desire for reconciliation, and negative reciprocity. For the research, it is of interest to study the consequences the individual tendency to forgive on

mental health and life satisfaction. Furthermore, the individual tendency to forgive may play a role as a strategy in decision conflicts and dilemma situations.

Scale Development

The scale is the German translation of the already validated Tendency to Forgive Scale. Information on the validity of the original scale can be found in Brown and Phillips (2005). The scale was used for the first time in the SOEP in the 2009 SOEP pretest (representative random sample of the German population, N = 1.007) and displays, given the typical characteristics of population surveys (low number of items, high heterogeneity of survey respondents), satisfactory reliability and factorial validity (Weinhardt & Schupp, 2011). Based on the satisfactory results of the 2009 SOEP pretest, the Tendency to Forgive scale was included in the main SOEP survey in 2010.

References

Brown, R., & Phillips, A. (2005). *Letting bygones be bygones: Further evidence for the validity of the tendency to forgive scale*. *Personality and Individual Differences*, 38, 627-638.

Brown, R. P. (2003). *Measuring individual differences in the tendency to forgive: Construct validity and links with depression*. *Personality and Social Psychology Bulletin*, 29, 759-771.

Weinhardt, M., & Schupp, J. (2011). *Die Messung individueller Vergebungstendenz im SOEP: Skaleneigenschaften der deutschen Version der Tendency-to-Forgive-Scale*. Berlin: DIW Berlin.

Items To what degree do the following statements apply to you personally (In welchem Maße treffen die folgenden Aussagen auf Sie persönlich zu):

1. I get over it relatively quickly when someone hurts my feelings (Ich komme relativ leicht darüber hinweg, wenn jemand mich emotional verletzt).
2. When somebody has wronged me, I often think about it for quite a while (R) (Wenn jemand mir unrecht getan hat, denke ich oft lange darüber nach).
3. I tend to bear grudges (R) (Ich bin tendenziell nachtragend).
4. When other people wrong me I try to just forgive and forget (Wenn andere mir unrecht tun, versuche ich einfach zu vergeben und zu vergessen).

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2010	plh0206i07	18799	3.62	1.63	0.34	0.57
2010	plh0206i08R	18805	3.26	1.68	0.33	0.57
2010	plh0206i09R	18820	4.79	1.67	0.39	0.57
2010	plh0206i10	18813	4.16	1.54	0.35	0.57
2015	plh0206i07	26916	3.59	1.68	0.33	0.57
2015	plh0206i08R	26951	3.29	1.75	0.34	0.57
2015	plh0206i09R	26897	4.81	1.74	0.40	0.57
2015	plh0206i10	26928	4.27	1.58	0.33	0.57
2016	plh0206i07	118	3.49	1.96	0.34	0.53
2016	plh0206i08R	118	3.36	1.90	0.41	0.53
2016	plh0206i09R	118	4.56	1.91	0.39	0.53
2016	plh0206i10	118	4.60	1.70	0.15	0.53
2020	plh0206i07	28997	3.67	1.68	0.34	0.58
2020	plh0206i08R	29041	3.49	1.77	0.35	0.58
2020	plh0206i09R	28888	5.02	1.72	0.41	0.58
2020	plh0206i10	29014	4.39	1.61	0.34	0.58

1.27 Trust, Trustworthiness, Fairness

Summary

Trust, trustworthiness, and fairness were measured in the SOEP at five-year intervals since 2003, using five items. Three of the items can be combined into a single scale for measuring generalized trust.

Theoretical Background

In sociology and political science, generalized trust describes the average expectation of trustworthiness in strangers (Stolle, 2002). Trust is interpreted as a measure of cooperative relationships among citizens that allows people to interact in a complex social environment and to reduce their transaction costs (Luhmann, 2000). For sociologist James Coleman, two points are characteristic for the concept of trust: on the one hand, trust means that the person trusting entrusts specific goods to another person without being able to directly control or sanction the actions of the other person. On the other hand, there must be a potential benefit as an incentive: the person must gain some advantage from having trusted another person if the latter proves to be trustworthy. In this conception, trust is less a personality characteristic than a specific behavior. Generalized trust (trust in strangers) also differs from trust in institutions and from trust in acquaintances. In social psychology, the concept is also important: “Interpersonal trust is defined here as an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon” (Rotter, 1967).

Scale Development

The scale used to measure trust was based on the scales used in the General Social Survey (GSS) and in the World Values Survey (WVS), and an additional (Item 2) was added. The scale was first piloted in the 2002 SOEP pretest and used in 2003 in the main SOEP survey. The scale was further validated in the 2003, 2004, 2005, and 2006 SOEP pretests (through parallel surveying of the personality dimension “agreeableness: trust” from the NEO-PI-R and testing of sequence effects; Naef & Schupp, 2009). Further information can be found in Dohmen et al. (2008).

References

- Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2008). Representative trust and reciprocity: Prevalence and determinants. *Economic Inquiry*, 46, 81-90.
- Naef, M., & Schupp, J. (2009). *Measuring Trust: Experiments and Surveys in Contrast and Combination*. Berlin: DIW Berlin.
- Luhmann, N. (2000). *Vertrauen: Ein Mechanismus der Reduktion sozialer Komplexität*. Stuttgart: Lucius & Lucius.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35, 651-665.
- Stolle, D. (2002). Trusting Strangers - Generalized trust in perspective. *Österreichische Zeitschrift für Politikwissenschaft*, 31, 397-412.

Items

What is your opinion on the following three statements (Was ist Ihre Meinung zu den folgenden drei Aussagen):

1. On the whole, one can trust people (Im Allgemeinen kann man den Menschen vertrauen)
2. Nowadays one can't depend on anyone (Heutzutage kann man sich auf niemanden mehr verlassen)
3. When dealing with strangers, it is better to be cautious before trusting them (Wenn man mit fremden zu tun hat, ist es besser, vorsichtig zu sein, bevor man ihnen vertraut)

Scale: 1 (Agree completely/ Stimme voll zu) to 4 (Disagree completely/ Lehne voll ab)

Do you believe that most people ... (Glauben Sie, dass die meisten Leute...):

4. Would exploit you if they had the opportunity (Sie ausnützen würden, falls sie eine Möglichkeit dazu hätten) or would try to treat you fairly (oder versuchen würde, Ihnen gegenüber fair zu sein)?

Scale: 1 (Would exploit you if they had the opportunity / Sie ausnützen würden, falls sie eine Möglichkeit dazu hätten) or 2 (Or would try to treat you fairly / oder versuchen würde, Ihnen gegenüber fair zu sein?)

Would you say that the most of the time, people ... (Würden Sie sagen, dass die Leute die meiste Zeit...)

5. Attempt to be helpful? (versuchen, hilfsbereit zu sein?) Or only act in their own interests? (oder nur ihre eigenen Interessen verfolgen?)

Scale: 1 (Attempt to be helpful / versuchen, hilfsbereit zu sein?) or 2 (Or only act in their own interests / oder nur ihre eigenen Interessen verfolgen?)

Test-Retest Correlations

The three trust items (1-3) which form a scale were included in a retest of a subsample ($N = 161$) in 2005 within 30 to 49 days after the respective initial tests. Test-retest correlation of the items were (in scale order) .41, .42, and .28; scale scores had a test-retest correlation of .46.

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2003	plh0192R	22489	2.63	0.68	0.45	0.61
2003	plh0193	22463	2.60	0.77	0.50	0.61
2003	plh0194	22501	1.69	0.72	0.33	0.61
2003	plh0195	22218	1.53	0.50		
2003	plh0196	22269	1.64	0.48		
2008	plh0192R	19623	2.62	0.67	0.44	0.60
2008	plh0193	19597	2.63	0.77	0.49	0.60
2008	plh0194	19611	1.72	0.72	0.31	0.60
2008	plh0195	19347	1.54	0.50		
2008	plh0196	19391	1.62	0.49		
2013	plh0192R	25723	2.71	0.65	0.47	0.62
2013	plh0193	25698	2.68	0.76	0.51	0.62
2013	plh0194	25701	1.72	0.71	0.33	0.62
2013	plh0195	25210	1.59	0.49		
2013	plh0196	25316	1.56	0.50		
2018	plh0192R	29678	2.73	0.70	0.41	0.60
2018	plh0193	29610	2.66	0.81	0.47	0.60
2018	plh0194	29668	1.72	0.75	0.36	0.60
2018	plh0195	28820	1.61	0.49		
2018	plh0196	29066	1.53	0.50		

1.28 Vineland Adaptive Behavior Scales

Summary

The 20-item Vineland Adaptive Behavior Scale has been used in the SOEP since 2005 to assess parents' ratings of their 2-3-year-old children in the areas of language, everyday skills, motor skills, and social relationships.

Theoretical Background

Especially at an age when individual functions such as linguistic, mathematic, and social competencies are still relatively undifferentiated, adaptive behavior offers a true-to-life measure of child development in an everyday life context that is significant for the child. Measuring this adaptive behavior also does not require testing the child but rather takes place in the framework of a reporting procedure in which a person who is familiar with the child's adaptive behavior in everyday life provides specific descriptions of the child's behavior.

Scale Development

The scale is based on a German adaptation (Tietze et al. 1998) of the Vineland Adaptive Behavior Scale by Sparrow, Balla und Cichetti (1984). For use in the SOEP survey framework, the scale was reduced to 20 items. Further information can be found in Schmiade, Spieß, & Tietze (2008).

References

Schmiade, N., Spieß, C. K., & Tietze, W. (2008). *Zur Erhebung des adaptiven Verhaltens von zwei- und dreijährigen Kindern im Sozio-oekonomischen Panel (SOEP)*. Berlin: DIW Berlin.

Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (1984). *Vineland Adaptive Behavior Scale. A revision of the Vineland Social Maturity Scale by Edbar A. Doll. Survey Form Manual*. Circle Pines, Minnesota: American Guidance Service.

Tietze, W., Meischner, T., Gänßfuss, R., Grenner, K., Schuster, K.-M., Völkel, P., & Roßbach, H.-G. (1998). *Wie gut sind unsere Kindergärten? Eine Untersuchung zur pädagogischen Qualität in deutschen Kindergärten*. Neuwied: Luchterhand.

Items

For parents, it is always a big event when their child learns something new. Please tell us what new things your child can do (Für Eltern ist es immer ein großes Erlebnis, wenn das Kind schon wieder etwas Neues kann. Bitte geben Sie an, welche Dinge das bei Ihrem Kind sind):

Talking (Sprechen)

1. Understands brief instructions such as “go get your shoes” (Versteht kurze Anweisungen, wie z.B. „hole deine Schuhe“)
2. Forms sentences with at least two words (Bildet Sätze mit mindestens zwei Wörtern)
3. Speaks in full sentences (with four or more words) (Spricht in ganzen Sätzen (mit vier und mehr Wörtern))
4. Listens attentively to a story for five minutes or longer (Hört einer Geschichte 5 Minuten oder länger aufmerksam zu sein)
5. Passes on simple messages such as “dinner is ready” (Überbringt einfache Nachrichten wie z.B. „Essen ist fertig“)
6. (since 2010) Follows instructions (heard five minutes before) (Folgt Anweisungen, die es fünf Minuten zuvor gehört hat)
7. (since 2010) Tells his/her first and lastname when asked for it (Nennt seinen Vor- und Nachnamen, wenn es danach gefragt wird)
8. (since 2010) Listens attentively to stories for at least 15 Minutes (Hört in der Regel Geschichten mindestens 15 Min. aufmerksam zu)

Scale: 1 = Yes (ja), 2 = To some extent (teilweise), 3 = No (nein)

Everyday skills (Alltagsfähigkeiten)

1. Uses a spoon to eat without assistance and without dripping (Isst selbstständig mit dem Löffel, ohne zu kleckern)
2. Blows his/her nose without assistance (Putzt sich selbst die Nase)
3. Uses the toilet to do “number two” (Benutzt für „großes Geschäft“ die Toilette)
4. Puts on pants and underpants the right way around (Zieht sich Hosen und Unterhosen selbst richtig herum an)
5. Brushes his/her teeth without assistance (Putzt sich selbst die Zähne)

Scale: 1 = Yes (ja), 2 = To some extent (teilweise), 3 = No (nein)

Movement (Bewegung):

1. Walks forward down the stairs (Läuft Treppen vorwärts herunter)

2. Opens doors with the door handle (Öffnet Türen mit Türklinke)
3. Climbs up playground climbing equipment and other high slayground structures (Klettert auf Klettergerüste und andere hohe Spielgeräte)
4. Cuts paper with scissors (Schneidet mit einer Schere Papier durch)
5. Paints/draws recognizable shapes on paper (Malt auf Papier erkennbare Formen)
6. (since 2010) Holds pens in the right way (not fist grip) when drawing (Hält Stifte richtig (nicht mit der Faust), um zu malen)

Scale: 1 = Yes (ja), 2 = To some extent (teilweise), 3 = No (nein)

Social relationships (Soziale Beziehungen):

1. Calls familiar people by name; for example, says “mommy” and “daddy” or uses the father’s first name (Nennt vertraute Personen beim Namen; sagt z.B. „Mama.“ „Papa“ oder verwendet den Vornamen des Vaters)
2. Participates in games with other children (Nimmt an Spielen mit anderen Kindern teil)
3. Gets involved in role-playing games (“playing pretend”) (Beschäftigt sich mit Rollenspielen („tun als ob“))
4. Shows a special liking for particular playmates or friends (Zeigt eine Vorliebe für bestimmte Spielgefährten oder Freunde)
5. Calls his/her own feelings by name, for example, “sad,” “happy,” “scared” (Benennt eigene Gefühle, z. B. „traurig,“ „freuen,“ „Angst“)
6. (since 2010) Takes turns with other children when playing without being asked to do so (Wechselt sich mit anderen beim Spielen ab, ohne darum gebeten zu werden)

Scale: 1 = Yes (ja), 2 = To some extent (teilweise), 3 = No (nein)

Items and Scale Statistics

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2013	spch1	6337	1.15	0.40	0.26	0.67
2005-2013	spch2	4162	1.08	0.35	0.54	0.67
2005-2013	spch3	4535	1.33	0.61	0.60	0.67
2005-2013	spch4	3672	1.56	0.68	0.31	0.67
2005-2013	spch5	4526	1.15	0.45	0.57	0.67
2010-2020	spch3	6947	1.38	0.64	0.57	0.70
2010-2020	spch5	6931	1.18	0.49	0.50	0.70
2010-2020	spch6	6553	1.56	0.62	0.37	0.70
2010-2020	spch7	6575	1.67	0.78	0.49	0.70
2010-2020	spch8	6565	1.70	0.72	0.38	0.70

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2020	skll1	10268	1.46	0.60	0.35	0.67
2005-2020	skll2	10261	1.71	0.74	0.42	0.67
2005-2020	skll3	10257	1.99	0.90	0.42	0.67
2005-2020	skll4	8097	1.82	0.76	0.55	0.67
2005-2020	skll5	8099	1.62	0.69	0.37	0.67

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2013	mvmn1	4539	1.07	0.31	0.30	0.52

continues on next page

Table 56 – continued from previous page

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2013	mvmn2	6336	1.17	0.52	0.28	0.52
2005-2013	mvmn3	4536	1.20	0.48	0.33	0.52
2005-2013	mvmn4	4523	1.50	0.75	0.41	0.52
2005-2013	mvmn5	4533	1.81	0.75	0.29	0.52
2010-2020	mvmn1	6953	1.09	0.35	0.28	0.57
2010-2020	mvmn3	6944	1.24	0.53	0.31	0.57
2010-2020	mvmn4	6918	1.59	0.80	0.40	0.57
2010-2020	mvmn5	6945	1.79	0.76	0.36	0.57
2010-2020	mvmn6	8736	1.61	0.76	0.35	0.57

year	variable	count	mean	sd	itemrestcorr	alpha
2005-2013	sclr1	4173	1.02	0.16	0.24	0.51
2005-2013	sclr2	6701	1.40	0.59	0.20	0.51
2005-2013	sclr3	4538	1.24	0.52	0.25	0.51
2005-2013	sclr4	4528	1.33	0.60	0.40	0.51
2005-2013	sclr5	4532	1.28	0.55	0.40	0.51
2010-2020	sclr2	9116	1.34	0.55	0.17	0.57
2010-2020	sclr3	6927	1.35	0.64	0.30	0.57
2010-2020	sclr4	6909	1.36	0.63	0.42	0.57
2010-2020	sclr5	6937	1.31	0.59	0.40	0.57
2010-2020	sclr6	6527	1.58	0.69	0.37	0.57

Last change: Dec 16, 2022

**CHAPTER
TWO**

CONTACT INFORMATION AND ACKNOWLEDGEMENT

Special thanks also go to Selin Kara for integrating the SOEP Scales Manual into the SOEPcompanion (<http://companion.soep.de/>) and to Anatol Sluchych for the scripted output of the item and statistics tables.

Address: SOEP, DIW Berlin, Mohrenstraße 58, 10117 Berlin, Germany

Homepage: <http://www.diw.de/soep>

E-Mail: soepmail@diw.de

SOEPhotline: +49 30 89789-292