

GESIS Panel Wave Report

GESIS Panel Wave Report

Wave ib (May - July 2021)

Related to ZA5664 and ZA5665

Version 44.0.0

Mirjan Kummerow, Sven Stadtmüller, Kai Weyandt

August 2022

Suggested Citation:

Kummerow, M., Stadtmüller, S., Weyandt, K. (2022). *GESIS Panel Wave Report: Wave ib* (GESIS Panel Wave Report). GESIS - Leibniz Institute for the Social Sciences.

Contents

Part I: About the GESIS Panel	1
1. General Overview	1
2. Design of Data Collection	1
3. Overview of the GESIS Panel Waves	2
4. Access to Data, Documentation, and Data Sharing	4
5. Bibliographic Citation and Notification of Publications	4
5.1 Bibliographic Citation	4
5.2 Notification of Publications	5
6. GESIS Panel Team	5
6.1 Core Team Members	5
6.2 GESIS Panel Coordination Group	5
7. Acknowledgements	6
Part II: Wave ib (May - July 2021)	7
1. Wave Preparation	7
1.1 Responsible GESIS Panel Team Members	7
1.2 Basic Information	7
1.3 Fielded Studies and Questionnaire Composition	7
1.4 Paradata	8
2. Fielding and Outcome Rates	9
2.1 Fielding Phase	9
2.2 Outcome Rates	10
3. Post-Processing	13
3.1 Data Cleaning and Quality Control	13
3.2 Handling of Ambiguous Cases in the Paper Questionnaire	13
3.3 Generated Variables	13
3.4 Variables not Available in the Standard Edition	14
Appendix	15
I. Field Phase	15
II. Documents	17
a. Invitation Letter for Offline Participants sent by mail	17
b. Invitation Letter for Online Participants sent by mail	18
c. Data Privacy Statement sent by mail (for Online and Offline Participants)	19
d. Invitation Email	20
e. First Email Reminder	21
f. Second Email Reminder	22
References	23

Part I: About the GESIS Panel

1. General Overview

The GESIS Panel provides a probability-based mixed-mode access panel infrastructure located at GESIS Leibniz Institute for the Social Sciences in Mannheim, Germany. The project offers the social science community a unique opportunity to collect survey data with a random sample representative for the German population. Submitted study proposals are evaluated based on a scientific peer review process.

Panel members were initially recruited in 2013 in face-to-face interviews followed by a self-administered profile survey. Internet users could choose between an online and an offline mail mode. All participants of the profile survey are considered as members of the panel and invited to the regular waves every two months. The starting cohort encompassed 4888 panelists at the beginning of 2014 in wave ba.

In order to compensate for panel attrition, refreshment samples were drawn in 2016 and 2018, using the General Social Survey (ALLBUS) interview as vehicle. The initial 2013 cohort encompasses German speaking panelists aged between 18 and 70 years (at the time of recruitment) and permanently residing in Germany, whereas the second cohort includes panelists from the age of 18 without upper restriction. Design weights that enable the integration of two or multiple cohorts are provided in the data set. Further information on the design weights and their use can be found in the [GESIS Panel Data Manual](#). The recruitment cohort is indicated by the variable z000006a. For more details, please see the methods reports of the recruitment processes and the GESIS Panel reference paper (Bosnjak et al., 2017). A basic overview of the GESIS Panel can also be found on our [cheatsheet](#).

2. Design of Data Collection

The data collection process employs two self-administered survey modes: online and offline. Data collection and panel maintenance is administered and organized by the GESIS Panel Team.

Until 2020, the GESIS Panel waves took place every two months. Starting with wave ia in 2021, the waves take place every three months, each taking about 20 to 25 minutes.

About three quarters of the panelists participate online (web-based surveys); the rest of the panelists attend the surveys by mail.

Each survey wave consists of two major parts: about seven minutes of survey time is reserved for GESIS Panel Longitudinal Core Studies developed by GESIS. The remaining survey time is reserved for submitted external studies. Fielded external studies have undergone a peer-review process.

One aim of the Longitudinal Core Studies is to measure frequently demanded characteristics beyond demographics, such as personality and human values, political behavior and orientations, well-being and quality-of-life, environmental attitudes and behavior, and information/communication technology usage. Moreover, a second aim of the GESIS Panel Longitudinal Core Studies is to assess and to control for data quality (i.e., different sources of survey errors) by measuring concepts such as survey participation evaluations, survey mode habits and preferences, and by including selected items from other benchmark surveys (e.g., German Microcensus, ESS, ALLBUS, ISSP).

Independently of the survey mode, all participants are invited by mail and receive an unconditional incentive of five Euros. The online version of the GESIS Panel questionnaires is implemented in the EFS Panel installation by Tivian. In addition to the mail invitation, online participants receive an invitation and two reminders by email. The online data collection process is conducted by the GESIS Panel team. The field phase lasts about eight weeks.

Offline data are collected by a mail service provider. They send out all paper questionnaires one day before the start of the online field phase. No reminders are sent out in the offline mode. In-coming

paper questionnaires are processed by the mail provider until one day before the start of the next wave's field phase. The paper questionnaires are handled by an external field institute. The field institute scans all questionnaires and processes the answers automatically. They use optical character/mark recognition (OCR/OMR) technology to read the checkboxes automatically. Free text fields are captured using intelligent character recognition (ICR) technology. The data is stored in csv format. During the data control, at least 10 percent of the checkboxes and all open answers are checked manually by two employees of the external field institute for correctness.

3. Overview of the GESIS Panel Waves

Until 2020, the GESIS Panel multi-topic survey waves took place every two months, starting with aa in August 2013. Starting with wave ia in 2021, the waves take place every three months. Each wave includes four to nine different internal and external studies. The first three waves in 2013 (waves aa, ab, ac) were part of the initial recruitment phase and therefore only included a subsample of panelists. The first wave of the GESIS Panel with the full sample was wave ba in February 2014.

From wave aa until wave hf the regular field phase of one wave lasted until the beginning of the next wave for both modes. The reduction from six to four waves in 2021 results in one-month break between the field periods of the survey waves, starting from wave ia. In contrast to other waves, the field period of the online part (21.08.2013 - 14.10.2013) in wave aa differed from the field period of the mail part. Further, the field period for panelists who were invited in the mail mode in wave fe was partly extended due to a web-push-experiment (more information about the web-push-experiment can be found in [GESIS Panel Wave Report fe](#)).

Table 1 presents an overview of all waves fielded by the GESIS Panel so far. The first column indicates the year of data collection, the second column indicates the name of the wave. Waves and studies are named after the GESIS Panel naming convention (see [Codebook](#)). Waves are signified by two letters, the first signifying the year and the second the wave of the year, both letters having the potential range from a to z. The third column indicates the study code of the studies that were fielded in the respective wave (see [Study Descriptions](#)). The last columns provide information on the field period.

Table 1: Overview of the GESIS Panel waves

Year	Wave	Studies	Field period
2013	aa	aa, ab, zq	21.08. - 20.09.
	ab	ab, ac, ad, zq	16.10. - 10.12.
	ac	ab, ae, af, zq	11.12. - 19.02.
2014	ba	zb, ag, ah, ai, zq	27.02. - 15.04.
	bb	zc, aj, ak, al, ai, zq	16.04. - 17.06.
	bc	zd, aj, am, an zq	18.06. - 12.08.
	bd	ze, ao, ap, an, zq	13.08. - 14.10.
	be	zf, zg, zh, aq, an, zq	15.10. - 16.12.
	bf	zi, zh, am, ar, zq	17.12. - 17.02.
	ca	zb, at, av, ar, zq	18.02. - 14.04.
2015	cb	zc, as, aq, aw, zq	15.04. - 16.06.
	cc	zd, zc, ax, ay, aw, zq	17.06. - 11.08.
	cd	ze, as, av, az, aw, zq	12.08. - 13.10.
	ce	zf, zg, zh, as, az, zy, aw, zq	14.10. - 15.12.
	cf	zi, ba, zh, bb, zy, aw, zq	16.12. - 16.02.
	da	zb, at, bc, av, be, zy, bf, aw, zq	17.02. - 19.04.
	db	zc, bg, bh, zy, bd, aw, zq	20.04. - 14.06.
2016	dc	zd, ax, bi, bj, zy, aw, zq	15.06. - 16.08.
	dd	ze, ac, bk, bg, az, aw, zq	17.08. - 18.10.
	de	zf, zg, zh, bd, bh, bl, aw, zq	19.10. - 13.12.
	df	zi, zh, bn, bo, aw, zq	14.12. - 14.02.
	ea	zb, at, bp, bk, zj, zy, zz, aw, zq	15.02. - 18.04.
	eb	zc, bd, bh, bm, aw, zq	19.04. - 13.06.
	ec	zd, bq, br, bo, zj, zy, zq	14.06. - 15.08.
2017	ed	ze, zh, zt, zy, bt, bs, zq	16.08. - 17.10.
	ed	zc quick poll - voting intention	12.09. - 23.09.
	ee	zf, zg, zh, bu, bd, zy, zq	18.10. - 12.12.
	ef	zh, zi, bo, aj, zj, zq	23.12. - 13.02.
	fa	zb, at, bf, bb, bw, zq	14.02. - 17.04.
	fb	zc, zy, bv, bx, zj, zq	18.04. - 12.06.
	fc	zd, bz, by, bo, zz, zq	13.06. - 14.08.
2018	fd	ze, zt, zy, bw, zz, cb, cc, zq	15.08. - 16.10.
	fe	zf, zg, zh, by, cb, zz, zq	05.10. - 11.12.
	ff	zh, zi, ca, cb, cd, zq	12.12. - 12.02.
	ga	zb, at, bf, ce, by, zz, cg, ch, zq	13.02. - 16.04.
	gb	zc, cj, ca, cf, ce, zz, zq	17.04. - 11.06.
	gc	zd, zj, ce, ck, cr, zq	12.06. - 13.08.
	gd	ze, zt, cr, cn, ca, ci, zq	14.08. - 15.10.
2019	ge	zf, zh, zg, co, cf, cl, zq	16.10. - 10.12.
	gf	zh, zi, cp, ca, zq	11.12. - 11.02.
	ha	no data collection	
	hb	zc, zb, cq, cv, cy, zq	20.05. - 07.07.
	hc	zd, zj, cx, ci, cy, dc, zy, zq	08.07. - 25.08.
	hd	ze, zt, cu, cy, zy, de, dd, zq	26.08. - 13.10.
	he	zf, zh, zg, cs, cl, zy, cm, dd, zq	14.10. - 08.12.
2020	hf	zi, zh, db, cy, zy, cm, zq	09.12. - 09.02.
	ia	zb, zc, cw, ct, cy, cm, zq	24.02. - 20.04.
2021	ib	zd, ze, cz, da, cy, dh, cm, zq	26.05. - 20.07.

4. Access to Data, Documentation, and Data Sharing

The scientific use file of the GESIS Panel is accessible for scientific purposes via the [GESIS Data Archive](#) in Cologne. Along with the data set, all documents are stored centrally in the data catalog. The wave documentation comprises the wave reports, the questionnaires and a codebook that documents all variables in the data set. Additional documents that register the recruitment in 2013, 2016 and 2018 and further descriptions of the data are also available.

It is intended to publish an updated edition of the cumulative data set that includes new data from the last wave as well as revisions from previous waves every four to six months. The revisions of earlier data releases are documented in the [errata document](#) that is accessible in the study entry of the GESIS Panel GESIS Data Archive.

We provide two editions of this cumulative data set: a scientific use file accessible for research purposes (GESIS Panel Standard Edition: ZA5665), and a secure scientific use file that is only available for on-site use at the Secure Data Center in Cologne (GESIS Panel Extended Edition: ZA5664). To [access](#) the scientific use file, users have to sign a user contract. Upon approval of the data use request, the data archive will provide researchers with access to the current scientific use file via secure FTP-download.

The integration of the second cohort and the increase of waves made a reorganization of the data set necessary. Initially, the GESIS Panel data were provided as one incremental increasing data set that contained all panelists and all waves. With the integration of the second cohort in the data release of wave ec, the data set will be delivered separated and different types of data sets exist. For a comprehensive overview of the structure of the GESIS Panel data, please refer to GESIS Panel Data manual.

Following the terms and conditions of the GESIS data use agreement, GESIS Panel data cannot be shared on a public repository for reproducible research. Scientific use files of the GESIS Panel are available for research purposes from GESIS. To acquire a copy of the data set, researchers can fill out the [agreement](#).

5. Bibliographic Citation and Notification of Publications

5.1 Bibliographic Citation

Each new data release has its own DOI. Although each release may include changes to older waves, replicability is guaranteed since every variable remains in the data set and new editions of variables are added as new variables. We ask users to always pay attention that they select the correct DOI of the data set they used for publications.

Researchers are required to cite the data set they use in publications with the correct ZA version number and DOI as follows:

German:

GESIS (2022). *GESIS Panel Standard Edition*. GESIS Datenarchiv, Köln. ZA5665 Datenfile Version 44.0.0, doi: 10.4232/1.13931

GESIS (2022). *GESIS Panel Extended Edition*. GESIS Datenarchiv, Köln. ZA5664 Datenfile Version 44.0.0, doi: 10.4232/1.13930

English:

GESIS (2022). *GESIS Panel Standard Edition*. GESIS Data Archive, Cologne. ZA5665 Datafile Version 44.0.0, doi: 10.4232/1.13931

GESIS (2022). *GESIS Panel Extended Edition*. GESIS Data Archive, Cologne. ZA5664 Datafile Version 44.0.0, doi: 10.4232/1.13930

Additionally, please refer to the GESIS Panel reference paper in publications that are based on the GESIS Panel data set:

Bosnjak, M., Dannwolf, T., Enderle, T., Schaurer, I., Struminskaya, B., Tanner, A., & Weyandt K. W. (2017). Establishing an open probability-based mixed-mode panel of the general population in Germany: The GESIS Panel. *Social Science Computer Review*, 36(1). <https://doi.org/10.1177/0894439317697949>

5.2 Notification of Publications

To get an overview of the actual usage of our data, researchers using the GESIS Panel data in their publication are asked to send a notification including bibliographic information and the data set's DOI to info@gesis-panel.de. In accordance with our user contract, we ask researchers to provide us with an electronic or paper copy of their publications. Publications that use GESIS Panel data are included in the official [GESIS Panel bibliography](#) on our homepage.

6. GESIS Panel Team

6.1 Core Team Members

Table 2 provides an overview of the active members of the GESIS Panel project.

Table 2: Members of the Team GESIS Panel

Function	Person
Team Leader	Bernd Weiß
Survey Project Management	Isabella Minderop Mirjan Kummerow Maikel Schwerdtfeger Sven Stadtmüller
Survey Statistics and Data Quality Management	Ingo Konradt Steffen Pötzschke Kai Weyandt
Panel Management	Gabriele Wahlig
Software Adjustment and Maintenance	Kai Böge

6.2 GESIS Panel Coordination Group

Bella Struminskaya, Utrecht University (Speaker)

Vera Toepoel, Utrecht University (Deputy Speaker)

Mick Couper, University of Michigan

Marcel Das, CentERdata and Tilburg University

Thomas Emery, Open Data Infrastructure for Social Science and Economic Innovations (ODISSEI)

Joseph Sakshaug, Institute for Employment Research (IAB), Ludwig Maximilian University of Munich, University of Mannheim

7. Acknowledgements

We thank the researchers submitting proposals to the GESIS Panel. We are very grateful to the many anonymous reviewers that provide valuable feedback to the submitted studies.

Part II: Wave *ib* (May - July 2021)

1. Wave Preparation

1.1 Responsible GESIS Panel Team Members

Survey project management	Mirjan Kummerow, Sven Stadtmüller
Data management	Kai Weyandt
Data archiving	Kai Weyandt
Panel management	Gabriele Wahlig

1.2 Basic Information

Wave *ib* is the 44th regular panel wave of the GESIS Panel. Overall, 4703 active panelists were invited to participate in wave *ib*. 2538 panelists are part of the first cohort that was recruited in 2013, 1032 panelists are part of the second cohort that was recruited in 2016, and 1133 panelists are part of the third cohort that was recruited in 2018.

All participants were invited by mail and received an unconditional incentive of five Euros. Online participants received an email invitation in addition.

1.3 Fielded Studies and Questionnaire Composition

Wave *ib* consisted of eight studies that are listed in Table 3. The listed order in the table reflects the order in the questionnaire. For a detailed description of the respective studies, please refer to the study description, the online and offline questionnaire documentation, and the codebook that can be accessed via the study entry in the [GESIS Data Archive](#).

Study *cm* contains an experiment. The experimental group is indicated by the variable *ibcm247a*.

Within study *zq* the online and offline questionnaires differ with respect to two questions: Online panelists were asked about the electronic device they used to fill in the questionnaire (variables *ibzq014a* and *ibzq015a*), offline panelists were asked on which date they filled in the questionnaire (variables *ibzq017a* and *ibzq018a*).

Table 3: Overview of GESIS Panel Studies in Wave ib

Study	Waves	Authors	Title
zd	Core study	Henning Best, Tanja Dannwolf	Environmental attitudes and behavior
ze	Core study	Constanze Beierlein, Eldad Davidov, Beatrice Rammstedt, Shalom H. Schwartz	Personality and Personal Values
cz	ib	Melanie Verhovnik-Heinze	Crime reporting. Journalistic content, use and impact
da	ib	Claudia Landwehr, Johannes Gutenberg , Philipp Harms, Johannes Gutenberg , Nils D. Steiner, Johannes Gutenberg	False Consensus Beliefs in Politics and Populist Attitudes
cy	hz, hb, hc, hd, hf, ia, ib	Bernd Weiß, Ines Schaurer, Mirjan Kummerow, Isabella Minderop, Maikel Schwerdtfeger, Sven Stadtmüller	GESIS Panel Special Survey on the Coronavirus SARS-CoV-2 Outbreak in Germany
dh	ib	Lydia Repke, Henning Silber	Social contact during the COVID-19 pandemic in Germany
cm	he, hf, ia, ib	Henning Silber, Bella Struminskaya, Michael Bosnjak, Bernd Weiß, Fabienne Kraemer, Joanna Koßmann	Mechanisms of Panel Conditioning in Longitudinal Studies: Reflection, Satisficing, and Social Desirability
zq	Core study	Michael Bosnjak, Lars Kaczmirek, Bella Struminskaya	Monitoring quality: survey experience & mode characteristics

1.4 Paradata

Paradata can be easily identified in the data set by the third and fourth digit in the variable name. The letters *zr* indicate information on relative time stamps, collected by the online survey software, *zs* indicate client-side paradata, and *zp* are additional paradata collected by the online software. In general, more paradata are available for panelists of the online mode.

For the online mode, relative time stamps (variables *ibzr001a* to *ibzr107a*) for each page are available. These time variables report the time difference in seconds between pressing the forward button of the respective page and the absolute time stamp. The absolute time stamp variable (*ibzp207a*) signifies the time in seconds which is past since 01-01-1970 when loading the first page of the survey.

The connected page id is mentioned in the label. The page id for each question can be found in the codebook or on the screenshots of the online questionnaire. For technical details about the logic of the provided time stamp variables, please see the EFS manual.

In wave *ib*, several client-side based paradata are collected in page-based string variables (*ibzs001a* to *ibzs107a*). The connected page id is mentioned in the label. The page id for each question can be found in the codebook or on the screenshots of the online questionnaire.

For detailed information, please see the separate paradata documentation ([ZA5664-65_Online-Paradata.pdf](#)).

2. Fielding and Outcome Rates

2.1 Fielding Phase

The invitation was sent out by mail on 25.05.2021 for all panelists (online and offline). The invitation letter included an unconditional incentive of five Euros. The letter for the offline panelists included the paper questionnaire. Online panelists additionally received an invitation by email on 26.05.2021. The fieldwork for wave *ib* ended on 20.07.2021.

Overall, 4703 active members of the GESIS Panel were invited, 2538 are members of the first recruitment cohort, 1032 are members of the second recruitment cohort and 1133 are members of the third recruitment cohort. 1218 panelists were invited in the offline mode and 3485 in the online mode. The online participants who have not participated in the survey received two reminders on 02.06.2021 and 10.06.2021. The panelists invited in the offline mode did not receive any reminder letters. The text of the invitation letters (online and offline) and the email reminder can be found in the Appendix.

Figure 1 shows the cumulative participation over the field period. Figure 2 gives insights into the daily return of online and paper questionnaires. A detailed table can be found in the Appendix (see Table 6).

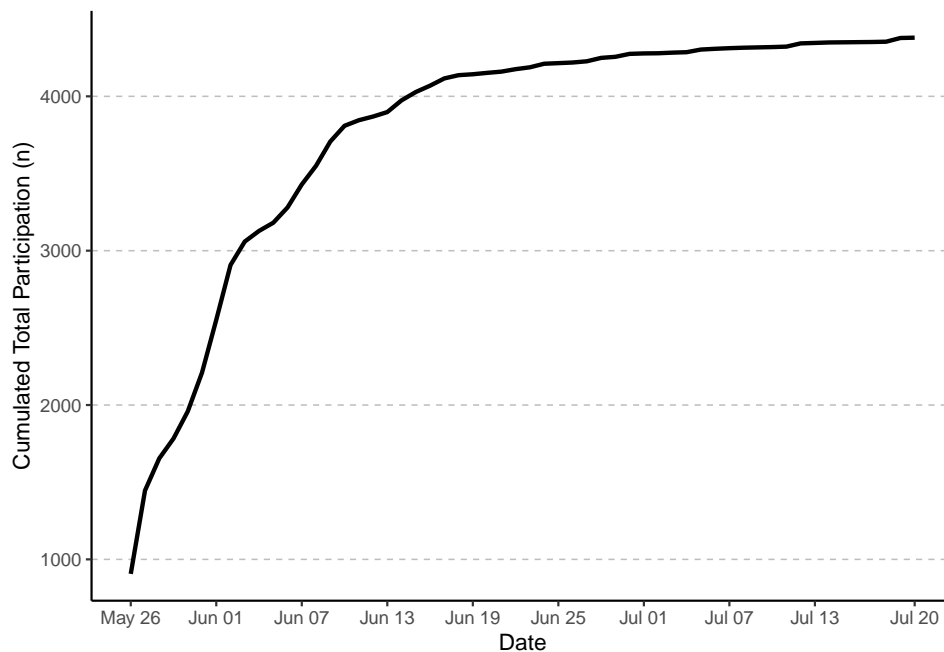


Figure 1: Cumulative participation of the GESIS Panel (wave *ib*, fielding period 26.05.2021 to 20.07.2021)

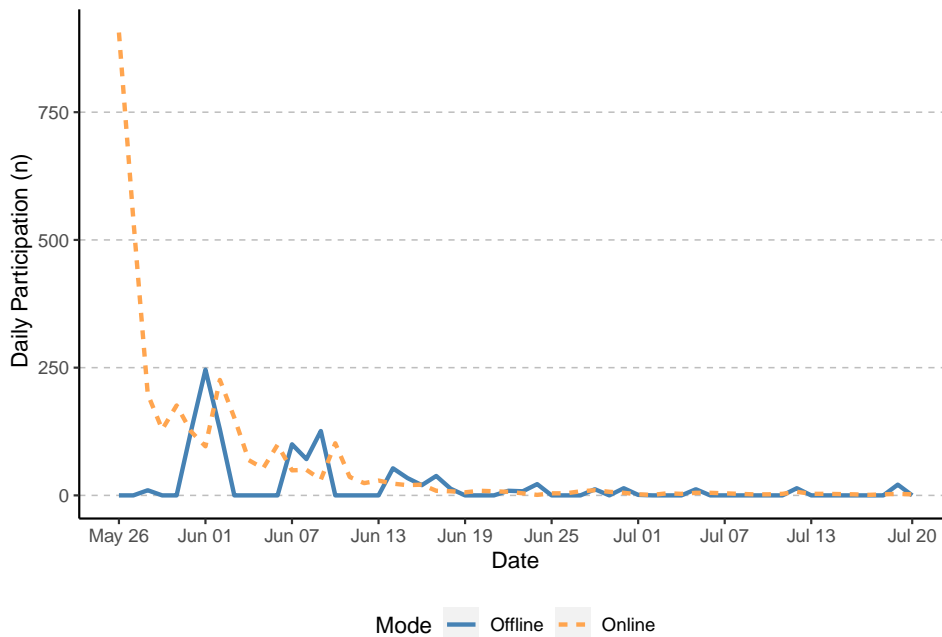


Figure 2: Daily return of questionnaires by mode of the GESIS Panel (wave i**b**, fielding period 26.05.2021 to 20.07.2021)

2.2 Outcome Rates

The response rates calculation for the recruitment process of the GESIS Panel are based on Final Disposition Codes for In-Person Household Surveys (American Association for Public Opinion Research, 2016) and are adapted for register-based samples in Germany. The wave-specific response metrics are presented separately for the 3 recruitment cohorts. GP2013 indicates the first cohort that was recruited in 2013, GP2016 indicates the second cohort that was recruited in 2016, GP2018 indicates the third cohort that was recruited in 2018. Please note that the GESIS Panel may have already recruited a further cohort whose outcome rates can only be reported for later waves.

The completion rate (COMR) is the proportion of those who completed or partially completed the survey over eligible panel members who were invited to the survey. All active panel members are eligible for the wave. Active panel members are those who do not sign off from the panel. The eligibility for the wave surveys is defined as the returned profile questionnaire: all invited panelists who returned the profile questionnaire and did not sign off from the panel afterwards, were invited to the wave. The completion rate is computed separately for two modes and as an overall rate with counting the response to the mode the respondent was originally invited to.

$$\text{Completion Rate COMR} = \frac{\text{Interview} + \text{Partial}}{\text{Interview} + \text{Partial} + \text{Refusal} + \text{Noncontact} + \text{Other}}$$

	Overall COMR	COMR Online	COMR Offline
GP2013	$\frac{2351+10}{2351+10+22+8+147} \equiv 93.03\%$	$\frac{1780+6}{1780+6+18+0+84} \equiv 94.60\%$	$\frac{571+4}{571+4+4+8+63} \equiv 88.46\%$
GP2016	$\frac{953+1}{953+1+7+5+66} \equiv 92.44\%$	$\frac{700+1}{700+1+7+0+41} \equiv 93.59\%$	$\frac{253+0}{253+0+0+5+25} \equiv 89.40\%$
GP2018	$\frac{1027+7}{1027+7+6+2+91} \equiv 91.26\%$	$\frac{779+7}{779+7+6+0+56} \equiv 92.69\%$	$\frac{248+0}{248+0+0+2+35} \equiv 87.02\%$

The absorption rate indicates the quality of address lists of active panel members. This estimate is a

proportion of non-contacts among the active panelists.

$$\text{Absorption Rate} = \frac{\text{Invitations Sent} - \text{Undeliverable Invitations}}{\text{Invitations Sent}}$$

	Overall Absorption Rate	Absorption Rate Online	Absorption Rate Offline
GP2013	$\frac{2538-8}{2538} \equiv 99.68\%$	$\frac{1888-0}{1888} \equiv 100.00\%$	$\frac{650-8}{650} \equiv 98.77\%$
GP2016	$\frac{1032-5}{1032} \equiv 99.52\%$	$\frac{749-0}{749} \equiv 100.00\%$	$\frac{283-5}{283} \equiv 98.23\%$
GP2018	$\frac{1133-2}{1133} \equiv 99.82\%$	$\frac{848-0}{848} \equiv 100.00\%$	$\frac{285-2}{285} \equiv 99.30\%$

The cumulative response rate 1 (CUMR1) is obtained by multiplication of the recruitment rate, profile rate, and the completion rate for each wave. For detailed information about the calculation of the recruitment rate and the profile rate see the recruitment reports of the respective cohorts.

$$\text{Cumulative Response Rate 1 (CUMR1)} = \text{RECR} \times \text{PROR} \times \text{COMR}$$

	Overall CUMR1 Wave ib	CUMR1 Wave ib Online	CUMR1 Wave ib Offline
GP2013	$0.2898 \times 0.7942 \times 0.9303 \equiv 21.41\%$	$0.2898 \times 0.7878 \times 0.9460 \equiv 21.60\%$	$0.2898 \times 0.8067 \times 0.8846 \equiv 20.69\%$
GP2016	$0.2022 \times 0.8051 \times 0.9244 \equiv 15.05\%$	$0.2022 \times 0.8059 \times 0.9359 \equiv 15.25\%$	$0.2022 \times 0.8036 \times 0.8940 \equiv 14.53\%$
GP2018	$0.1830 \times 0.7743 \times 0.9126 \equiv 12.93\%$	$0.1830 \times 0.7784 \times 0.9269 \equiv 13.20\%$	$0.1830 \times 0.7668 \times 0.8702 \equiv 12.21\%$

The cumulative response rate 2 (CUMR2) takes the retention rate (RETR) into account, that is, the number of active panel members at the time of this wave out of all active panel members (i.e., the panelists who returned the profile survey). It is advisable to report this indicator when using the data from a single wave.

$$\text{Retention Rate} = \frac{\text{Overall Active Panel@Recent Wave}}{\text{Overall Active Panel@Profile Survey}}$$

	Overall Retention Rate	Retention Rate Online	Retention Rate Offline
GP2013	$\frac{2538}{4938} \equiv 51.40\%$	$\frac{1888}{3068} \equiv 61.54\%$	$\frac{650}{1870} \equiv 34.76\%$
GP2016	$\frac{1032}{1710} \equiv 60.35\%$	$\frac{749}{1095} \equiv 68.40\%$	$\frac{283}{615} \equiv 46.02\%$
GP2018	$\frac{1133}{1607} \equiv 70.50\%$	$\frac{848}{1060} \equiv 80.00\%$	$\frac{285}{547} \equiv 52.10\%$

$$\text{Cumulative Response Rate 2 (CUMR2)} = \text{RECR} \times \text{PROR} \times \text{COMR} \times \text{RETR}$$

	Overall CUMR2 Wave ib	CUMR2 Wave ib Online	CUMR2 Wave ib Offline
GP2013	$0.2898 \times 0.7942 \times 0.9303 \times 0.5140 \equiv 11.01\%$	$0.2898 \times 0.7878 \times 0.9460 \times 0.6154 \equiv 13.29\%$	$0.2898 \times 0.8067 \times 0.8846 \times 0.3476 \equiv 7.19\%$
GP2016	$0.2022 \times 0.8051 \times 0.9244 \times 0.6035 \equiv 9.08\%$	$0.2022 \times 0.8059 \times 0.9359 \times 0.6840 \equiv 10.43\%$	$0.2022 \times 0.8036 \times 0.8940 \times 0.4602 \equiv 6.68\%$
GP2018	$0.1830 \times 0.7743 \times 0.9126 \times 0.7050 \equiv 9.12\%$	$0.1830 \times 0.7784 \times 0.9269 \times 0.8000 \equiv 10.56\%$	$0.1830 \times 0.7668 \times 0.8702 \times 0.5210 \equiv 6.36\%$

The break-off rate is a proportion of those who answered less than 50 % of the substantial questions over those who started the interview (answered at least one question).

$$\text{Break-Off rate} = \frac{\text{Break-Off}}{\text{Interview} + \text{Partial} + \text{Break-Off}}$$

	Overall Break-Off rate	Break-off rate Online	Break-off rate Offline
GP2013	$\frac{12}{2351+10+12} \equiv 0.51\%$	$\frac{9}{1780+6+9} \equiv 0.50\%$	$\frac{3}{571+4+3} \equiv 0.52\%$
GP2016	$\frac{6}{953+1+6} \equiv 0.63\%$	$\frac{6}{700+1+6} \equiv 0.85\%$	$\frac{0}{253+0+0} \equiv 0.00\%$
GP2018	$\frac{3}{1027+7+3} \equiv 0.29\%$	$\frac{3}{779+7+3} \equiv 0.38\%$	$\frac{0}{248+0+0} \equiv 0.00\%$

The attrition rate in this wave report is defined as the proportion of the panel members who drop out between the profile survey that was the first self-administered survey of the GESIS Panel and the current wave. According to the definition of the active panel (returned the questionnaire of the profile survey), the active panel after the profile survey was 4938 panel members. During the recruitment phase, 50 panel members have signed off from the panel.

Attrition can occur voluntarily and involuntarily (DiSogra and Callegaro, 2016). In the GESIS Panel, voluntary attrition is a result of panel members contacting the GESIS Panel team and requesting to be removed from the panel. Cases in which inability to participate due to health reasons or death of a panel member were communicated to the GESIS Panel by other persons (such as panel members' relatives), and were treated as voluntarily attrition and removed from the panel.

If panel members do not respond to three consecutive waves or cannot be reached for three consecutive waves, they are excluded from the GESIS Panel (involuntary attrition). Removal of panel members due to prolonged nonresponse or prolonged noncontact was done for the first time before wave bd and is done before each wave. The attrition rate reported below includes cases for which a request has been made to be removed as well as cases removed by the GESIS Panel.

$$\text{Attrition rate} = \frac{\text{Overall Active Panel@Profile Survey} - \text{Overall Active Panel@Recent Wave}}{\text{Overall Active Panel@Profile Survey}}$$

	Overall Attrition rate	Attrition rate Online	Attrition rate Offline
GP2013	$\frac{4938-2538}{4938} \equiv 48.60\%$	$\frac{3068-1888}{3068} \equiv 38.46\%$	$\frac{1870-650}{1870} \equiv 65.24\%$
GP2016	$\frac{1710-1032}{1710} \equiv 39.65\%$	$\frac{1095-749}{1095} \equiv 31.60\%$	$\frac{615-283}{615} \equiv 53.98\%$
GP2018	$\frac{1710-1133}{1607} \equiv 29.50\%$	$\frac{1095-848}{1060} \equiv 20.00\%$	$\frac{615-285}{547} \equiv 47.90\%$

3. Post-Processing

In this section, we provide a brief overview of measures of data cleaning and quality control (see section 3.1) and peculiarities of the paper mode (section 3.2). In section 3.3, variables that are generated in the process of data preparation are listed. Section 3.4 provides an overview of variables that are exclusively available in the Extended Edition of the data set.

3.1 Data Cleaning and Quality Control

During the data preparation process, the data undergo several steps of data preparation and validation. The recoding is in line with the GESIS Panel missing value scheme. The GESIS Panel disseminates the data in a quite raw format. This means the data are not validated with respect to previous statements of the panelists within the questionnaire (e.g., filter questions) or within data collection waves (e.g., differences in demographic variables). Usually, this becomes apparent in the offline mode, where panelists can ignore routing and fill in filtered questions anyway.

Due to data privacy, specific variables undergo an anonymization process and are either categorized (see 3.3) or are only accessible in the GESIS Panel Extended Edition (see 3.4). This is primarily the case for demographic variables but also relates to sensitive topics as well as spatial information.

The panel itself is subject to cleaning processes. Panelists are removed from the panel after three subsequent waves of non-response or non-contact.

3.2 Handling of Ambiguous Cases in the Paper Questionnaire

Variable `ibza002a` indicates the mode in which a respondent answered the questionnaire. In general, paper questionnaires offer less guidance to panelists on how to answer a question than online questionnaires. This might even cause questions to be answered in an unintended manner. The paper questionnaires are processed electronically by a field institute and some of the cases are checked manually. Any problems and unclear responses are marked by the person entering the data and marked as -111. The main incidences are cases in which the person entering the data was uncertain of how to interpret the information provided by the respondent in the questionnaire. Examples are multiple answers where only one answer is allowed, crosses between checkboxes, and answers that are crossed-out.

In contrast to previous wave publications, recoding of the ambiguous cases has not been done since wave `cf`.

3.3 Generated Variables

Table 4 lists the variable(s) generated in the process of data preparation. In wave `ib3` variables had to be generated due to privacy reasons and data protection. The text responses with comments about the questionnaire in variable `ibzq016a` are not published. Only a variable indicating whether the respondent left comments on the survey or not (`ibzq016b`) is published. Generated variables that are published in a later release of the data set are listed in the errata document that is accessible in the study entry of the GESIS Panel in the GESIS Data Archive.

Table 4: Overview of generated Variables in Wave `ib`

Variable	Variable Label
<code>ibcy136b</code>	Getroffene Maßnahmen: Sonstiges - offen
<code>ibcy194b</code>	Impfbedenken: Andere - offen
<code>ibzq016b</code>	Comment, dichotomous

Note: English labels can be found in the codebook.

3.4 Variables not Available in the Standard Edition

In order to secure the anonymity of the panel members, not all variables are available in the standard edition as they were collected. Answers to open-ended questions, for instance, are not included in the Standard Edition. They are available in the Extended Edition. Table 5 gives an overview on the variables that are additionally available in the Extended Edition.

Table 5: Overview of Variables only available in the Extended Edition

Variable	Variable Label
ibcy136b	Getroffene Maßnahmen: Sonstiges - offen
ibcy194b	Impfbedenken: Andere - offen
ibzp209a	Javascript version
ibzp210a	Flash version

Note: English labels can be found in the codebook.

Appendix

I. Field Phase

Table 6: Daily returns by mode


Date	Online		Offline		Total	
	No.	% (cum.)	No.	% (cum.)	No.	% (cum.)
2021-05-26	906	27.45	0	0.00	906	20.68
2021-05-27	540	43.80	0	0.00	540	33.01
2021-05-28	198	49.80	10	0.93	208	37.76
2021-05-29	129	53.71	0	0.93	129	40.71
2021-05-30	176	59.04	0	0.93	176	44.73
2021-05-31	125	62.83	126	12.60	251	50.46
2021-06-01	96	65.74	246	35.40	342	58.26
2021-06-02	226	72.58	129	47.36	355	66.37
2021-06-03	152	77.19	0	47.36	152	69.84
2021-06-04	69	79.28	0	47.36	69	71.42
2021-06-05	53	80.88	0	47.36	53	72.63
2021-06-06	99	83.88	0	47.36	99	74.89
2021-06-07	49	85.37	100	56.63	149	78.29
2021-06-08	50	86.88	71	63.21	121	81.05
2021-06-09	31	87.82	126	74.88	157	84.63
2021-06-10	102	90.91	0	74.88	102	86.96
2021-06-11	36	92.00	0	74.88	36	87.79
2021-06-12	24	92.73	0	74.88	24	88.33
2021-06-13	29	93.61	0	74.88	29	89.00
2021-06-14	23	94.30	53	79.80	76	90.73
2021-06-15	20	94.91	34	82.95	54	91.96
2021-06-16	21	95.55	20	84.80	41	92.90
2021-06-17	9	95.82	38	88.32	47	93.97
2021-06-18	8	96.06	13	89.53	21	94.45
2021-06-19	6	96.24	0	89.53	6	94.59
2021-06-20	9	96.52	0	89.53	9	94.79
2021-06-21	8	96.76	0	89.53	8	94.98
2021-06-22	7	96.97	9	90.36	16	95.34
2021-06-23	4	97.09	8	91.10	12	95.62
2021-06-24	1	97.12	22	93.14	23	96.14
2021-06-25	4	97.24	0	93.14	4	96.23
2021-06-26	4	97.36	0	93.14	4	96.32
2021-06-27	8	97.61	0	93.14	8	96.51
2021-06-28	10	97.91	12	94.25	22	97.01
2021-06-29	7	98.12	0	94.25	7	97.17
2021-06-30	5	98.27	14	95.55	19	97.60
2021-07-01	2	98.33	1	95.64	3	97.67
2021-07-02	1	98.36	0	95.64	1	97.69
2021-07-03	4	98.49	0	95.64	4	97.79
2021-07-04	3	98.58	0	95.64	3	97.85

Table 6: Daily returns by mode (*continued*)

Date	Online		Offline		Total	
	No.	% (cum.)	No.	% (cum.)	No.	% (cum.)
2021-07-05	5	98.73	12	96.76	17	98.24
2021-07-06	5	98.88	0	96.76	5	98.36
2021-07-07	4	99.00	0	96.76	4	98.45
2021-07-08	3	99.09	0	96.76	3	98.52
2021-07-09	2	99.15	0	96.76	2	98.56
2021-07-10	2	99.21	0	96.76	2	98.61
2021-07-11	3	99.30	0	96.76	3	98.68
2021-07-12	7	99.52	14	98.05	21	99.16
2021-07-13	3	99.61	0	98.05	3	99.22
2021-07-14	3	99.70	0	98.05	3	99.29
2021-07-16	2	99.76	0	98.05	2	99.34
2021-07-17	1	99.79	0	98.05	1	99.36
2021-07-18	2	99.85	0	98.05	2	99.41
2021-07-19	3	99.94	21	100.00	24	99.95
2021-07-20	2	100.00	0	100.00	2	100.00

II. Documents

a. Invitation Letter for Offline Participants sent by mail

 GESIS · Postfach 10 28 36 · 68028 Mannheim  	 Leibniz-Institut für Sozialwissenschaften GESIS GesellschaftsMonitor Postfach 10 28 36 68028 Mannheim Telefon 0621 – 1246 – 564 Telefax 0621 – 1246 – 577 www.gesis-gesellschaftsmonitor.de	
Mannheim, 25.05.2021		
Einladung zu unserer Umfrage von Mai bis Juli 		
<p>herzlichen Dank für Ihre Teilnahme am GESIS GesellschaftsMonitor. Heute möchten wir Sie gerne einladen, an unserer aktuellen Umfrage von Mai bis Juli teilzunehmen. Die Beantwortung der Fragen wird etwa 20 Minuten in Anspruch nehmen. Bitte schicken Sie uns den ausgefüllten Fragebogen wieder mit dem beiliegenden frankierten Rückumschlag zu.</p> <p>Wir wünschen Ihnen viel Spaß beim Ausfüllen der Umfrage. Als Dankeschön für Ihre Teilnahme haben wir Ihnen in diesem Schreiben wieder 5 Euro beigelegt.</p> <p>Hat sich Ihre Adresse geändert oder ziehen Sie in Kürze um? Bei Adressänderungen oder sonstigen Rückfragen erreichen Sie uns telefonisch zu den üblichen Bürozeiten unter 0621-1246564 oder per E-Mail an info@gesis-gesellschaftsmonitor.de. Wir freuen uns über Ihr Interesse und beantworten gerne alle Fragen.</p> <p>Herzliche Grüße und alles Gute </p> <p>Dr. Bernd Weiß und das gesamte Projektteam</p> <p>PS: Informationen zum Datenschutz finden Sie auf der Rückseite dieses Briefes.</p>		
<small>GESIS e.V. Vereinsregister Amtsgericht Mannheim Registernummer VR 1449 Steuer-Nr. 38145/01607 USt-Id.Nr. DE814839735</small>	<small>BW-Bank Stuttgart BLZ 600 501 01 Konto-Nr. 749 650 43 33 BIC/SWIFT-Code SOLADEST600 IBAN DE31 6005 0101 7496 5043 33</small>	<small>GESIS e.V. ist Mitglied der Leibniz-Gemeinschaft Präsident und Vorstand Prof. Dr. Christof Wolf Postfach 12 21 55 68072 Mannheim</small> 

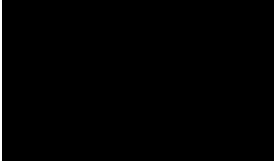


b. Invitation Letter for Online Participants sent by mail



gesis Leibniz-Institut
für Sozialwissenschaften

GESIS · Postfach 10 28 36 · 68028 Mannheim



GESIS GesellschaftsMonitor
Postfach 10 28 36
68028 Mannheim
Telefon 0621 - 1246 - 564
Telefax 0621 - 1246 - 577
www.gesis-gesellschaftsmonitor.de

Mannheim, 25.05.2021

Einladung zu unserer Umfrage von Mai bis Juli



herzlichen Dank für Ihre Teilnahme am GESIS GesellschaftsMonitor. Heute möchten wir Sie gerne einladen, an unserer aktuellen Umfrage von Mai bis Juli teilzunehmen. Die Beantwortung der Fragen wird etwa 20 Minuten in Anspruch nehmen.

Wir wünschen Ihnen viel Spaß beim Ausfüllen der Umfrage. Als Dankeschön für Ihre Teilnahme haben wir Ihnen in diesem Schreiben wieder 5 Euro beigelegt.

Den Link zur aktuellen Umfrage erhalten Sie in den nächsten Tagen wie gewohnt per E-Mail. Sie können die Umfrage aber auch manuell starten, indem Sie sich auf unserer Homepage www.gesis-gesellschaftsmonitor.de mit Ihren persönlichen Zugangsdaten anmelden.

Hat sich Ihre Adresse geändert oder ziehen Sie in Kürze um? Bei Adressänderungen oder sonstigen Rückfragen erreichen Sie uns telefonisch zu den üblichen Bürozeiten unter 0621-1246564 oder per E-Mail an info@gesis-gesellschaftsmonitor.de. Wir freuen uns über Ihr Interesse und beantworten gerne alle Fragen.

Herzliche Grüße und alles Gute



Dr. Bernd Weiß und das gesamte Projektteam

PS: Informationen zum Datenschutz finden Sie auf der Rückseite dieses Briefes.

GESIS e.V.
Vereinsregister Amtsgericht Mannheim
Registernummer VR 1449
Steuer-Nr. 38145/01607
USt-Id.Nr. DE814839735

BW-Bank Stuttgart
BLZ 600 501 01
Konto-Nr. 749 650 43 33
BIC/SWIFT-Code SOLADEST600
IBAN DE31 6005 0101 7496 5043 33

GESIS e.V. ist Mitglied der Leibniz-Gemeinschaft
Präsident und Vorstand
Prof. Dr. Christof Wolf
Postfach 12 21 55
68072 Mannheim



c. Data Privacy Statement sent by mail (for Online and Offline Participants)

Erklärung zum Datenschutz und zur absoluten Vertraulichkeit Ihrer Angaben beim GESIS GesellschaftsMonitor

GESIS – Leibniz-Institut für Sozialwissenschaften und alle beauftragten Dienstleister arbeiten nach den Vorschriften der EU-Datenschutz-Grundverordnung und allen anderen in Deutschland gültigen datenschutzrechtlichen Bestimmungen.

Das gilt insbesondere für die Wiederholungsbefragungen des GESIS GesellschaftsMonitors, bei denen mehrere Befragungen mit derselben Person durchgeführt werden. Die Angaben aus den Befragungen werden lediglich durch eine Nummer miteinander verknüpft.

Nach der Teilnahme an den Befragungen werden die Antworten in einer Datenbank getrennt von Ihren personenbezogenen Daten gespeichert.

Ergebnisse werden nur in anonymisierter Form dargestellt, beispielsweise zusammengefasst in Tabellen und Grafiken. Niemand kann aus den Ergebnissen erkennen, von welcher Person die Angaben gemacht worden sind. Das heißt, niemand erfährt, welche Antworten Sie persönlich gegeben haben.

Es gibt keine Weitergabe von Daten, die Ihre Person erkennen lassen.

Die Teilnahme am GESIS GesellschaftsMonitor ist freiwillig. Erhaltene Aufwandsentschädigungen sind keine Bezahlung, sondern ein Dankeschön für Ihre Unterstützung der wissenschaftlichen Forschung. Sie gehen damit keine Verpflichtung für weitere Befragungen ein. Die Beendigung bzw. das Abbrechen der Teilnahme ist jederzeit möglich und mit keinen Nachteilen verbunden. Um nicht mehr teilzunehmen, bedarf es keiner Kündigung.

Ihre Rechte

Im Hinblick auf Ihre personenbezogenen Daten können Sie bis zur Löschung der Daten bei Projektabschluss gegenüber GESIS jederzeit die folgenden Rechte geltend machen:

- Auskunftsrecht
- Recht auf Berichtigung
- Recht auf Löschung („Recht auf Vergessenwerden“)
- Recht auf Einschränkung der Verarbeitung
- Recht auf Datenübertragbarkeit

Außerdem haben Sie ein Beschwerderecht bei einer Datenschutz-Aufsichtsbehörde. Sie können Ihre Beschwerde sowohl bei der Aufsichtsbehörde im Bundesland Ihres Wohnsitzes oder Arbeitsplatzes als auch bei der für den Verantwortlichen im jeweiligen Bundesland zuständigen Aufsichtsbehörde erheben.

Ansprechpartner

Für alle Fragen und Ersuche zum Datenschutz wenden Sie sich bitte an:

GESIS – Leibniz-Institut für Sozialwissenschaften
GESIS GesellschaftsMonitor
Postfach 12 21 55
68072 Mannheim

Tel.: +49-(0)621-1246-564
Fax: +49-(0)621-1246-577
datenschutz@gesis-gesellschaftsmonitor.de

Weitere Informationen zum Datenschutz und unserem Datenschutzbeauftragten finden Sie unter www.gesis.org/institut/datenschutz

d. Invitation Email

Ihre neue Umfrage von Mai bis Juli 2021

Sehr geehrte Frau ... ,

herzlichen Dank für Ihre Teilnahme am GESIS GesellschaftsMonitor.

Heute möchten wir Sie gerne einladen, an unserer aktuellen Befragung teilzunehmen. Über diesen Link kommen Sie direkt zu unserer neuen Umfrage von Mai bis Juli 2021:

<https://www.gesis-gesellschaftsmonitor.de/...>

Als Dankeschön für Ihre Teilnahme erhalten Sie in Kürze wieder 5 Euro per Post.

Wir wünschen Ihnen viel Spaß beim Ausfüllen der Umfrage. Die Beantwortung der Fragen wird etwa 20 Minuten in Anspruch nehmen.

Bei Rückfragen erreichen Sie uns telefonisch zu den üblichen Bürozeiten unter 0621-1246564 oder per E-Mail an info@gesis-gesellschaftsmonitor.de. Wir freuen uns über Ihr Interesse und beantworten gerne alle Fragen.

Mit herzlichen Grüßen aus Mannheim,

Ihr GESIS GesellschaftsMonitor Team

Hinweis zum Datenschutz:

In keinem Fall werden Daten weitergegeben, die Ihre Person erkennen lassen. Niemand kann aus den Auswertungen der Daten Rückschlüsse darauf ziehen, von welcher Person die Angaben gemacht worden sind. Weitere Informationen zum Datenschutz finden Sie hier:

https://www.gesis-gesellschaftsmonitor.de/privacy_policy.php

e. First Email Reminder

Erinnerung: Ihre Umfrage von Mai bis Juli 2021

Sehr geehrte Frau ...,

wir haben Sie kürzlich zur Teilnahme an einer neuen Befragung eingeladen und würden uns sehr freuen, wenn auch Sie teilnehmen. Über den folgenden Link können Sie direkt an der Umfrage von Mai bis Juli 2021 teilnehmen:

<https://www.gesis-gesellschaftsmonitor.de/...>

Als Dankeschön für Ihre Teilnahme haben wir Ihnen bereits 5 Euro per Post zugeschickt.

Wir wünschen Ihnen viel Spaß beim Ausfüllen der Umfrage. Die Beantwortung der Fragen wird etwa 20 Minuten in Anspruch nehmen.

Bei Rückfragen erreichen Sie uns telefonisch unter 0621-1246564 oder per E-Mail an info@gesis-gesellschaftsmonitor.de. Wir freuen uns über Ihr Interesse und beantworten gerne alle Fragen.

Mit herzlichen Grüßen aus Mannheim,

Ihr GESIS GesellschaftsMonitor Team

Hinweis zum Datenschutz:

In keinem Fall werden Daten weitergegeben, die Ihre Person erkennen lassen. Niemand kann aus den Auswertungen der Daten Rückschlüsse darauf ziehen, von welcher Person die Angaben gemacht worden sind. Weitere Informationen zum Datenschutz finden Sie hier:

https://www.gesis-gesellschaftsmonitor.de/privacy_policy.php

f. Second Email Reminder

Erinnerung: Ihre neue Umfrage von Mai bis Juli 2021

Sehr geehrte Frau ... ,

wir haben Sie kürzlich zur Teilnahme an einer neuen Befragung eingeladen und würden uns sehr freuen, wenn auch Sie teilnehmen. Über den folgenden Link können Sie direkt an der Umfrage von Mai bis Juli 2021 teilnehmen:

<https://www.gesis-gesellschaftsmonitor.de/...>

Als Dankeschön für Ihre Teilnahme haben wir Ihnen bereits 5 Euro per Post zugeschickt.

Bei Rückfragen erreichen Sie uns telefonisch unter 0621-1246564 oder per E-Mail an info@gesis-gesellschaftsmonitor.de. Wir freuen uns über Ihr Interesse und beantworten gerne alle Fragen.

Mit herzlichen Grüßen aus Mannheim,

Ihr GESIS GesellschaftsMonitor Team

Hinweis zum Datenschutz:

In keinem Fall werden Daten weitergegeben, die Ihre Person erkennen lassen. Niemand kann aus den Auswertungen der Daten Rückschlüsse darauf ziehen, von welcher Person die Angaben gemacht worden sind. Weitere Informationen zum Datenschutz finden Sie hier:

https://www.gesis-gesellschaftsmonitor.de/privacy_policy.php

References

American Association for Public Opinion Research. (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys.

Bosnjak, M., Dannwolf, T., Enderle, T., Schaurer, I., Struminskaya, B., Tanner, A., & Weyandt, K. W. (2017). Establishing an Open Probability-Based Mixed-Mode Panel of the General Population in Germany: The GESIS Panel. *Social Science Computer Review*, 089443931769794. <https://doi.org/10.1177/0894439317697949>

Callegaro, M., & DiSogra, C. (2008). Computing Response Metrics for Online Panels. *Public Opinion Quarterly*, 72(5), 1008–1032. <https://doi.org/10.1093/poq/nfn065>

DiSogra, C., & Callegaro, M. (2016). Metrics and Design Tool for Building and Evaluating Probability-Based Online Panels. *Social Science Computer Review*, 34(1), 26–40. <https://doi.org/10.1177/0894439315573925>

GESIS Panel Wave Report

GESIS – Leibniz-Institut für Sozialwissenschaften

Survey Design and Methodology

GESIS Panel

Postfach 12 21 55

68072 Mannheim

E-Mail: gesis-panel@gesis.org

www.gesis.org/gesis-panel