



Data From the German Family Panel Pairfam: The Supplementary COVID-19 Survey

DATA PAPER

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ABSTRACT

The COVID-19 pandemic had major implications for private and family lives. The German Family Panel pairfam conducted an online survey regarding the experiences during the pandemic. The survey was conducted from May to July 2020. It includes instruments introduced in previous pairfam waves as well as new modules on topics that proved particularly relevant during the COVID-19 pandemic. The resulting dataset encompasses a sample of 3,182 respondents from all German federal states ranging in age from 17–47 years. The data has already been used in a variety of scientific publications and is available for research and teaching purposes.

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BACKGROUND: CONTEXT AND AIMS OF THE PAIRFAM COVID-19 SURVEY

The COVID-19 pandemic has major implications for the public and private lives of all people worldwide. Therefore, at the beginning of the pandemic in early 2020, the German federal states implemented far-reaching contact restrictions and lockdown regulations to slow the spread of the virus (Steinmetz et al., 2020). This resulted in the widespread closure of most stores, childcare facilities and schools in Germany. To prevent further spread of the virus, personal contact was limited to members of one's household, and many employees had to work from home or with reduced working hours. Childcare became a primary responsibility for (working) parents, who were additionally advised to avoid grandparents' support due to higher health risks for the older generation. Similarly, homeschooling was introduced for the majority of students, which was to be supported by teachers. Only children whose parents had system-relevant occupations (e.g. at a hospital) and had to work outside the home could access emergency childcare or attend school in an institutional setting.

To meet the need for information about this unique and adverse circumstance and its impact on both institutions and individual lives, a large number of online surveys were soon initiated (e.g. Bünning et al., 2020; Langmeyer et al., 2020). While these could provide insight into important aspects of the conditions caused by the COVID-19 pandemic and subsequent lockdown measures, many surveys had to rely on random sampling and/or collected cross-sectional data that are of limited value for analyzing the changes caused by the pandemic. In contrast, longitudinal studies provide opportunities to collect data on conditions before, during, and after the COVID-19 pandemic. These can not only provide (better) estimates of change, but also enable researchers to examine the predictors of different responses as well as the long-term consequences.

The German Family Panel pairfam, which has been running since 2008/2009 (Huinink et al., 2011), took advantage of its longitudinal design and included an additional, optional online survey regarding the experiences during the COVID-19 pandemic. Pairfam is a panel study for researching partnership and family dynamics in Germany and therefore particularly well suited to capture the consequences of the COVID-19 pandemic for private life and personal relationships. Besides the main respondents – so-called anchors – their partners, parents and children are also included in the panel survey. Until August 2022, 13 out of 14 pairfam waves were available for analysis. Wave 13, which was conducted during the second and third COVID-19 wave in Germany, was released in 2022.

The additional online COVID-19 survey was carried out from May to July 2020 and builds on the extensive

information collected in previous survey waves on various life domains, including the employment situation or parenting. The main objectives of this additional survey were as follows: (1) to collect information on conditions during and after the first German lockdown based on a representative sample of four birth cohorts (anchors born 1971–73, 1981–83, 1991–93, and 2001–03), (2) to provide a longitudinal perspective on how personal lives changed as a result of COVID-19 restrictions, by linking participants' reports before and during the pandemic, and (3) to enable future analyses that are able to attribute long-term changes in well-being and a variety of life domains to specific experiences during the pandemic-induced crisis situation captured in the pairfam COVID-19 survey.

The fourth cohort (2001–03) was newly added with the regular Wave 11 together with a refreshment sample for the original cohorts (1971–73, 1981–83, 1991–93). In addition to the four cohorts, so-called “Step-ups” were included in the COVID-19 sample. The pairfam panel's child respondents who reach the age of 16 become “step-up” respondents in the following wave and therefore eligible to answer the regular anchor questionnaire instead of the child questionnaire. The COVID-19 sample includes former child respondents who “stepped-up” in previous waves. The heterogeneity of age groups and different life stages covered in the pairfam panel allowed the pairfam COVID-19 survey to address a broad range of issues relevant to adolescents, young adults, and adults in their late 30s and 40s, as well as single respondents, couples, and parents. The topics included personal well-being, partnership and family quality, parenthood, childcare and the division of housework, pandemic-specific changes in behavior and experiences with regards to media-consumption and schooling.

The survey included instruments from previous waves of the panel study to allow for longitudinal comparisons, e.g., on relationship quality and the division of housework and childcare, as well as new modules on topics that proved particularly relevant during the COVID-19 pandemic (e.g., media use, media-based communication, homeschooling).

As the pairfam COVID-19 study was developed at the beginning of the pandemic, only few empirical studies were yet available that informed the motivation and purpose behind collection of the data. Some authors published rapid evidence reviews or commentaries in March and April 2020 warning about the effects of lockdown measures on social life, such as effects of school closures on children (Brooks et al., 2020). First empirical results were published that also highlighted challenges posed by the school closures (Anger et al., 2020; forsa, 2020). However, many studies regarding life during the pandemic were ongoing and had not completed data collection by the time the pairfam COVID-19 survey was developed. To allow for (international) comparison,

some of the new questions in the pairfam COVID-19 study were based on indicators used in other ongoing COVID-19 studies (see [Table 3](#)).

METHODS

STUDY DESIGN

The pairfam COVID-19 study can be used as a stand-alone cross-sectional dataset. However, it was conducted as part of a broader panel study and complements the longitudinal data of 14 waves of data collection as an additional time of measurement. The different resources such as the codebook, the variable list, the methods report and the technical report are listed and explained in chapter 3.

The selection of the gross sample¹ for the COVID-19 survey was completed during the fieldwork period for pairfam wave 12. Eligible for the COVID-19 interview were respondents who had already been interviewed face-to-face in wave 12, or were temporary dropouts in wave 12 (who had not declined future interviews), or respondents who had not yet been finally processed by an interviewer during the main survey of wave 12 ([Brix et al., 2020](#)). The eligibility criteria applied to 9,640 respondents and included both anchor respondents from the four pairfam cohorts as well as step-up anchors.

The eligible pairfam respondents were invited to participate in an online survey of approximately 15 minutes via an invitation letter with a personalized link to the online survey. Two weeks after the initial invitation, a participation reminder was sent to all anchor respondents who had not already completed the survey. Upon entering the survey, respondents were asked to provide informed consent to data collection and agree to the linking of their survey data with existing panel data (via their anchor identifier "ID"). In the COVID-19 survey no dependent interviewing² was used (as did the regular data collection in pairfam waves). A few screening questions asking for household composition were used as filter questions. The programming of the online survey and field work was conducted by Kantar Public, the same survey institute that was assigned to execute data collection for the regular pairfam waves.

The pairfam COVID-19 survey incorporated a broad range of topics relevant to respondents of different age groups and personal situations. The following topics were covered in the pairfam COVID-19 survey:

- personal well-being and worries related to the COVID-19 pandemic
- partnership quality and family climate
- for separated families: children's contact and communication with non-residential parents, and/or anchor's contact to non-residential children
- child care and the division of housework
- parents' experiences in the parenting role

- children's media consumption and school experiences

Special modules for younger respondents (up to 25 years old):

- depressiveness and coping with the pandemic
- adherence to restrictions
- media consumption, personal contact to friends and school experiences

The survey consisted of instruments that were already used in previous waves as well as modules that were newly introduced to cover topics that emerged as relevant during the COVID-19 pandemic. To allow for (international) comparisons, indicators and questions used in other COVID-19 studies were included in the new modules where possible. In section 2.5 (Materials/Survey instruments) references for all survey questions are described in detail and information on their availability in other pairfam datasets is provided.

TIME OF DATA COLLECTION

Data for the COVID-19 study was collected between May 19th and July 13th, 2020. The majority of interviews (92.6%) was conducted within the first four weeks of fieldwork. The number of interviews per week (cumulated over the field period) can be found in [Walper et al., 2021](#).

LOCATION OF DATA COLLECTION

Data was collected from respondents who live in all federal states of Germany. A detailed account of how many respondents from each of the 16 federal states participated can be found in the methods report provided by Kantar Public ([Brix et al., 2020](#)).

SAMPLING, SAMPLE AND DATA COLLECTION

All participating pairfam respondents received the invitation letter at the beginning of the field period and an additional reminder if they had not completed the web survey on June 3rd, 2020. After approximately eight weeks of data collection and without further notification, the field phase ended on July 13th, 2020. Respondents did not receive any additional monetary compensation for their participation. However, during the field phase of wave 12 (November 2019 – July 2020) anchor respondents who were interviewed (face-to-face or telephone format) received 15 € as a reward for participation.

A total of 9,640 pairfam respondents were contacted and invited to participate. The overall response rate was 33.0%, resulting in a sample of 3,182 respondents for the pairfam COVID-19 survey. Due to incomplete interviews (N = 22) and conflicting information on birth date and/or gender (N = 6), a total of 28 respondents were excluded from the final sample.

Sample composition of the COVID-19 survey is depicted in [Table 1](#). The composition of the main pairfam sample in wave 11 is included in the table for comparison.

Mean age is 31 years. For about 82% of respondents contact restrictions were still in place (6% “don’t know”). About 83% of parents with schoolchildren in the sample stated that schools were still (partially) closed at the time of the survey. Further, 74% of parents with younger children stated that daycare and kindergartens were still (partially) closed. The household income had decreased for 24%.

MATERIALS AND SURVEY INSTRUMENTS

The pairfam COVID-19 survey is comprised of nine sections and a total of 64 questions. Questions require either one or multiple responses, each response is assigned to one item and represented as one variable in the resulting dataset. [Table 2](#) provides an overview over the sections, number of questions and items included. The full COVID-19 questionnaire can be found in the pairfam COVID-19 Release 1.1.

For an overview over the scales from the COVID-19 survey, please refer to [Table 3](#). Some scales are assessed in regular pairfam waves as well. For more information

on instruments repurposed from previous waves of the pairfam study, please refer to the pairfam Scales and Instruments Manual ([Reim et al., 2022](#)). For an overview of the availability of longitudinal data see [Table 4](#). Indicators and details not included in [Table 3](#) are described in the following. Further information on the individual indicators can be found in the pairfam Technical Paper 15 ([Walper et al., 2021](#)).

Section (1) starts with an introductory statement addressed at the respondents, followed by questions concerning informed consent (for details on the provided information, see [Brix et al., 2020](#)), gender and date of birth. In section (2), household and employment information is assessed.

This is followed by section (3), addressing well-being and concerns regarding the pandemic. As shown in [Table 4](#), some well-being indicators were also assessed in regular pairfam waves.

This section is followed by section (4), addressing partnership quality, division of household labor and family climate.

The separation module (section (5)) refers to (1) respondents with children in their household whose

	COVID-19 SURVEY (2020) N (%)	PAIRFAM WAVE 11 (2018/19) N (%)
Sex		
Female	1829 (58.0)	5261 (53.0)
Male	1325 (42.0)	4656 (47.0)
Birth cohort		
1971–73	585 (18.5)	1625 (16.4)
1981–83	918 (29.1)	2800 (28.2)
1991–93	660 (20.9)	2534 (25.6)
2001–03	855 (27.1)	2476 (25.0)
Step-up sample (born 1995–2003)	136 (4.3)	483 (4.9)
Family status		
Single	1085 (34.4)	3789 (38.2)
Living apart together (LAT)	448 (14.2)	1517 (15.3)
Cohabiting (married and unmarried)	1580 (50.1)	4552 (45.9)
Children in the household	1107 (35.1)	3461 (34.9)
Highest school degree		
Currently enrolled	801 (25.4)	2182 (22.0)
Lower, Volks-/Hauptschulabschluss	164 (5.2)	1131 (11.4)
Intermediate, Realschulabschluss	675 (21.4)	2509 (25.3)
Upper, allg. Hochschulreife	1514 (48.0)	4106 (41.4)
N	3154 (100.0)	9918 (100.0)

Table 1 Sample Composition COVID-19 Survey and Pairfam Wave 11 in comparison.

Note. Reprinted from “The pairfam COVID-19 survey: Design and instruments. Release 1.1. LMU Munich: pairfam Technical Paper 15,” by Walper et al., 2021, p. 9.

SECTION	NUMBER OF QUESTIONS	NUMBER OF RESPONSES/ITEMS
1 Introduction/Data protection policy/Identification	2	4
2 Current Situation/Household composition/Employment	10	57
3 Well-being, concerns	2	15
4 Partnership and family climate	8	21
5 Separated families	14	17
6 Child care and parenting role	2	14
7 Children in the household: Media consumption, school	10	21
8 Module for respondents up to 25	12	30
9 Conclusion	4	9
Total	64	188

Table 2 Survey Instruments in the Pairfam COVID-19 Study.

other biological parent lives elsewhere and (2) respondents with biological children who live elsewhere. In the segment regarding children with a non-resident biological parent, the first question serves as a filter question and is posed to all respondents with at least one child. It assesses whether one of the respondent's children has a biological parent who lives outside their household (cor22). Separated or divorced respondents with children were then posed questions on personal and digital contact frequency. If the questions applied to more than one child from a previous relationship, they referred to the youngest child. The second segment was addressed to respondents who have one or more biological children from a previous relationship who do not live in their household. This section also starts with a filter question to identify respondents who have biological children from previous relationships that live with the other biological parent in another household (cor29). It then covers the same questions as the module's first part while referring to the respondents' own contact to their externally living biological children.

In section (6), childcare arrangements during the pandemic-induced lockdown were captured among respondents with a minimum of one child in the household. The longitudinal availability of the parental role indicators is shown in Table 4.

Children's media consumption while schools and day care facilities were closed was assessed in section (7) by asking parents how much time their children spent per day in front of a screen and how that amount compared to their children's media consumption prior to the COVID-19 crisis. If parents had more than two children, the questions referred only to their youngest and their oldest child. The questions in this section about schooling are addressed to respondents with schoolchildren in their household, in order to assess to what extent their families were affected by the closure of schools and homeschooling during lockdown. Respondents with more

than one child were asked to refer to the youngest child. The section's last items assess the respondent's and their youngest child's overall experience with homeschooling.

To better capture young people's experiences during the COVID-19 lockdown, a module for respondents younger than 26 years (born 1995 or later) was included in the pairfam COVID-19 survey, with questions regarding well-being, coping, compliance to the rules, media consumption and personal contacts during the lockdown phase (section (8)). The questions for respondents with schoolchildren in their household were modified to assess young people's experience with home schooling. The questions were posed to all young respondents who currently attended school.

Lastly, in section (9), besides the items on the overall experience during the pandemic (see Table 3), two questions ask respondents with children about the coping strategies employed by the youngest and oldest child in their household. The survey's final item is an open question that asks respondents to specify what the first thing is they would like to do once the COVID-19 pandemic is over.

QUALITY CONTROL

Value Checks

To check if value labels were assigned correctly, it was assessed for each variable whether the actual value range from the dataset corresponded to the range of possible values listed in the questionnaire. Values that were outside the specified range were identified as incorrect entries and recoded as “-4 Filter Error / Incorrect Entry”.

Filter Checks

The filters documented in the questionnaire for each variable were checked as well. In the case of filter errors (i.e., a question was asked by mistake or not asked by mistake), the missing value “-4 Filter Error / Incorrect Entry” was assigned.

TOPIC	QUESTION	NUMBER OF ITEMS, ITEM LABELS	SCALE RANGE	RELIABILITY	SOURCE OF SCALE
Well-being					
Activity	How have you been feeling, for the most part, during the past four weeks?	3 (active, active and enterprising, full of energy)	1-5	$\alpha = .798$	"Befindlichkeitsskalen (Well-being scales)" (Abele-Brehm & Brehm, 1986)
Anger	How have you been feeling, for the most part, during the past four weeks?	2 (angry, peeved)	1-5	$\alpha = .817$	"Befindlichkeitsskalen (Well-being scales)" (Abele-Brehm & Brehm, 1986)
Anxiety	How have you been feeling, for the most part, during the past four weeks?	2 (nervous, anxious)	1-5	$\alpha = .665$	"Positive and Negative Affect Schedule" (Watson et al., 1988), "Computeradaptiver Test zur Erfassung von Angst (computer adaptive test to assess anxiety)" (Walter et al., 2005)
Stress	How have you been feeling, for the most part, during the past four weeks?	3 (stressed, overburdened, under pressure)	1-5	$\alpha = .861$	"Perceived Stress Questionnaire" (Levenstein et al., 1993) and its German Version (Fliege et al., 2001)
Loneliness	How have you been feeling, for the most part, during the past four weeks?	2 (lonely, alone)	1-5	$\alpha = .872$	"UCLA Loneliness Scale" (Russell et al., 1980), items of the PACO study (Schmidt et al., 2020)
Concerns	How worried are you about the following areas in your life?	4 (your personal financial situation; your health of your relatives; exam, graduation)	1-3	/	Items of the PACO study (Schmidt et al., 2020)
Relationship Quality					
Intimacy	How often do the following things happen in your partnership?	2 (how often do you tell your partner what you're thinking; how often do you share your secrets and private feelings with your partner?)	1-5	$\alpha = .781$	
Admiration	How often do the following things happen in your partnership?	2 (how often does your partner express recognition for what you've done; how often does your partner show that he/she appreciates you?)	1-5	$\alpha = .833$	"Network of Relationships Inventory" (Furman & Buhrmester, 1985)
Conflict	How often do the following things happen in your partnership?	2 (how often are you and your partner annoyed at or angry with each other; how often do you and your partner disagree and quarrel?)	1-5	$\alpha = .807$	"Network of Relationships Inventory" (Furman & Buhrmester, 1985)
Division of Household Chores and Childcare					
Relative Share of Labor	How do you and your partner currently organize tasks in the following areas? Please refer only to the portion of the work done by you and/or your partner.	5 (housework (washing, cooking, cleaning); shopping; working on the house, apartment, or car; financial and administrative matters; child care)	1-5	/	"Negotiating the Life Course project" (McDonald et al.)

(Contd.)

TOPIC	QUESTION	NUMBER OF ITEMS, ITEM LABELS	SCALE RANGE	RELIABILITY	SOURCE OF SCALE
Family Climate					
Family Climate	What is the atmosphere like at your home? Do the following apply more, the same, or less than before the crisis due to COVID-19? The atmosphere is ...	5 (... happy, we are having fun together; ...anxious and worried; ...stressful and irritated; ...comfortable and relaxed; ... conflictual, heavy)	1-3	/	Developed by the pairfam team ¹ based on items included in the COVID-19 module of the pairfam Child Questionnaire in wave 12
Childcare and Parenting Role					
Childcare	How did you organize child care while day care facilities and schools were closed? Please mark all options that apply.	10 (my children don't require close supervision; I supervised them at home without working; I supervised them at home while working from home; my partner supervised them at home without working; my partner supervised them at home while working from home; the children attended an emergency day care facility; relatives, friends, or neighbors supervised my children; the children were alone at home; my children's other biological parent supervised them; other)	0: not mentioned 1: mentioned	/	Adapted from the "Corona-Alltag (Corona everyday life)" survey by the "Wissenschaftszentrum Berlin für Sozialforschung (Berlin Social Science Center)" (Bünning et al., 2020)
Parental Self-Efficacy/ Competence	To what extent do the following statements apply to you?	2 (I can meet the needs of my child(ren) very well; I feel helpless concerning parenting)	1-5	$\alpha = .601$	Socio-Economic Panel (SOEP, 2007)
Unspecific Strain	To what extent do the following statements apply to you?	2 (my life with my child(ren) is exhausting; I am often at the end of my rope)	1-5	$\alpha = .758$	Socio-Economic Panel (SOEP, 2007)
Schooling					
School Assignments	Who supported your child with these assignments, including via e-mail, telephone, or video call? Please mark all options that apply.	7 (my child completed the assignments independently; I did; my partner; my child's other biological parent; siblings; schoolmates; others)	0: not mentioned 1: mentioned	/	Online-survey by the University of Magdeburg (Porsch & Porsch, 2020)
Experience with Homeschooling	What was your experience with that task?	2 (I felt exhausted and overwhelmed; I enjoyed supporting my child(ren) in learning new content)	1-5	/	Online-survey by the University of Magdeburg (Porsch & Porsch, 2020), one item developed by the pairfam team

(Contd.)

TOPIC	QUESTION	NUMBER OF ITEMS, ITEM LABELS	SCALE RANGE	RELIABILITY	SOURCE OF SCALE
Module for Respondents up to 25 Years					
Depressiveness	The following statements can be used to describe yourself. Please read each statement and mark which of the four answer possibilities best describes how you felt during the lockdown.	10 (my mood was melancholic; I felt happy; I felt depressed; I felt sad; I was in desperation; my mood was gloomy; I felt good; I felt secure; I felt calm and composed; I enjoyed life)	1-4	$\alpha = .903$	"State-Trait Depression Scales" (Spaderna et al., 2002)
Coping	Think about the time during the lockdown. Which of the following statements apply to you?	6 (I did everything to somehow entertain myself; I tried to make myself happy with food, drinks, smoking, etc.; I imagined that other people were having a much harder time; I spoke to someone to learn more about the situation; I followed expert opinions; I did something new that I would have otherwise never done)	1-5	$\alpha = .562$	German adaptation of the WCCL, the "Skala zur Erfassung des Bewältigungsverhaltens (Ways of Coping Checklist)" (Ferring & Flipp, 1989)
Compliance to Rules	How often did you do the following things?	3 (I met up with people outside of my household, even when it was not necessary; I visited or was visited by older relatives or friends (>65); I was not particularly vigilant about maintaining 1-2 meters between myself and people outside of my household)	1-5	/	Based on a survey conducted by the University of Koblenz-Landau (Pressestelle Campus Landau, 2020)
Overall Evaluation					
Experience with the Pandemic	In sum: What has been your experience during the COVID-19 pandemic?	4 (this period has strongly affected me personally in a negative way; this period has strongly affected us as a family in a negative way; this period has strengthened our family bond; I can see the positive side of this period as well)	1-5	/	Developed by the pairfam team

Table 3 Survey Instruments.

Note. For further details please refer to "The pairfam COVID-19 survey: Design and instruments. Release 1.1. LMU Munich: pairfam Technical Paper 15," by Walper et al., 2021. ¹"pairfam team" refers to the Research Associates who worked on creating the pairfam COVID-19 survey.

SCALES	PAIRFAM WAVE														
	1 (2008/09)	2 (2009/10)	3 (2010/11)	4 (2011/12)	5 (2012/13)	6 (2013/14)	7 (2014/15)	8 (2015/16)	9 (2016/17)	10 (2017/18)	11 (2018/19)	12 (2019/20)	COVID-19 SURVEY (2020)	13 (2020/21)	14 (2021/22)
Well-being															
Activity			x ¹	x	x	x	x	x	x	x	x	x	x	x	x
Anger	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Anxiety			x	x	x	x	x	x	x	x	x	x	x	x	x
Stress			x	x	x	x	x	x	x	x	x	x	x	x	x
Loneliness ²	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Concerns													x		
Depressiveness ³		x	x	x	x	x	x	x	x	x	x	x	x ⁴	x	x ⁵
Partnership															
Intimacy	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Admiration	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Conflict	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Partnership Satisfaction	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Relative Share of Labor	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Parenting Role															
Parental Self Efficacy		x		x	x	x	x	x	x	x	x	x	x	x	x
Unspecific Strain (cor36i3)			x			x	x	x	x	x	x	x	x	x	x
Unspecific Strain (cor36i4)		x	x			x	x	x	x	x	x	x	x	x	x

Table 4 Scales over the Course of the Pairfam Waves.

Note: ¹Wave 3 included Activity scale as a 2-item-version. ²In regular pairfam waves, loneliness was assessed using a single item. ³While the original wording refers to the present, the items in the COVID-19 survey were changed to refer to the time of lockdown due to the pandemic. ⁴In contrast to the regular pairfam waves, depressiveness was only assessed in young respondents of age 25 and younger. ⁵Wave 14 includes only 3 items of the depressiveness scale.

Consistency Checks

Further, to identify logically impossible or empirically implausible combinations of values, various checks were conducted on two or more variables. In some cases, it was not possible to resolve the discrepancies, e.g., regarding the gender and date of birth of the main respondent. Therefore, the provided values were not edited. Instead, two variables (`inconsist_sex` and `inconsist_dob`) were generated to map inconsistencies between information from the main survey and the COVID-19 survey. These variables are explained in detail in [Table 5](#).

Weights

In line with the entire pairfam study, weighting of the pairfam COVID-19 survey is based on two weights: Design weights aim to address unequal inclusion probabilities in the gross sample. Based on the design weights, in a second step calibrated design weights are generated. These weights additionally address selective participation for seven core demographic characteristics (e.g., gender, education, migration background) using iterative proportional fitting (IPF). Calibrated design weights adjust the distributions of these characteristics in the sample to the respective distributions of the German population (as observed in the German Mikrozensus). Based on the different samples in pairfam (base, DemoDiff, refreshment, all), four different weights are provided. For more details regarding the weighting procedure and how to use the weighting variables, please refer to pairfam Technical Paper 17 ([Wetzel et al., 2021](#)). Like other German COVID-19 surveys, the pairfam samples are further biased towards higher education. The Technical Paper 15 ([Walper et al., 2021](#)) also lists recommendations on how to deal with this education bias.

DATA ANONYMIZATION AND ETHICAL ISSUES

Pairfam was approved by the ethics committee of the Faculty of Management, Economics and Social Sciences of the University of Cologne. All work by pairfam and Kantar Public is performed in accordance with the provisions of the EU General Data Protection Regulation. In addition, Kantar is a member of the Arbeitskreis Deutscher Markt-

und Sozialforschungsinstitute e.V. (ADM) and is bound by its code of conduct. For more information, please visit www.adm-ev.de.

The data collected during the interview is stored at Kantar separately from the respondents' name and address using a pseudonym (code number). Kantar transmits the results of the survey pseudonymized, i.e. without name and contact data, to the universities that are part of the pairfam project. This also applies to follow-up surveys, which are also linked only by a code number.

The pairfam teams carry out data preparation and quality control and conduct research with the pairfam data. They also pass them on to the GESIS data archive as scientific use data files to be used by other scientific institutions and individuals for research purposes. All evaluations and analyses are carried out without reference to the respondent's name and address, and the information obtained is presented exclusively in anonymized form. Only if it is necessary to contact the respondents again, for example due to ambiguities or within the framework of interviewer control (e.g., by making a telephone call or sending a postcard with a request to confirm that the interview has been conducted), will the information required for this purpose be reunited at Kantar. Kantar will not disclose the respondent's name and address to any third party other than the recipients listed above.

Further, open answers were recoded for anonymization in the pairfam COVID-19 dataset. Specifically, this means that open answers to the items `cor8i11o` and `cor9i11o`, which contain information further qualifying the residual category of the given answer list to changes in the employment situation, were first compared to the answer list. If possible, open answers were then recoded into existing categories while the original answers were coded "0 Not mentioned". All remaining open answers were coded to a single value ("1 Mentioned"), indicating that an open answer was given. The original string values were deleted due to data protection laws. For the same reason, all open answers to item `cor62o` were recoded to "1 Mentioned", while the original string values were deleted from the data sets.

VARIABLE	LABEL	VALUES	VALUE LABELS	DESCRIPTION
<code>inconsist_sex</code>	Inconsistency gender respondent between COVID-19 and pairfam survey	0	No inconsistency	Respondent's gender in COVID-19 survey not respondent's gender in pairfam survey
		1	Inconsistency	
<code>inconsist_dob</code>	Inconsistency date of birth (month, year) respondent between COVID-19 and pairfam survey	0	No inconsistency	Respondent's date of birth in COVID-19 survey not respondent's date of birth in pairfam survey
		1	Inconsistency: month	
		2	Inconsistency: year	
		3	Inconsistency: month & year	

Table 5 Tag Variables in the COVID-19 Data Set.

Note. Reprinted from "The pairfam COVID-19 survey: Design and instruments. Release 1.1. LMU Munich: pairfam Technical Paper 15," by S. Walper et al., 2021, p.26.

EXISTING USE OF DATA

Below a list of publications originated from the pairfam COVID-19 data to-date (August 2022) is provided.

Publications

- Alt, P., Reim, J., & Walper, S. (2021). Fall From Grace: Increased Loneliness and Depressiveness Among Extraverted Youth During the German COVID-19 Lockdown. *Journal of Research on Adolescence : The Official Journal of the Society for Research on Adolescence*, 31(3), 678–691. <https://doi.org/10.1111/jora.12648>
- Bujard, M., den Driesch, E. von, Ruckdeschel, K., Laß, I., Thönnissen, C., Schumann, A., & Schneider, N. F. (2021). *Belastungen von Kindern, Jugendlichen und Eltern in der Corona-Pandemie*. Bundesinstitut für Bevölkerungsforschung. <https://doi.org/10.12765/bro-2020-02>
- Geissler, S., Reim, J., Sawatzki, B., & Walper, S. (2022). Elternsein in der Corona-Pandemie: Ein Fokus auf das Erleben in der Elternrolle. *Diskurs Kindheits- und Jugendforschung / Discourse. Journal of Childhood and Adolescence Research*, 17(1), 9–26. <https://doi.org/10.3224/diskurs.v17i1.02>
- Gummer, T., Schmiedeberg, C., Bujard, M., Christmann, P., Hank, K., Kunz, T., Lück, D., & Neyer, F. J. (2020). The impact of COVID-19 on fieldwork efforts and planning in pairfam and FReDA-GGS. *Survey Research Methods*, 14(2), 223–227. <https://doi.org/10.18148/srm/2020.v14i2.7740>
- Hank, K., & Steinbach, A. (2021). The virus changed everything, didn't it? Couples' division of housework and childcare before and during the Corona crisis. *Journal of Family Research*, 33(1), 99–114. <https://doi.org/10.20377/jfr-488>
- Hiekel, N., & Kühn, M. (2021). *Mental health before and during the COVID-19 pandemic: The role of partnership and parenthood status in growing disparities between types of families*. Rostock: Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2021-013>
- Jessen, J., Spiess, C. K., Waights, S. & Wrohlich, K. (2021). Sharing the Caring? The Gender Division of Care Work during the COVID-19 Pandemic in Germany. *IZA Discussion Paper*, 14457. <https://doi.org/10.2139/ssrn.3870188>
- Kunze, S. (2021). Das Belastungslevel von Familien in Corona-Zeiten unter besonderer Perspektive der Eltern: Verantwortung der Gesellschaft und Unterstützungsmöglichkeiten für Familien. *Familien-Prisma*, 13, 29–36.
- Naumann, E., den Driesch, E. von, Schumann, A., & Thönnissen, C. (2021). Anstieg depressiver Symptome bei Jugendlichen und jungen Erwachsenen während des ersten Lockdowns in Deutschland: Ergebnisse des Beziehungs- und Familienpanels pairfam. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, 64(12), 1533–1540. <https://doi.org/10.1007/s00103-021-03451-5>
- Schmid, L., Wörn, J., Hank, K., Sawatzki, B., & Walper, S. (2021). Changes in employment and relationship satisfaction in times of the COVID-19 pandemic: Evidence from the

- German family Panel. *European Societies*, 23(sup1), S743–S758. <https://doi.org/10.1080/14616696.2020.1836385>
- Schmiedeberg, C., & Thönnissen, C. (2021). Positive and negative perceptions of the COVID-19 pandemic: Does personality play a role? *Social Science & Medicine (1982)*, 276, 113859. <https://doi.org/10.1016/j.socscimed.2021.113859>
- Walper, S., Reim, J., Schunke, A., Berngruber, A., & Alt, P. (2021). *Die Situation Jugendlicher in der Corona-Krise*. München: Deutsches Jugendinstitut e. V.
- Walper, S., & Reim, J. (2020). Young People in the COVID-19 Pandemic: Findings from Germany. *ISSBD Bulletin*, 2(78), 18–20.

DATASET DESCRIPTION AND ACCESS

In 2020, the first pairfam COVID-19 dataset was released (Release 1.0), and a few months later in 2021, a revised version of the pairfam COVID-19 dataset was released (Release 1.1).

Changes between Release 1.0 and Release 1.1 only relate to the weighting variables “d2weight”, “cdweight”, “cd1weight”, “cd2weight” and “cd3weight”. For information that is more detailed please refer to pairfam Technical Paper 15.

Further variables in the dataset which are not explained in chapter 2.5 are described in the appendix.

Please note that the pairfam COVID-19 survey, although release 1.1 was released at the same time as pairfam wave 12, is the follow-up of wave 11, as the selection of the gross sample for the COVID-19 survey was completed while the fieldwork for wave 12 was still being performed. This affects the merging process of the resulting data sets with the standard pairfam data. To avoid issues with temporary drop-out cases, using wave 11 as a reference wave for both wave 12 and the COVID-19 survey is recommended. After the end of the pairfam project, the website will not be updated anymore. However, the release including the data of the pairfam COVID-19 survey will continue to be available.

CITATION RULES

Correctly referencing the use of pairfam data is important for the research community and for demonstrating the scientific value of such a large-scale study. Therefore, we kindly request researchers who use pairfam data to follow these citation rules in their publications. For publications based on the pairfam COVID-19 data, the data set (Release 1.1) and the Technical Paper 15 should be cited as follows:

- Walper, S., Sawatzki, B., Alt, P., Reim, J., Schmiedeberg, C., Thönnissen, C., & Wetzel, M. (2021). *The pairfam COVID-19 survey*. GESIS Data Archive, Cologne. ZA5959 Data file Version 1.1.0. <https://doi.org/10.4232/pairfam.5959.1.1.0>

Walper, S., Sawatzki, B., Alt, P., Reim, J., Schmiedeberg, C., Thönnissen, C. & Wetzel, M. (2021). *The pairfam COVID-19 survey: Design and instruments*. Release 1.1. LMU Munich: pairfam Technical Paper 15.

If regular pairfam panel data is used, the usual citation rules apply: The study and the data version (currently release 13.0) should be referred to. For more detailed information regarding citing the regular pairfam data please refer to <https://www.pairfam.de/en/data/citation/>.

In order to cite the pairfam Data Manual, the Scales Manual, and the codebooks correctly, suggestions can be found on the corresponding cover pages and on the pairfam website (<https://www.pairfam.de/en/>). If new publications with pairfam data are published, the pairfam team kindly asks to inform the pairfam user service about it.

REPOSITORY LOCATION

All pairfam datasets including the COVID-19 dataset are stored on the GESIS Data Archive. The DOI are as follows:

Data file version 1.0.0 (Release 1.0):
<https://doi.org/10.4232/pairfam.5959.1.0.0>

Data file version 1.1.0 (Release 1.1):
<https://doi.org/10.4232/pairfam.5959.1.1.0>

OBJECT/FILE NAME

The data files are named depending on the language of the data labels and the file format. For an overview over all data files please refer to [Table 6](#). The data is available for SPSS and Stata, in German and in English. There are four datasets each for the “regular” anchor and the step-up anchor sample. The datasets with anchor and step-up anchor samples include identical variables and can therefore be combined easily. Analogous to the regular pairfam data, they are provided separately because both samples differ regarding the way they were obtained (see chapter 1). If both datasets are combined, the COVID-19 sample described in [Table 1](#) can be obtained.

DATA TYPE

The released datasets consist of secondary data, which was prepared for easier and more convenient usage based on the primary data collected by Kantar Public.

FORMAT NAMES AND VERSIONS

The survey data is stored in two different file formats: SAV and DTA. It can be accessed using a variety of software including SPSS (ideal for .sav format) or Stata (ideal for .dta format) and R.

FILE NAME	TYPE	DESCRIPTION	ENGLISH	GERMAN
anchor_covid-19_eng_stata.sav	Dataset	Anchor dataset for Stata	x	
anchor_covid-19_de_stata.sav	Dataset	Anchor dataset for Stata		x
anchor_covid-19_eng.sav	Dataset	Anchor dataset for SPSS	x	
anchor_covid-19_de.sav	Dataset	Anchor dataset for SPSS		x
stepup_anchor_covid-19_eng_stata.sav	Dataset	Step-up Anchor dataset for Stata	x	
stepup_anchor_covid-19_de_stata.sav	Dataset	Step-up Anchor dataset for Stata		x
stepup_anchor_covid-19_eng.sav	Dataset	Step-up Anchor dataset for SPSS	x	
stepup_anchor_covid-19_de.sav	Dataset	Step-up Anchor dataset for SPSS		x
scales_pairfam COVID-19.do	Do-File	Do-File for Scales for Stata	x	
scales_pairfam COVID-19_eng.sps	Syntax	Syntax for Scales for SPSS	x	
scales_pairfam COVID-19_de.sps	Syntax	Syntax for Scales for SPSS		x
Codebook pairfam COVID-19 survey_en, 2020.pdf	Documentation	Questionnaire	x	
Codebook pairfam COVID-19 survey_de, 2020.pdf	Documentation	Questionnaire		x
Methodenbericht, pairfam COVID-19-Studie.pdf	Documentation	Methods report, documentation of the field work		x
pairfam Technical Paper 15.pdf	Documentation	Technical Paper with further information e.g. regarding all indicators and weighting in the COVID-19 survey	x	
Variables, pairfam COVID-19 survey.xlsx	Documentation	An overview over all variables in the data sets	x	x

Table 6 Files Included in the Release.

LANGUAGE

Both file formats (.sav and .dta) are available with either English (anchor_covid-19_en_) or German (anchor_covid-19_de_) data labels. Table 6 shows which file is available in which language.

LICENSE

The pairfam datasets are handed over to GESIS for archiving and further dissemination by the pairfam Research Data Center. The pairfam COVID-19 survey can be found at GESIS via this link: https://search.gesis.org/research_data/ZA5959 (study number ZA5959).

All metadata published in the GESIS DBK is freely available under the Creative Commons CC0 1.0 Universal Public Domain Dedication. GESIS asks, however, that all metadata sources are credited, e.g. the data providers or any aggregator, including GESIS itself. For more information, see <https://dbk.gesis.org/dbksearch/guidelines.asp?db=d>.

Pairfam data has access class “C”, which is defined by GESIS as data and documents that are accessible for academic research and teaching only after written permission of the data provider. The data archive obtains permission for this in writing, stating the user and the purpose of the evaluation.

LIMITS TO SHARING

The data collected by the German Family Panel pairfam, including the COVID-19 data, are accessible to the scientific community as scientific use file for scholarly analyses. The data are available to registered data users only. To become a registered user, interested researchers should follow the instructions on the pairfam data access website. The data can be shared with B.A./M.A. students for the preparation of a student thesis, and can be used for teaching purposes.

For more information regarding access, please see chapter 3.9.

There is no data containing identifying information in the datasets. Hence, there are no potential barriers to full sharing of the data in this regard.

Please note that, when using the data, it must be cited correctly.

PUBLICATION DATE

The data of the pairfam COVID-19 survey, release 1.0, was released on December 16, 2020. Version 1.1 of the pairfam COVID-19 survey was released together with pairfam wave 12 on July 8, 2021.

FAIR GUIDING PRINCIPLES

In the following section, the COVID-19 dataset is described regarding the FAIR Guiding Principles for scientific data management and stewardship (Wilkinson et al., 2016). The principles recommend data to be findable, accessible, interoperable, and reusable.

Findability

All pairfam datasets can be found via their unique and persistent identifier (DOI), see chapter 3.1.

Platforms, where the pairfam COVID-19 survey is mentioned or where the data sources are linked, include RatSWD/KonsortSWD, GESIS and da|ra (see Table 7).

In addition, with each release, already registered users are informed that the data is available to them free of charge. In this context, users are also made aware of the additional data set.

Accessibility

The data collected by the German Family Panel pairfam are accessible to the scientific community as scientific use file for scholarly analyses. The current release 13.0 includes the following files:

- the well-prepared and anonymized pairfam data of the first 13 survey waves (incl. the DemoDiff, sample refreshment and step-up subsamples) in the standard data formats Stata and SPSS (with both English and German labels),
- all codebooks (in English and German language) and questionnaires as well as a set of overviews of the instruments (variable list), the concept paper, the Data and the Scales Manual, the annual methods reports, and several other documents (<https://www.pairfam.de/en/documentation/>).

The release of the additional pairfam COVID-19 survey, release 1.1, includes:

- the well-prepared and anonymized pairfam data of the additional online survey in the standard data formats Stata and SPSS (with both English and German labels),
- the codebook (in English and German language), an overview of all instruments in the data set (variable list), syntax files to generate scales, the pairfam Technical Paper 15, and the methods report

RatSWD/ KonsortSWD	https://www.konsortswd.de/en/ratswd/topics/corona/studies/pairfam-corona-studie/
GESIS	https://search.gesis.org/research_data/ZA5959
da ra	https://www.da-ra.de/dara/study/web_show?res_id=771544&mdlang=de&detail=true

Table 7 Platforms, where the pairfam COVID-19 Survey is Linked.

If an employee of a university or research institution would like to request the data for own research purposes, these steps should be followed: (1) Download the application form and indicate which data should be ordered. (2) The requested information should be entered on the contract form, which should then be signed and sent to the pairfam user support office. After the application is approved by pairfam, the scientific use file(s) will be provided by GESIS at a small charge either as download or on CD-ROM (30 € per study, 3€ for every additional study). All relevant information will be given to the applicant via email.

Students can access the data through internal distribution for the preparation of a thesis via their advisor. For this purpose, the distribution form has to be filled out, signed and sent to pairfam user service.

The internal distribution of pairfam data to a third party is authorized only if the other person:

- works in the context of the research project or the same research institute specified in application form or
- is a student using the data for theses required by the degree program.

There is an obligation to complete the distribution form and to inform the pairfam user support about any internal distribution of the data by sending a copy of this document. The pairfam data can also be used for teaching purposes. Pairfam metadata like the data manual are freely accessible on the pairfam website, even for users who do not work with the data.

Interoperability and Reuse

Pairfam data and metadata, including the COVID-19 survey, are available in German and English. All variable labels and value labels were translated according to the English versions of the questionnaires. Therefore, pairfam uses an accessible and broadly applicable language. Within the supplied metadata, references to other (meta)data are always made when necessary.

Further, various factors are provided for optimal reuse of the pairfam data. Each variable in the data sets was assigned a label containing a description of the variable as well as its question number in the CAWI questionnaire. Value labels are also assigned for each variable's values according to the questionnaire.

Moreover, the following missing values codes and labels were defined and applied to all variables in both COVID-19 datasets: “-1 Don't know”, “-2 No answer”, “-3 does not apply”, “-4 Filter error / Incorrect entry”. The missing values “-1 Don't know” and “-2 No answer” were assigned if the respondent did not answer a question. These codes are the only missing values also documented in the codebook. The value “-3 Does not apply” was assigned if a respondent had not been asked

the corresponding question (i.e., the respondent was not asked the question due to the filter).

Lastly, to facilitate data analysis, the COVID-19 datasets for anchors and step-ups contain several generated variables. Further details regarding generated variables can be found in the pairfam Technical Paper 15. Unlike these generated variables, scales variables are not included in the delivered data set. However, syntax files (scales_covid-19, both in Stata and SPSS) that help with generating the scales variables are included as part of the scientific use file.

REUSE POTENTIAL STRENGTHS OF THE DATA

The data collected within the scope of the pairfam COVID-19 survey documents how the exceptional circumstances and nation-wide restrictions induced by the first COVID-19 lockdown affected individuals, families, and personal relationships in different domains of their lives including education, employment, and child care. The dataset is based on a well-described, largely representative sample of the four pairfam birth cohorts, covering an age range from 17 to 47 years. With the survey being part of the broader pairfam panel study initiated in 2008, the available data allows for a comparison of the same sample at different times leading up to shortly after the first COVID-19 lockdown in Germany. Data collected during the COVID-19 survey on the pairfam anchor respondents can be linked with the rich data of the panel's regular waves including multi-actor data from anchors, their partners, parents, and children. Including pairfam's last wave of data collection in 2022, there will also be two waves of multi-actor panel data available after the COVID-19 survey was conducted. The analysis of pairfam's longitudinal data enables researchers to better estimate occurring changes in well-being and various life domains due to the pandemic situation. It further allows for the identification of pre- and peri-pandemic predictors (such as personality characteristics, mental health status, quality of relationships, as well as pandemic-related experiences) for different reaction patterns as well as long-term consequences. This might include identifying potential risk factors for crisis-induced negative changes in personal and family life.

LIMITATIONS OF THE DATA

Despite many of the COVID-19 survey's indicators having been included in previous pairfam waves, some scales (e.g. family climate, coping behavior, concerns) were first introduced in the COVID-19 survey and are therefore not available for longitudinal analyses. Moreover, some included items are not based on well-established instruments, but were developed by the pairfam team. The validity and reliability of their assessments should therefore be monitored closely. In contrast to the regular

pairfam waves, the online COVID-19 survey did not extend to the partners of anchor respondents. As far as parenting and child well-being is concerned, this lack of information from a second parent might lead to a biased perspective.

The COVID-19 survey was intended to be a relatively short questionnaire with a low threshold for participation. Due to the resulting time limits, some questions (e.g., on depressiveness) could only be posed to the youngest cohort and step-ups, as the survey would otherwise have been too long, especially for parents with children. Furthermore, questions about children (e.g. in the separation module) could not use the child's identifier as they do in the regular survey. Specific children must thus be matched based on their age (youngest or oldest child) in the previous wave.

REPRESENTATIVENESS AND BIAS IN THE DATA

The pairfam panel is based on a representative sample of German-speaking individuals who were randomly drawn from German population registers in 2008. Since the first wave of data collection in 2008/2009 (N = 12,402 anchor respondents) there has been a significant reduction in the number of respondents until wave 11 in 2018/19 (N = 6,353 including a refreshment sample introduced in wave 11). While this is a common observation for panel studies (Leeuw et al., 2018), it ascribes great importance to the continuous assessment of potential differences in attrition rates among different groups and thus the sample's representativeness at each wave. Due to higher dropout rates among these subgroups, men, respondents with lower educational status, respondents with migration background and respondents without children are underrepresented in the main pairfam sample. To counteract selectivity bias in the pairfam sample, weights are released with all pairfam data sets, including the COVID-19-data (for more information, see (Schmiedeberg, 2015; Wetzel et al., 2021).

Comparing the main pairfam sample and the respondents of the COVID-19 survey, only small differences were found for most socio-demographic

characteristics (see Table 1). Using a similar approach, an in-depth analysis of nonresponse patterns in the COVID-19 survey showed that women, singles and higher educated participated more often while people with migration background participated less often (Wetzel & Hünteler, in press). These findings are in line with other online COVID-19 surveys (Auspurg, 2020; Schaurer & Weiß, 2020). When comparing the educational distribution between the Mikrozensus (RDC of the Federal Statistical Office and Statistical Offices of the Federal States, 2020), which is the largest representative annual survey of German households, and the (unweighted) COVID-19 sample among the four pairfam cohorts, an education bias in the COVID-19 sample becomes evident (Walper et al., 2021). The sample's gender and education bias should be considered carefully when using the data and, where possible, the available pairfam weights should be used to counteract (Schmiedeberg, 2015; Walper et al., 2021).

STARTING POINTS FOR FUTURE RESEARCH

The COVID-19 survey data has already been used in different contexts and by a variety of researchers. In order to maximize the potential knowledge gain through the dataset, we suggest several ideas of how the data can be useful in future analyses. By pairing the pairfam COVID-19 survey with other datasets that provide a day-by-day and week-by-week history of German lockdown measures (Steinmetz et al., 2020), the lockdown measures could be related to constructs within our data set. With the macro data (regional indicators and microm indicators), German hot-spots of pandemic burden could also be identified (Schmiedeberg, 2015). Moreover, cross-cultural comparisons are possible when relating the pairfam COVID-19 survey data to datasets from other countries.

Furthermore, combining step-up respondents within the dataset with their previous child data might allow for the identification of individual, possibly predisposing factors for adverse courses in the pandemic for them. In combination with data from pairfam waves following

TYPE OF CONTRIBUTION	CONTRIBUTORS
Survey design, conception	Sabine Walper ^{1,2} , Barbara Sawatzki ¹ , Julia Reim ^{1,2} , Philipp Alt ¹ , Carolin Thönnissen ¹ , Claudia Schmiedeberg ¹
Data collection	conducted by Kantar Public, collaborating staff: Philipp Wich, Dr. Jana Brix, Frank Beninger, Christian Dürr
Data processing/preparation for release	Barbara Sawatzki ¹ , Martin Wetzel ³
Release/Documentation (including authorship of Technical Paper Nr. 15)	Sabine Walper ^{1,2} , Barbara Sawatzki ¹ , Philipp Alt ¹ , Julia Reim ^{1,2} , Claudia Schmiedeberg ¹ , Carolin Thönnissen ¹ , Martin Wetzel ³ , Nina Schumann ¹
Manuscript	Svenja Geissler ¹ , Julia Reim ^{1,2} , Philipp Alt, Sabine Krueger ¹ , Sabine Walper ^{1,2}

Table 8 Contributions.

Note: ¹Ludwig-Maximilians-Universität Munich, ²German Youth Institute, ³University of Cologne.

CONTRIBUTOR	ROLE
Prof. Dr. Sabine Walper ^{1,2}	pairfam Principal Investigator
Dr. Barbara Sawatzki ¹	pairfam Project Staff/Research Associate
Julia Reim, M.A. ^{1,2}	pairfam Project Staff/Research Associate
Dr. Philipp Alt ¹	pairfam Project Staff/Research Associate
Dr. Carolin Thönnissen ¹	pairfam Project Staff/Research Associate
Dr. Claudia Schmiedeberg ¹	pairfam Project Staff/Research Associate
Philipp Wich ⁴	Kantar Project Manager for pairfam
Dr. Jana Brix ⁴	Kantar Associate Director and project manager pairfam
Frank Beninger ⁴	Kantar, responsible for survey distribution
Christian Dürr ⁴	Kantar, responsible for field work
Dr. Martin Wetzel ³	pairfam Project Staff/Research Associate
Nina Schumann, Dipl. Soz. Wiss. ¹	pairfam Project Staff/Research Associate
Svenja Geissler, M. Sc. ¹	pairfam Project Staff/Research Associate
Sabine Krueger, B.Sc. ¹	pairfam Project Staff/Research Assistant

Table 9 Contributing Individuals: Roles and Affiliations.

Note: ¹Ludwig-Maximilians-Universität Munich, ²German Youth Institute, ³University of Cologne, ⁴Kantar Public.

the COVID-19 survey (wave 13 and 14), changes and developments within the pandemic can be analyzed. The data might be used to inform policy decisions to (1) support groups currently specifically vulnerable due to the pandemic circumstances and (2) prepare for potential future pandemic-like situations.

Other Information Required for Submission, not for Review

Contribution Statement

In Table 8, all contributions toward the survey design, data collection, data release, and this manuscript are documented. The roles and affiliations of all contributing individuals are listed in Table 9.

APPENDIX

Table A1 Further Variables in the Dataset.

VARIABLE NAME	DESCRIPTION
id	Constant personal identifier to match data from different actors and times of measurement
demodiff	DemoDiff is a supplementary East German sample that has been integrated into the pairfam base sample data beginning with wave 3
sample	Sample indicator indicating whether the respondent is part of the main sample, the demodiff sample, the refreshment sample or the stepup sample

cohort	Indicates the anchor's birth cohort: 1971 to 1973 (value "3"), 1981 to 1983 (value "2"), and 1991 to 1993 (value "1"). 2001 to 2003 (value "4")
intd	Date of interview: day
intm	Date of interview: month
inty	Date of interview: year
intwn	Date of interview: week of the year
intdur	Duration of CAWI interview in minutes
intdev	Interview device
sex_gen	Respondent's gender
dobm_gen	Respondent's month of birth
doby_gen	Respondent's year of birth
inconsist_sex	Indicator for inconsistencies regarding respondent's gender between COVID-19 and pairfam survey
inconsist_dob	Indicator for inconsistencies regarding respondent's date of birth between COVID-19 and pairfam survey
dweight	Design weight: pairfam base sample
cdweight	Calibrated design weight: pairfam base sample
d1weight	Design weight: pairfam base sample and DemoDiff sample
cd1weight	Calibrated design weight: pairfam base sample and DemoDiff sample
d2weight	Design weight: pairfam base sample, DemoDiff sample and refreshment sample
cd2weight	Calibrated design weight: pairfam base sample, DemoDiff sample and refreshment sample
d3weight	Design weight: pairfam refreshment sample (added in wave 11)
cd3weight	Calibrated design weight: pairfam refreshment sample

(Contd.)

- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M.** (2011). Panel Analysis of Intimate Relationships and Family Dynamics (pairfam) – Conceptual Framework and Design. *Zeitschrift Für Familienforschung/Journal of Family Research*, 23(1), 77–100. DOI: <https://doi.org/10.20377/jfr-235>
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