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Die Fakten
dicke! Der GESIS
Podcast

Doi: 10.17622/gp.2020.2
Doi: 10.17622/gp.2021.3



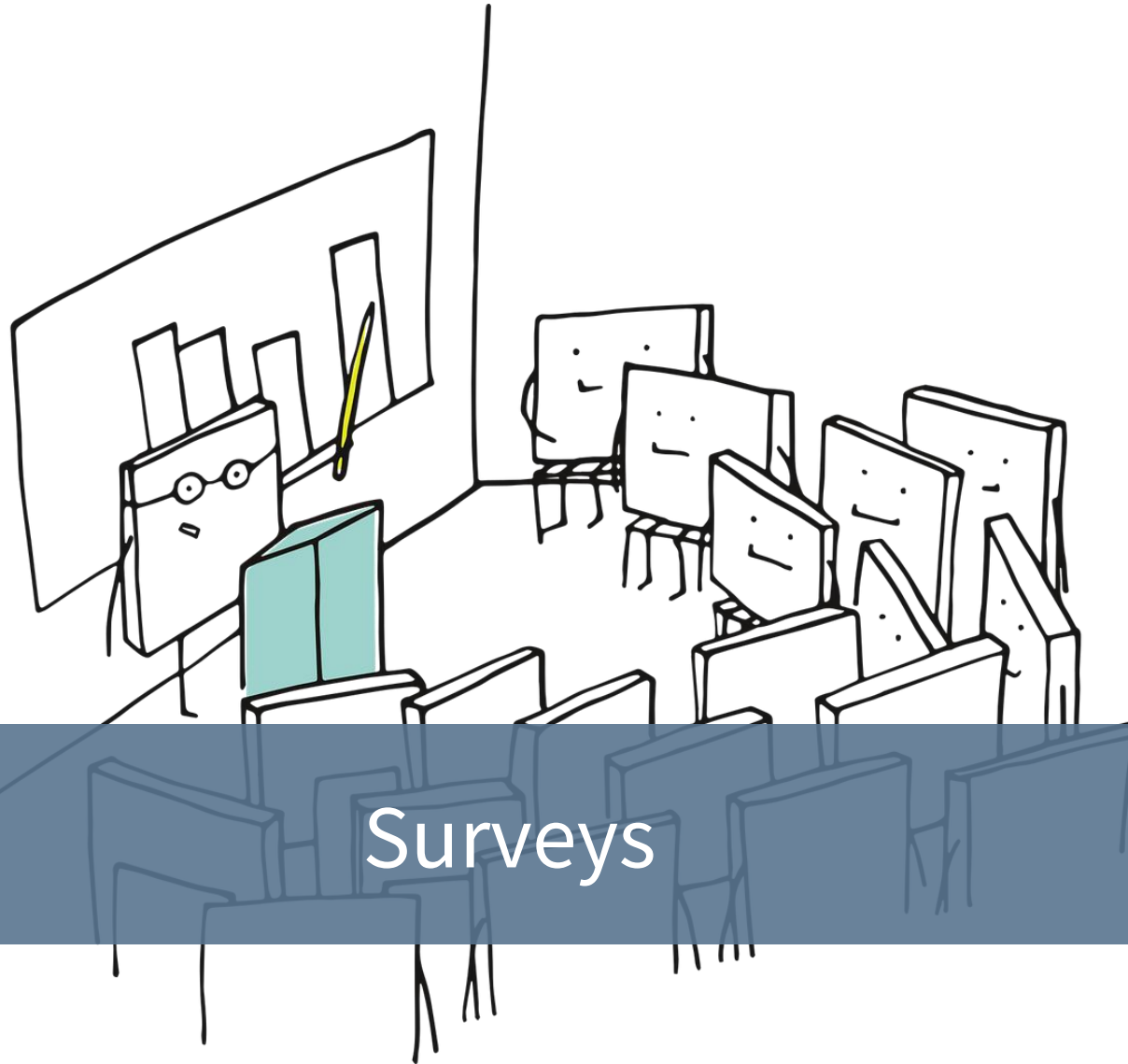
Supplementary Material

Die Fakten dicke! Der GESIS Podcast #2/#3

„Coronas Mob trotz“

February 2021

Lydia Repke & Matthias Sand



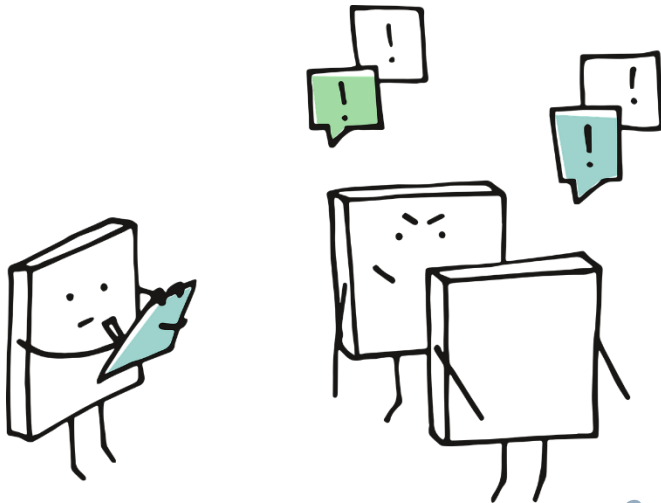
Surveys

Surveys and Their Purpose

Surveys

are a systematic method for data collection on humans using questionnaires.

i.e., giving respondents questions and answer categories or scales



Purpose

is to understand social phenomena.

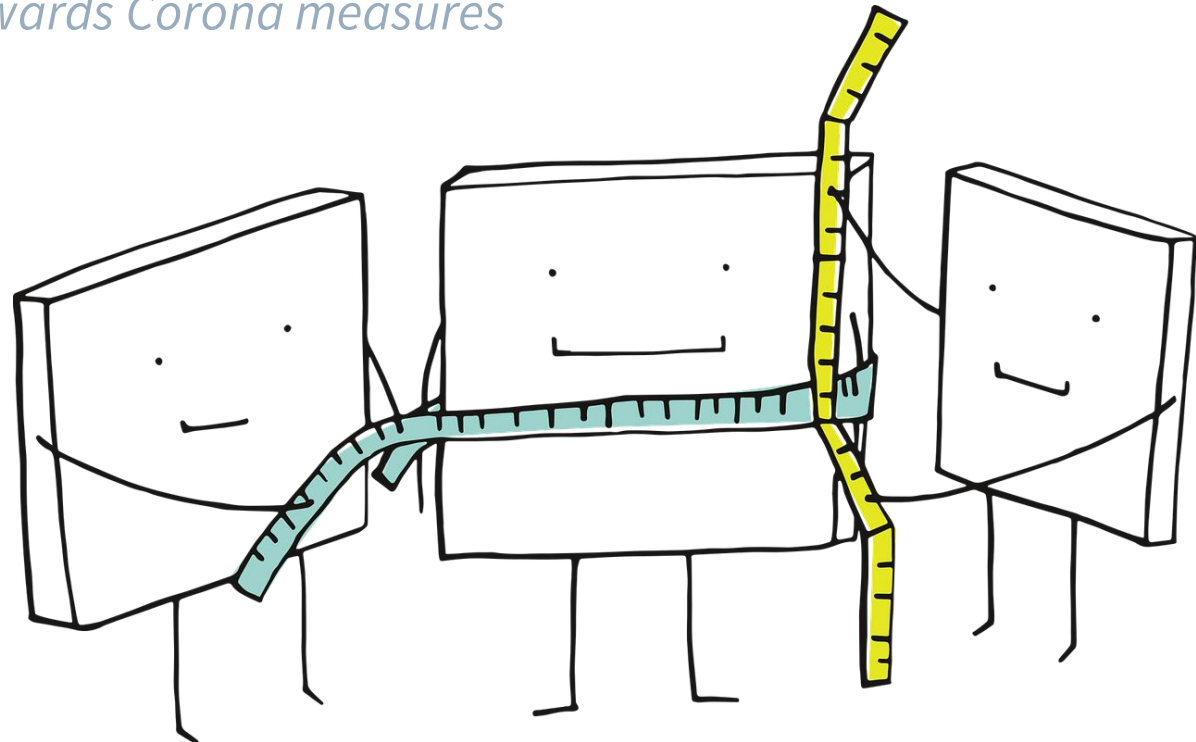
e.g., Why do people support Donald Trump?

Challenge of Surveys

Challenge

is to measure concepts that are not directly observable.

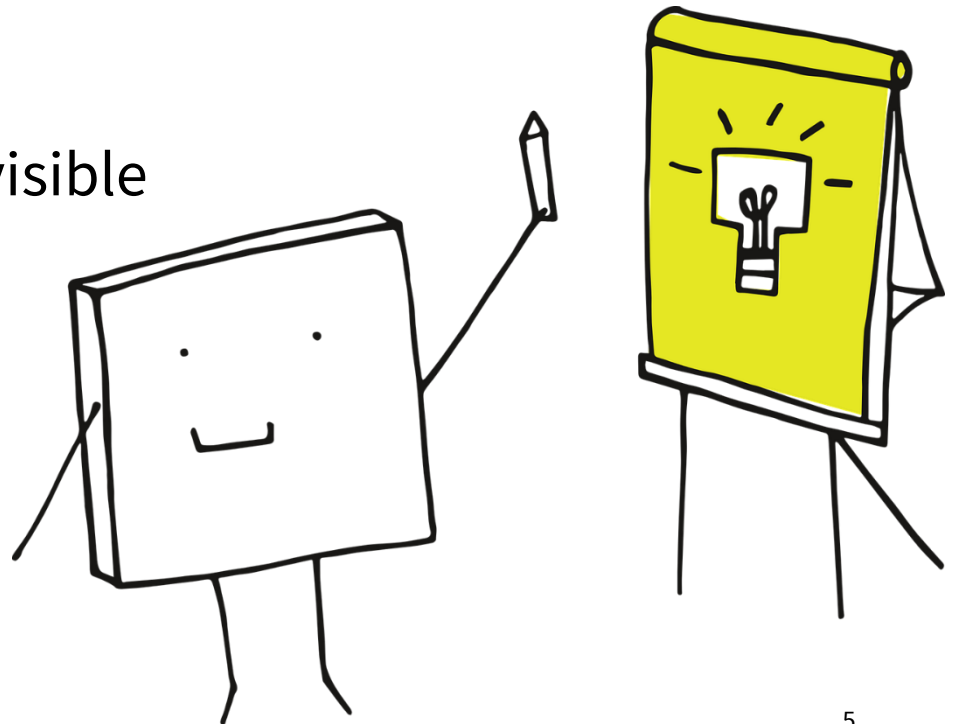
e.g., attitudes towards Corona measures



Importance of Surveys

Why are surveys important?

- To generate knowledge
- To advance science
- To make public opinion visible
- To inform public policies
- To democratize society





Sampling

Population and Sampling Frame

(Target) Population

is the entire set of units (people) for which the survey data is supposed to be used to make inferences.

e.g., German adult population



Sampling Frame

is the list from which the units are drawn for the sample.

e.g., German population register, telephone book, a map

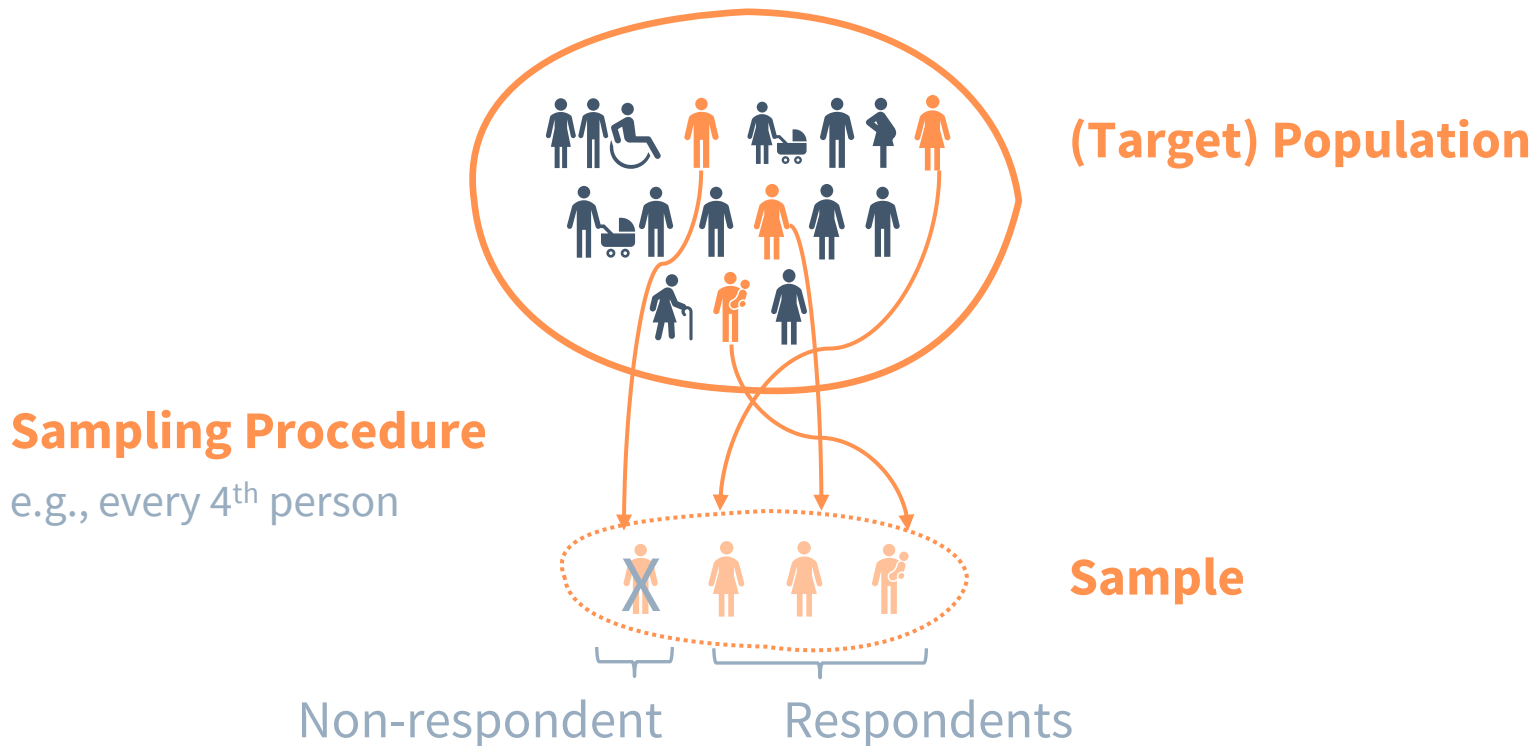


Sample

Sample

is a set of individuals selected from a statistical population defined by a procedure/sampling design.

e.g., a randomly chosen set of German adults



Non-Response and Its Types

Non-Response

occurs when a sampled individual refuses to participate in a survey (i.e., unit non-response) or does not give an answer to a specific question (i.e., item non-response).



Missing Completely at Random (MCAR)

- Estimates are approximately unbiased

Missing at Random (MAR)

- Estimation model needs to account for it

Not Missing at Random (NMAR)

- Non-response is systematic and cannot be ignored

Systematic Non-Response

In the case of **systematic non-response**, there is **no** methodological way to completely negate the bias caused by it. That is because the non-response correlates with the survey characteristic itself.

e.g., science skeptics do not fill out scientific surveys as a matter of principle

However, the caused bias may be reduced by trying the following techniques:

Adjustment Weighting or Calibration

- Depends on the relationship of the adjustment variables and the sampling mechanism

Oversampling or Screening

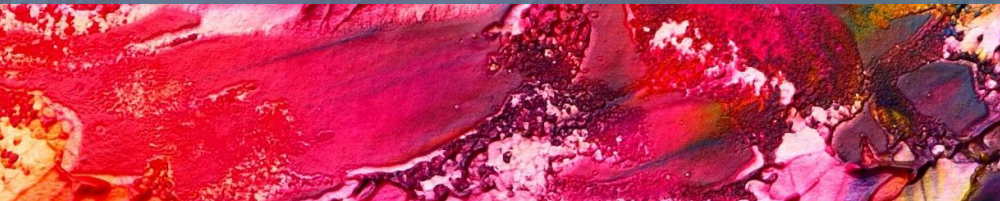
- Subgroup needs to have a characteristic for which one can sample or screen

Non-probabilistic Sampling Strategy

- Data can only be used for descriptive purposes



Representativeness



Different Perspectives

Statistically or mathematically,
representativeness is not defined.



Scientifically,
representativeness is often understood as the sample being a
sufficient replica of the target population.

In the public reception,
representativeness mistakenly means that the results are “true” and
generalizable.

Estimation

With the help of surveys, we try to estimate the **true value** of a variable in the **population** using either a point or an interval estimate. With each **sample**, this estimation may vary.

Point Estimate

i.e., a single value



Confidence Interval Estimates

i.e., a range/interval of values



Often people only report **point estimators** (a single value or “best guess”) and neglect that this estimator has a **confidence interval** (range of plausible values).

Representativeness in Surveys

According to Gabler and Quatember (2013), there are five quality criteria that determine the **representativeness** of a study:

- **Sampling strategy** (each unit of the target population should have a positive probability of inclusion)
- **Discrepancy between target and sampling population** (sampling frame should cover entire population)
- **Variable(s) of interest and their distribution** (whether a study is “representative” should be determined depending on the variables that are analyzed)
- **Sample size** (should be sufficiently big)
- **Non-response** (should not be systematic)



Digital Behavioral Data

Digital Behavioral Data (DBD)



Digital Behavioral Data

are all **traces of behavior** that are either

left by **uses of digital technology**

e.g., hashtags in tweets, liking, purchase information, phone calls

or that are **harnessed by digital technology**.

e.g., GPS location on mobile phones, sensors

Advantages of DBD

In contrast to survey data where respondents are asked rather explicitly about their attitudes and behaviors, **DBD** are **collected** in a **less obvious** way. This may lead to the following **advantages**:

- The data are not influenced by a specific research question but reflect the actual behavior of users of a given technology.
- Information can be quickly retrieved because data are already there. (data traces are produced constantly)
- The data are less affected by memory bias. (data are collected momentarily)



reaction to an event (e.g., development of a new vaccine) via commenting on an online platform thereby producing digital traces (i.e., digital behavioral data)

Disadvantages of DBD

DBD also have some **limits** that need to be kept in mind.

- There is little control over the sample composition. (it is not necessarily known *who* uses which platform, there is not always information on socio-demographics available that could be filtered for)
- There is the effect of self-selection. (individuals/“users” *select* themselves into using a certain platform)
- Data strongly depend on the platform and its “rules.” (predefined interaction options of the platform influence *what* users reveal about themselves)
- Not everything that happens on online platforms is also accessible. (due to *data protection* rights and ethical concerns)



Exemplary Fields of Research

The integration of **social sciences** with **computer science** has led to a new field of study: **computational social science**. Among its subfields are:



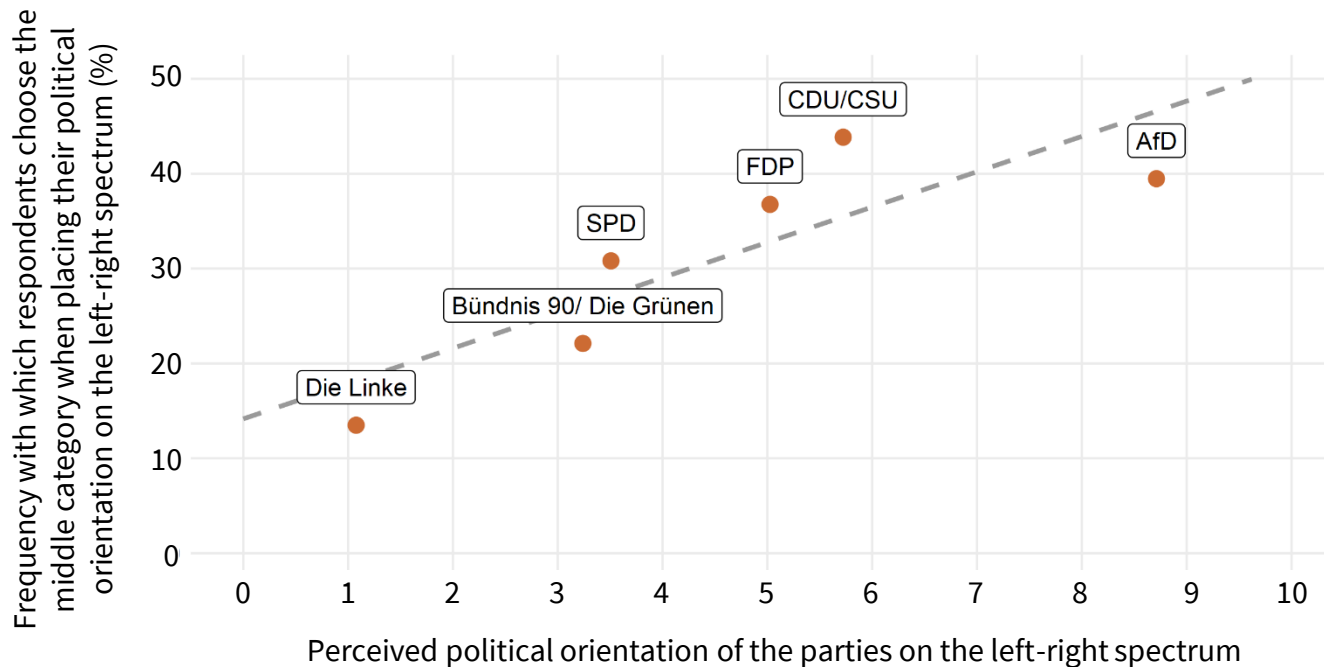
- Social networks and group formation (e.g., diffusion of norms, culture or diseases)
- Collective behavior and political sociology (e.g., mobilization of protest and social movements)
- Sociology of knowledge (e.g., consensus building)
- Economic sociology and organization (e.g., interactions in companies)
- Demography (e.g., migration flows)

(Edelmann et al., 2020)



Related Studies, Links, and Media

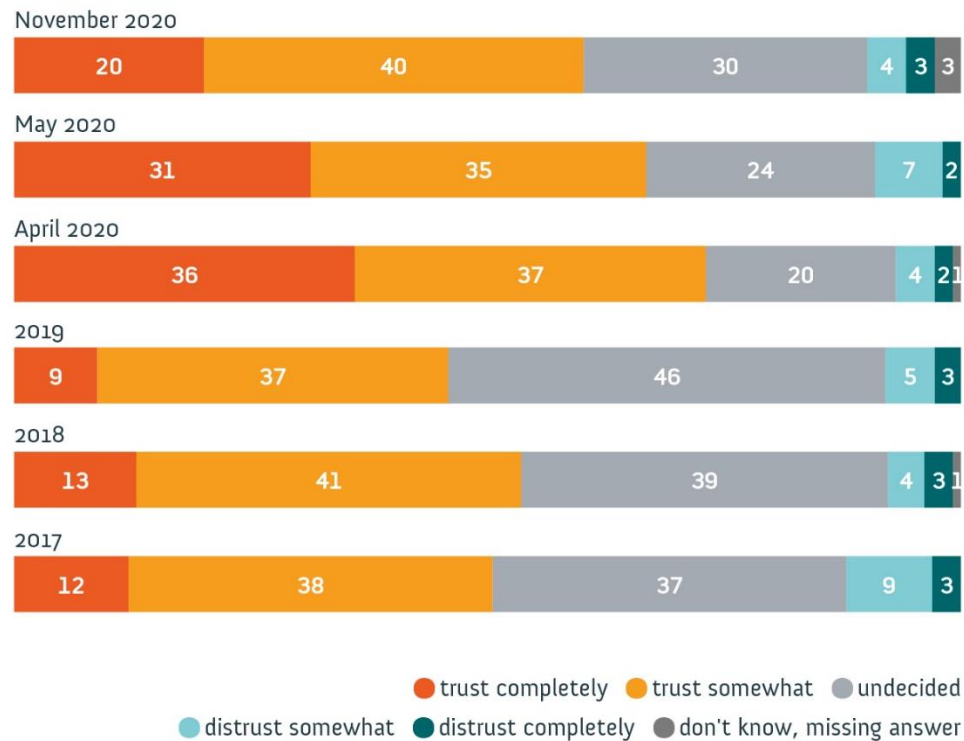
Left-Right Orientation



People who vote for **right-wing** parties **disproportionately often** choose the **middle category** when asked to place their political orientation on an 11-point scale where 0 means "left" and 10 means "right" (Singh & Mendold, 2019).

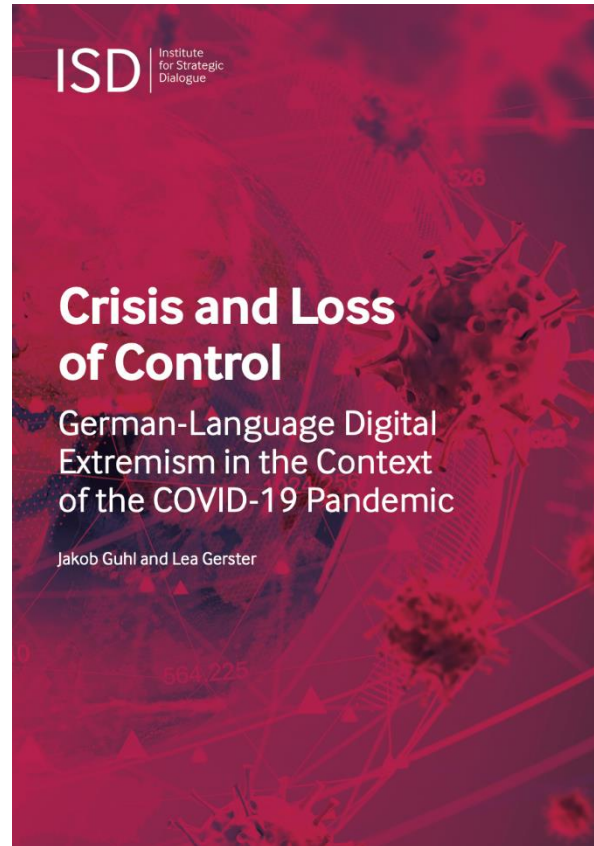
Trust in Science and Research

How much do you trust science and research?



Source: Science barometer – Wissenschaft im Dialog/Kantar | Minimum of 1,000 respondents each survey wave | Figures are in per cent. Numbers may not add up to 100 per cent due to rounding.

Crisis and Loss of Control




<https://www.isdglobal.org/wp-content/uploads/2020/12/ISD-Mercator-Report-English.pdf>

Conspiracy Myths and Beliefs

Wer schreibt? Zoe mit Esra, Marcel, Chantal, Juan, fünf Wissenschaftler:innen aus ganz verschiedenen Disziplinen (Geschichte, Informatik, Sprach-, Sozial- und Literaturwissenschaften).

Worum geht's? Verschwörungstheorien und Wissenschaft

Esra



Die Zerstörung der Presse
► Quellen:
<https://docs.google.com/document/d/1pL6ZTA-hwK->

Hey, habt ihr schon das neue Video von Rezo über Medien & Verschwörungstheorien gesehen? <https://www.youtube.com/watch?v=hkncijUZGKA>

Marcel

Nee, noch nicht, lohnt sich das?

Ja, auf jeden Fall. Ich habs schon gesehen. 🙌

Junge Akademie | Mainz:
„Verschwörungs...theorie? Oder wie soll ich das nennen?“
https://www.adwmainz.de/fileadmin/adwmainz/Junge_Akademie/JA%20Twitter%20Analyse/chat.sozi.html#frame5945

Felicitas (Mathematikerin) und eine wegen Corona besorgte Person

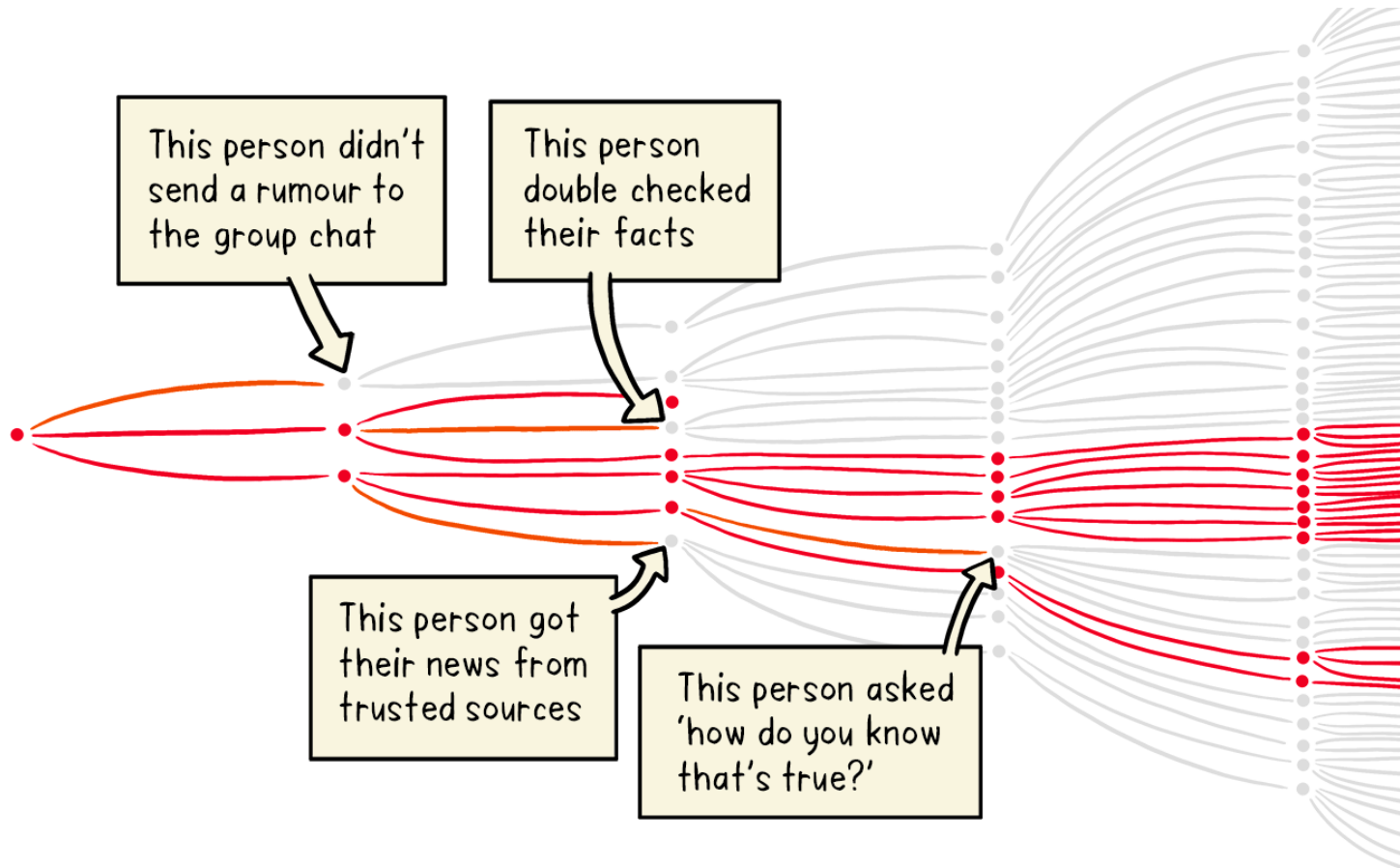
Anekdotescher Exkurs zum kritischen Denken mittels Mathematik

Darf ich mal einhaken und ein paar Fragen stellen? Die Berichte in den Medien haben mich mehr verwirrt als erhellt, mehr Fragen aufgeworfen als Antworten geliefert. Da könnte doch an manchen Verschwörungstheorien - pardon, Verschwörungen, doch durchaus etwas dran sein!

Senden

Junge Akademie | Mainz: „Felicitas (Mathematikerin) und eine wegen Corona besorgte Person“
<https://mathematik-corona-chat.glitch.me>

Let's Flatten the Infodemic Curve I



<https://www.who.int/news-room/spotlight/let-s-flatten-the-infodemic-curve>

Let's Flatten the Infodemic Curve II

Top tips for navigating the infodemic



1. Assess the source:

Who shared the information with you and where did they get it from? Even if it is friends or family, you still need to vet their source.



2. Go beyond headlines:

Headlines may be intentionally sensational or provocative.



3. Identify the author:

Search the author's name online to see if they are real or credible.



4. Check the date:

Is it up to date and relevant to current events? Has a headline, image or statistic been used out of context?



5. Examine the supporting evidence:

Credible stories back up their claims with facts.



6. Check your biases:

Think about whether your own biases could affect your judgment on what is or is not trustworthy.



7. Turn to fact-checkers:

Consult trusted fact-checking organizations, such as the International Fact-Checking Network and global news outlets focused on debunking misinformation.

<https://www.who.int/news-room/spotlight/let-s-flatten-the-infodemic-curve>

Vaccine Damage

Cochrane Database of Systematic Reviews | [Review - Intervention](#)

Vaccines for measles, mumps, rubella, and varicella in children

✉ Carlo Di Pietrantonj, Alessandro Rivetti, Pasquale Marchione, Maria Grazia Debalini, Vittorio Demicheli

Authors' declarations of interest

Version published: 20 April 2020 [Version history](#)

<https://doi.org/10.1002/14651858.CD004407.pub4> 

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Abstract

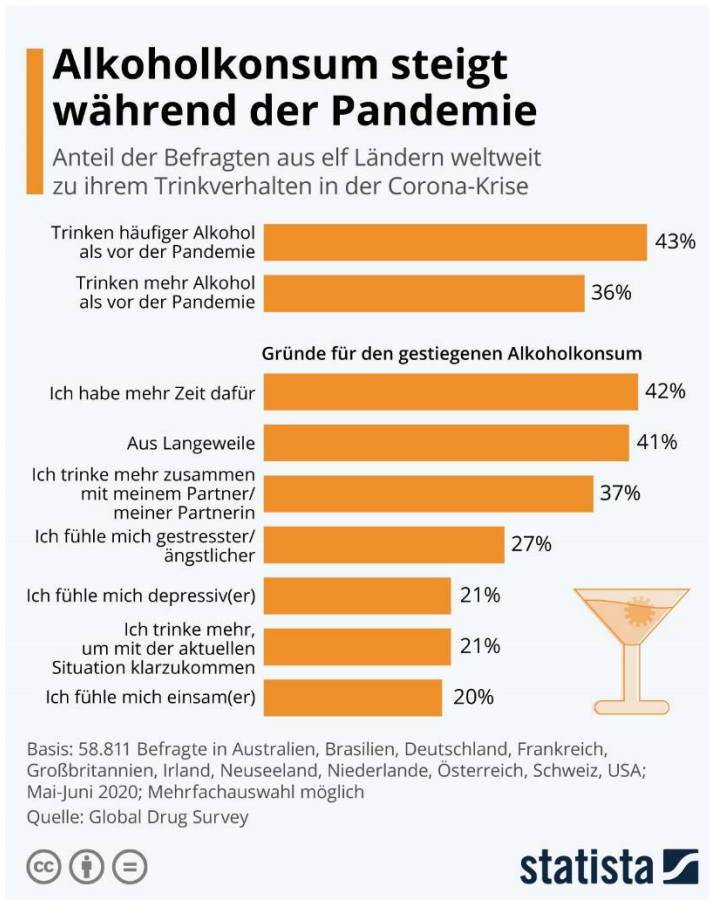
Available in [English](#) | [Español](#) | [فارسی](#) | [Français](#)

Background

Measles, mumps, rubella, and varicella (chickenpox) are serious diseases that can lead to serious complications, disability, and death. However, public debate over the safety of the trivalent MMR vaccine and the resultant drop in vaccination coverage in several countries persists, despite its almost universal use and accepted effectiveness. This is an update of a review published in 2005 and updated in 2012.

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004407.pub4/full>

Global Drug Survey



For 43 % of the respondents, **alcohol consumption increased** throughout the pandemic.

Reasons for that include:

- More available **time** for drinking
- **Boredom**
- Drinking with **partner**
- Feelings of **anxiety** or **depression**
- Coping with **situation**
- Feelings of **loneliness**

<https://de.statista.com/infografik/24026/alkoholkonsum-steigt-waehrend-der-pandemie/>

Existential Worries

DOI: 10.1007/s10273-021-2850-4

Analysen und Berichte Arbeitsmarkt

Toralf Pusch, Hartmut Seifert

Stabilisierende Wirkungen durch Kurzarbeit

In der Corona-Pandemie werden durch Kurzarbeit und weitere Hilfsmaßnahmen ganze Branchen stabilisiert. Dies gilt insbesondere für die stark betroffene Gastronomie. Kurzarbeit sichert bedrohte Arbeitsverhältnisse und dämpft Einkommenseinbußen, die bei Verlust des Arbeitsplatzes eintreten würden. Eine wesentliche Rolle spielen aufstockende Leistungen, die Kurzarbeiter:innen in tarifgebundenen Betrieben häufiger erhalten.

53% of **short-time workers** struggle with **existential worries**
(Pusch & Seifert, 2021).

Corona Accelerates Radicalization

GSPRÄCH

Corona beschleunigt die Radikalisierung warnt Sozialpsychologe Ernst-Dieter Lantermann



<https://www.swr.de/swr2/leben-und-gesellschaft/corona-beschleunigt-die-radikalisierung-warnt-sozialpsychologe-ernst-dieter-lantermann-100.html>

Please Do Not Blur.

Analyse zur politischen Radikalisierung

Bitte nicht weichzeichnen

Das reflexhafte Beschönigen faschistischer Demagogie und autoritärer Bewegungen ist nicht nur in den USA mitverantwortlich für Exzesse und Gewalt. Die Gefahr lauert in der Mitte der Gesellschaft.

MEINUNG Carolin Emcke
Publiziert: 31.01.2021, 07:29

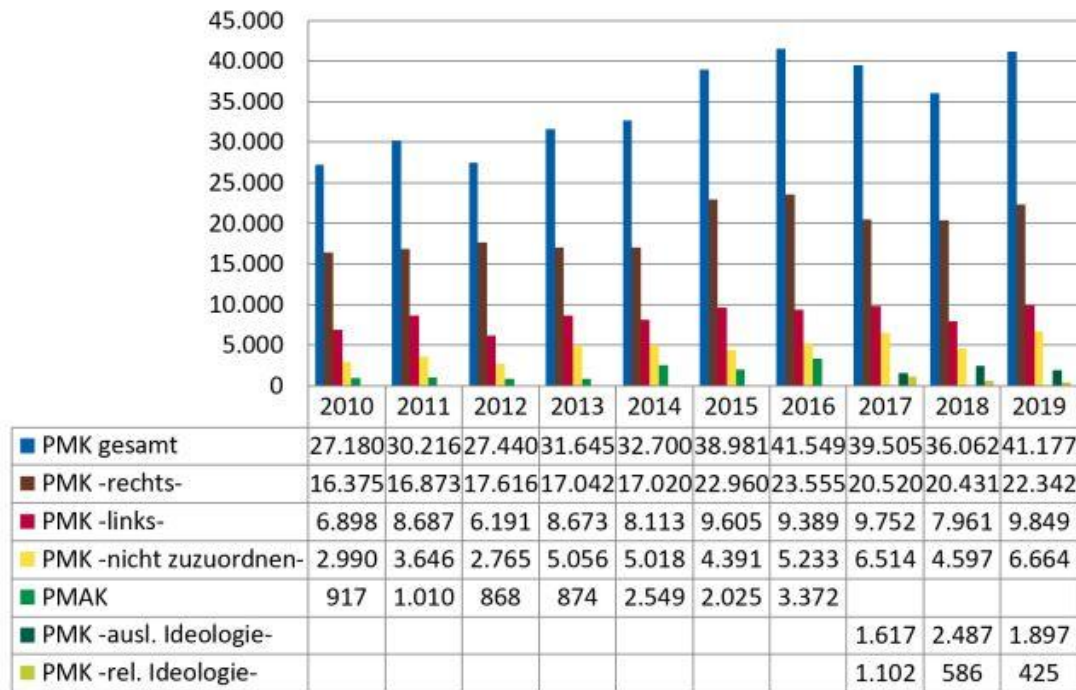
145 Kommentare



Enthemmte Horden: Der von Donald Trump angeheizte Sturm aufs Capitol am 6. Januar 2021.
Foto: Roberto Schmidt (AFP)

<https://www.tagesanzeiger.ch/bitte-nicht-weichzeichnen-766414223872>

Politically Motivated Crime



In 2019, 9,849 cases of politically motivated crime were attributable to the left spectrum and 22,342 cases to the right spectrum.

https://www.bka.de/DE/UnsereAufgaben/Deliktsbereiche/PMK/PMKrechts/PMKrechts_node.html

A vintage camera with a film strip is the central focus of the image. The camera is positioned in the lower right quadrant, with its lens and various mechanical parts clearly visible. The background is a textured, brown surface, possibly a wall or a piece of fabric, which adds a sense of depth and history. A blue horizontal band runs across the middle of the image, containing the text "Invited Experts".

Invited Experts

Survey Statistics



matthias.sand@gesis.org

Dr. Matthias Sand

is an expert in survey statistics specialized in **complex sample designs, weighting, and estimation.**

More information on representativeness:

<https://www.youtube.com/watch?v=ldCDTqYzBRo>

More information on weighting of survey data:

<https://www.youtube.com/watch?v=dSFwgviw7-c>

Digital Behavioral Data



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Dr. Katrin Weller

is an expert in computational social science. Her research focuses on social media, new types of research data, data preservation, and scholarly communication and altmetrics.

You can find an open-access article on „Perspective: Acknowledging Data Work in the Social Media Research Lifecycle” here:
<https://www.frontiersin.org/articles/10.3389/fdata.2020.509954/full>



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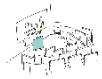
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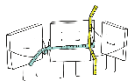
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Ottos Mops/Lulu's Pooch

(Ernst Jandl)

ottos mops trotzt
otto: fort mops fort
ottos mops hopst fort
otto: soso

otto holt koks
otto holt obst
otto horcht
otto: mops mops
otto hofft

ottos mops klopft
otto: komm mops komm
ottos mops kommt
ottos mops kotzt
otto: ogottogott



Lulu's pooch droops
Lulu: Scoot, pooch, scoot!
Lulu's pooch soon scoots.
Lulu brooms room.

Lulu scoops food.
Lulu spoons roots.
Lulu croons: Pooch, pooch.
Lulu broods.

Lulu's pooch drools.
Lulu: Poor fool pooch.
Lulu grooms pooch.

Lulu's pooch poops.
Lulu: Oops.