The Open Anchoring Quest Dataset: Anchored Estimates from 96 Studies on Anchoring Effects

ABSTRACT

People’s estimates are biased toward previously considered numbers (anchoring). We have aggregated all available data from anchoring studies that included at least two anchors into one large dataset. Data were standardized to comprise one estimate per row, coded according to a wide range of variables, and are available for download and analyses online (https://metaanalyses.shinyapps.io/OpAQ/). Because the dataset includes both original and meta-data it allows for fine-grained analyses (e.g., correlations of estimates for different tasks) but also for meta-analyses (e.g., effect sizes for anchoring effects).
(1) BACKGROUND

What is the percentage of psychological papers with open data? Is it more or less than 50%? Is it more or less than the last two digits of your phone number? What do you think is the percentage? Although neither of the suggestions is informative, subsequent estimates will be biased toward them. More generally, when people make numeric estimates and consider any number beforehand, their estimates are drawn towards the previously considered number. This phenomenon is called anchoring, anchoring effect, anchoring-and-adjustment (or even adjustment and anchoring, Tversky & Kahneman, 1974, p. 1128). As it has been shown that even entirely random numbers bias estimates (e.g., Bergman et al., 2010) and that even experts succumb to anchoring effects (e.g., Englich et al., 2006; Northcraft & Neale, 1987), anchoring has been termed one of the most robust phenomena of (social) psychology (e.g., Kahneman, 2012, p. 119).

Despite its robustness, there is currently no generally-accepted theoretical account for the wide range of different anchoring effects, a state of affairs not helped by contradictory findings and replication failures (e.g., Bohnik, 2021a, 2021b; Harris et al., 2019). Furthermore, replication failures have drawn into question moderator findings (e.g., Big Five, Cheek & Norem, 2019; Schindler et al., 2021; intelligence, cognitive reflection, and self-control, Röseler, 2021; ego depletion, Röseler et al., 2020; and whether anchors need to be considered explicitly or whether an incidental presentation suffices, Röseler et al., 2021; Shanks et al., 2020; for a discussion, see also Röseler & Schütz, 2022).

To sum up, theories that explain anchoring and its moderators need to be developed, but the replicability of many moderator findings is uncertain. We set out to build a comprehensive empirical dataset upon which future researchers can build new anchoring theories. Specifically, we aggregated all openly available anchoring datasets that include numeric estimates from studies with at least two different anchors and supplemented these with datasets that we received from other researchers’ publications and file-drawers.

In aggregating the data, we tried to capture the full breadth of anchoring paradigms by coding numerous design features and potential moderators. Picking two different anchoring experiments will yield different procedural details almost every time as each researcher makes their own decision with respect to the absolute judgment question (e.g., How many words are there in this paragraph?), the anchors (e.g., Are there more or less than 10 words?), whether anchors are framed as random (e.g., Write down the last two digits of your phone number and think about whether there are more or less words) or potentially relevant (e.g., another participant estimated the number of words to be 90), whether participants are paid for accurate estimates or not, what the unit of the estimate is (e.g., meters or miles), and many more parameters, most of which have not received attention in previous research.

The primary goal for constructing the data set was to test whether susceptibility to anchors has been measured reliably. That is, we tested how likely it was that people who were susceptible to an anchor in one task were also susceptible to an anchor in another task. Measuring a person-specific susceptibility to anchoring effects is necessary for personality research. Only if susceptibility can be measured reliably as a trait does it make sense to expect that it may correlate with personality traits such as intelligence (e.g., Bergman et al., 2010; Cheek & Norem, 2022) or need for cognition (e.g., Epley & Gilovich, 2006). Additionally, we tested which features of the anchoring paradigm (e.g., anchor extremeness, type of task, response scale), of the study (e.g., incentives), and of the participants (age and gender) affect reliability. This is also why we chose to aggregate participant-level datasets instead of meta-analytical data (e.g., effect sizes only). The reliability of people’s susceptibility to anchoring in all paradigms with multiple items was tested and currently, there is no evidence that susceptibility to anchoring is a trait (Röseler et al., 2022). Note that psychometric properties such as reliability are rarely assessed in social psychological tasks and the lack of reliability might also apply to other tasks (e.g., Berthet, 2021; Hedge et al., 2018; Parsons et al., 2018). Possible reasons for the poor reliability of anchoring are discussed by Röseler et al. (2022). Nevertheless, the aggregated data allow for tests of numerous other moderators, such as the role of incentives, nationality, or specific paradigm features, to be assessed.

We plan to add more anchoring datasets in the foreseeable future. The dataset can be viewed, downloaded, and analyzed interactively via our ShinyApp available at https://metaanalyses.shinyapps.io/OpAQ/ to aid researchers with power analyses, study design, and literature (or data) search.

(2) METHODS

2.1 STUDY DESIGN

Each row in the dataset represents one trial (i.e., an estimate) by a person (participant_id) for a given anchoring item (anchoring_item) and a given anchor (anchor). There may be multiple estimates per person and study (i.e., within-subjects manipulation of anchoring item) or only one (i.e., between-subjects manipulation of anchoring item). Studies included up to 30 anchoring items, but some included only one item. An item-wise version of the data with Hedges’s g per anchoring item per study is available online (https://osf.io/k745n/). Sample anchoring items with variable names and codings are provided in Figure 1.

Estimates were aggregated from numerous cross-sectional studies, which is why they vary with respect to study-design and type (online versus lab study), and many other variables that we coded. An overview over all variables is provided in Table 1.
Figure 1 Two Examples for Anchoring Items including Codings for Nine Variables.
Note: Other types of stimuli may be written information, images, videos, or combinations of such stimuli.

| VARIABLE              | DESCRIPTION                                                                 | NOTES AND EXAMPLES                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| id                    | Unique ID per case                                                         | Consecutive number per row                                                                                                                       |
| reference             | APA reference of the dataset or corresponding research article             | —                                                                                                                                                |
| reference_short       | Short APA reference with study number (if multiple studies were reported)  | e.g., “Author et al., 2022, Study 1”                                                                                                             |
| link                  | Link to download dataset                                                   | —                                                                                                                                                |
| participant_id        | ID variable from the respective study                                     |                                                                                                                                                |
| sex                   | 1 = male, 2 = female, 3 = non-binary                                       |                                                                                                                                                |
| age                   | Participant age in years                                                   |                                                                                                                                                |
| anchoring_item        | Description of anchoring item from the study (e.g., year the telephone was invented) | This is a brief explanation of the anchoring question.                                                                                         |
| true_value            | Correct answer for anchoring item (if none exists, unanchored mean estimate can be used) | Unanchored mean estimates were computed on the basis of a condition where no anchor was presented, a pretest, or a previous study with a similar setting and similar participants. Unanchored mean estimates were not used if true values differed between participants (e.g., height of their grand-father). |
| anchor                | Anchor that was presented in the trial                                     |                                                                                                                                                |
| anchorhigh            | 1 = high anchor, 0 = low anchor                                            |                                                                                                                                                |
| anchortype            | 1 = explicitly random, 2 = fixed and provided without explanation, 3 = having some relevance with the target, 4 = self-generated | Examples: 1 – Participants are involved in creating the random number, e.g., due to it being the last digits of their phone number or because they drew a number from an urn or threw a die. 2 – Was the telephone invented before or after 1830? 3 – The television was invented in 1900. When was the telephone invented? 4 – What is the boiling temperature of water on Mt Everest? (The self-generated anchor is 100°C, but 100 is not explicitly presented. |
| VARIABLE       | DESCRIPTION                                                                 | NOTES AND EXAMPLES                                                                                                                                 |
|---------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| comparative_  | 0 = no, 1 = yes                                                               | Comparative question refers to the question asking “Is the distance between Berlin and Prague more or less than X?” For this variable, it does not matter whether participants had to give explicit responses to this question or which responses they gave. Incidental or subliminal anchors or anchors framed as “Hint: The true value is more than 50 km” were coded as 0 (no). |
| question      |                                                                              |                                                                                                                                                   |
| direction     | 1 = direction of adjustment was known, 0 = direction was unknown              | Direction was coded as 0 if there was a comparative question (even if all participants gave the same answer to that question). Direction was coded as 1 if participants were told something like “Prices for this product in this store are given to compensate for decreases during negotiation” or “The true value is lower than $100”. |
| estimate      | Estimate that was given by participant in the respective trial               |                                                                                                                                                   |
| experiment_type | 1 = online, 2 = lab, 3 = class, 4 = field, 5 = mixed                        | Class refers to experiments conducted as part of a lecture or seminar in a classroom or in a synchronous online meeting. If the class was run online, it was coded as 1 (online). |
| incentive     | Monetary incentives are coded, only; 0 = not incentivized, 1 = incentivized    | Course credit and feedback were coded as 0, vouchers/ coupons and ready money were coded as 1 or 2.                                                                 |
|              | for participation, 2 = incentivized for accurate estimation (can be coupled  |                                                                                                                                                   |
|              | with incentives for participation); 3 = anchored estimate was a price        |                                                                                                                                                   |
|              | participants would pay (WTP) or accept for some product (WTA); receiving    |                                                                                                                                                   |
|              | feedback does not count as an incentive for participation); receiving        |                                                                                                                                                   |
|              | feedback does not count as incentive                                         |                                                                                                                                                   |
| preregistered | “0” = no; if yes, the link was provided; if the pre-registration was under   |                                                                                                                                                   |
|              | embargo, it was coded as “embargoed” until the embargo ends                |                                                                                                                                                   |
| preregtype    | Preregistration type                                                         | AsPredicted = AsPredicted.org; OSF-Standard Reg = OSF-Standard Pre-Data Collection Registration; Repl Recipe Reg = Replication Recipe (Brandt et al., 2014); Pre-Registration; Open-Ended Reg = Open-Ended Registration; PreReg in SocPsy = Pre-Registration in Social (van ’t Veer & Giner-Sorolla, 2016); Pre-Registration; RegRep Protocol = Registered Report Protocol Preregistration; OSF PreReg = OSF Preregistration |
| published     | 0 = no, 1 = yes; refers to whether the data or the corresponding article has  | Examples: Professionals/experts include judges estimating punishments or car mechanics estimating values of cars.                                                                 |
|              | been published in a peer-reviewed journal or conference (preprints = 0, data |                                                                                                                                                   |
|              | that is part of a published study = 1)                                       |                                                                                                                                                   |
| sampletype    | 1 = lay, 2 = professional or expert, 3 = mixed                              | Examples: Professionals/experts include judges estimating punishments or car mechanics estimating values of cars.                                                                 |
| scatetype     | 1 = open, 2 = closed, 3 = visual                                             | Examples: 1 – Textbox. 2 – Textbox with limited range of possible answers (e.g., probability that has to lay between 0 and 100%. 3 – visual analogue scale |
| stimulitype   | 1 = no additional information, 2 = additional information in text form, 3  | Examples: 1 – What is the population of Chicago? [no additional information] 2 – Newspaper article about Chicago prior to the question that does not state the true value. 3 – Image or Map of Chicago. 4 – Newspaper article with an image of Chicago. 9 – People who have visited Chicago during the last year are asked. |
|              | = image/audio/video, 4 = 2&3, 9 = other                                      | Examples: 1 – What is the population of Chicago? [no additional information] 2 – Newspaper article about Chicago prior to the question that does not state the true value. 3 – Image or Map of Chicago. 4 – Newspaper article with an image of Chicago. 9 – People who have visited Chicago during the last year are asked. |
| tasktype      | Type of estimation task (e.g. price, quantity, age, distance, …)             |                                                                                                                                                   |
| adjustment    | Difference between estimate and anchor                                       |                                                                                                                                                   |
| absadjustment | Absolute difference between estimate and anchor                              |                                                                                                                                                   |
| score         | Difference between estimate and anchor divided by difference between true    |                                                                                                                                                   |
| restr_score   | The above score but with cut-offs at 0 and 1                                 |                                                                                                                                                   |

Table 1 Overview of variables with descriptions and examples included in the dataset.
Descriptions of individual studies are available for all data that was part of a published research article or pre-print (variables: reference, link).

2.2 TIME OF DATA COLLECTION
Secondary data were collected from May 2021 through September 2022. Original data were collected between 2010 and 2022. The variable year of publication states the latest year of collection for unpublished datasets.

2.3 LOCATION OF DATA COLLECTION
Data were collected worldwide and stem from European, Asian, North-American, and South-American participants.

2.4 SAMPLING, SAMPLE AND DATA COLLECTION
The dataset includes \( k = 96 \) studies from 57 references. The total sample size is \( N = 21,359 \) participants who provided estimates for some of 412 unique anchoring items, yielding a total of 88,914 trials.

There are 6,941 male, 9,243 female, and 81 non-binary participants. Data for gender of the remaining 5,094 participants are not available. Mean age of the participants with available data for age was 32.69 years (median = 28, \( N = 15,322 \)). 8,978 did not receive monetary incentives for participating in the respective anchoring study, 11,255 received monetary incentives for participating in the study and 694 received monetary incentives for accurate estimates. For 432 participants, estimates were coupled to prices they would pay or get for products.

2.5 MATERIALS/SURVEY INSTRUMENTS
The dataset includes 412 anchoring instruments. There are true values available for 355 (86.2%) of these items. Adjustment and absolute adjustment susceptibility scores were computed for all estimates. 0–1-scores and restricted 0–1-scores could be computed for items with true values, only. A list of all items is available online (https://osf.io/g95hp/). Links to single datasets are in the variable “link” in the dataset and are available for 74 studies (77.1%).

2.6 QUALITY CONTROL
- All study-level data and the first trial for all trial-level data were checked by one of the authors. All trial-level data was furthermore checked by the respective resources contributors.
- We checked whether anchoring effects differed between published and unpublished studies or between preregistered and non-preregistered studies and found no differences.

2.7 DATA ANONYMISATION AND ETHICAL ISSUES
No ethical approval was obtained for the data collection as only secondary data that had already been anonymized were used. No further steps to anonymize the data were taken.

2.8 EXISTING USE OF DATA
In cases where the original data has been published, the reference is visible in the variable reference. A full list of included studies is available online (https://osf.io/9fh7c/).

Based on the dataset, three presentations have been held and three preprints have been published:

Presentations
- Röseler, L. (2021, March). Are some people more susceptible to anchoring effects than others? Talk (online) at the 63rd Conference of Experimental Psychologists, Ulm, Germany.
- Röseler, L., Weber, L., Stich, E., Günther, M., & Schütz, A. (2021, September). The Open Anchoring Quest (OpAQ): Tackling the reliability problem and boosting the power of anchoring research. Talk (online) at the Biennial Conference of the German Psychological Society – Personality Psychology and Psychological Diagnostics (DPPD) Section, Ulm, Germany.
- Röseler, L., Weber, L., Stich, E., Günther, M., & Schütz, A. (2022, March). The Open Anchoring Quest (OpAQ): Explaining variance of the heterogeneous but large anchoring effects. Talk (online) at the 64th Conference of Experimental Psychologists, Köln, Germany.

Research Articles
- Röseler, L., Weber, L., Stich, E., Helgerth, K., Günther, M., Wagner, F.-S., & Schütz, A. (2022). Measurements of Susceptibility to Anchoring are Unreliable: Meta-Analytic Evidence From More Than 50,000 Anchored Estimates. https://doi.org/10.31234/osf.io/67r5h
- Röseler, L., & Schütz, A. (2022). Hanging the Anchor Off a New Ship: A Meta-Analysis of Anchoring Effects. Advance online publication. https://doi.org/10.31234/osf.io/wf2tn
- Weber, L., & Röseler, L. (2022, August 11). Testing the Reliability of Anchoring Susceptibility Scores. Advance online publication. https://doi.org/10.31234/osf.io/2kfh3

(3) DATASET DESCRIPTION AND ACCESS
All datasets and associated materials are shared via the OpAQ’s OSF-project (https://osf.io/ygnvb/).

- Item-level data: https://osf.io/67r5h Note that this version will be outdated if new anchoring datasets are added. Please see the OSF-project page (https://osf.io/ygnvb/), folder Datasets, file opaq_XX.csv for the most recent item-level dataset.
- Effect-level data used for effect sizes meta-analysis: https://osf.io/k745n/
- Reliabilities and effect size data used for reliabilities meta-analysis: https://osf.io/g95hp/
- List of variables (see also Table 1): https://osf.io/mdgez/
- Interactive analyses: https://metaanalyses.shinyapps.io/OpAQ/.
3.1 REPOSITORY LOCATION
DOI of the OSF-project: https://dx.doi.org/10.17605/OSF.IO/YGNVB.
Link to the OSF-project: https://osf.io/ygnvb.

3.2 OBJECT/FILE NAME
OPAQ_JOPD.csv Available at https://osf.io/5gkf9.

3.3 DATA TYPE
Secondary data, processed data, aggregated data.

3.4 FORMAT NAMES AND VERSIONS
Datasets are available in .csv and .xlsx formats. We recommend opening both with GNU R (version 4 or above; R Core Team, 2018) or Microsoft Office Excel (Version 2004 or above).

3.5 LANGUAGE
English

3.6 LICENSE
CC-By Attribution 4.0 International.

3.7 LIMITS TO SHARING
The data are not under embargo and do not contain identifying information. The data may be updated with further anchoring data at a later date.

3.8 PUBLICATION DATE
The first version of the dataset including data from four anchoring studies was published on 23/06/2021. The latest version has been available since 01/04/2022.

3.9 FAIR DATA/CODEBOOK
The datasets have been posted publicly on the Open Science Framework (OSF), documented with meta-data, and assigned a DOI. Code with which the datasets have been created is available and can be run with open source software (e.g., GNU-R).

(4) REUSE POTENTIAL
Researchers can use the data for different questions related to anchoring effects but also more generally numeric estimation, advice-taking, or judgment and decision making.

As the data provide detailed information about anchoring paradigms such as true values of anchoring items (where applicable), researchers can use different anchoring scores (e.g., absolute difference between anchor and estimate) but also new scores to study the influence of any of participant-, item-, or study-features. In contrast to previous meta-analyses (Bystranowski et al., 2021; Li et al., 2021; Orr & Guthrie, 2006; Shanks et al., 2020; Townson, 2019), we did not find evidence of publication bias and there was no difference in effect size between published and unpublished studies. We plan to maintain the dataset for the foreseeable future and will add data from new studies. Thus, the dataset may become a starting-point for reviews on anchoring research but also a solid base upon which researchers can build to develop new theoretical accounts on the topic.

ACKNOWLEDGEMENTS
We thank Barbieri-Hermitte, P., Baumeister, R., Beuerle, L., Bickenbach, S., Blank, P. A., Bögemann, N. J., Boruchowicz, C., Bruchmann, M., Bühler, R., Burton, A., Coe-Odess, S., Deila Guardia, J., Dijkstra, K., Dahlle, S., Dolling, I. K., Duck, M., Eckert, L., S., Fischer, A., L., Friedinger, K., Gaertig, C., Görnitz, M., F., Honda, H., Hösch, Y., Hügel, J. C., Igna, E., Jiranek, A., K., Karg, A., Keller, R., D., Kick, G., Klusmann, B., Koßmann, L., Kraft, P., Kraus, R., E., Kroworsch, K., Kübling, S., Kupfer, J., Lammers, J, Lammersen, S., Lederer, L., Lee, C., Lewis, J., Loose, L., Loschelder, D., Moeck, R., Möhring, J., B., Morewedge, C., Panse, F., Popp, J., Querengässer, J., Rodgers, S., Röseler, J., J., Roßmaier, K., V., Schäffer, D., Scheelje, L., Schramm, E., S., Schreiner, N., B., Schwarz, B., Scopelliti, I., Simmons, J. P., Sing, J., Starker, U., Strack, F., Unger, B., Wackershauser-Sablotny, W., Wessel, J. P., Yoon, H., and Zorbach, A for providing us with their well-documented datasets.

FUNDING INFORMATION
This research was supported by the University of Bamberg’s CatchUp+ program, aimed at supporting researchers with children in the Covid-19 pandemic, to Lukas Röseler.

COMPETING INTERESTS
The authors have no competing interests to declare.
## AUTHOR CONTRIBUTIONS

| NO | AUTHOR | ORCID | CONTRIBUTION (CREDIT) | AFFILIATION | AUTHOR HAS CHECKED HIS OR HER DATA | AUTHOR HAS EMPTIED FILE-DRAWER |
|----|--------|-------|-----------------------|-------------|-----------------------------------|-------------------------------|
| 1  | Röseler, L. | 0000-0002-6446-1901 | Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing | University of Bamberg | x | x |
| 2  | Weber, L. | | Data curation, Investigation, Resources, Software, Visualization, Writing – review & editing | University of Bamberg | x | x |
| 3  | Helgerth, K. A. C. | | Validation, Writing – review & editing | University of Bamberg | x | x |
| 4  | Stich, E. | | Data curation, Software, Writing – review & editing | University of Bamberg | x | x |
| 5  | Günther, M. | | Data curation, Writing – review & editing | University of Bamberg | x | x |
| 6  | Tegelhoff, P. | 0000-0002-4701-4309 | Investigation, Data Curation, Resources, Validation, Writing – review & editing | University of Bamberg | x | x |
| 7  | Wagner, F. S. | | Investigation, Writing – review & editing | University of Bamberg | x | x |
| 8  | Antunovic, M. | | Resources & Data Curation, Writing – review & editing | University of Tubingen | x | x |
| 9  | Barreira-Lemarchand, F. | 0000-0003-2031-1597 | Resources & Data Curation, Writing – review & editing | Universidad Torcuato di Tella / Universidad de Buenos Aires | x | x |
| 10 | Halali, E. | 0000-0001-5730-7677 | Resources & Data Curation, Writing – review & editing | Bar-Ilan University | x | x |
| 11 | Ioannidis, K. | 0000-0003-2858-4688 | Resources & Data Curation, Writing – review & editing | University of Amsterdam | x | x |
| 12 | Genschow, O. | 0000-0001-6322-4392 | Resources & Data Curation, Writing – review & editing | Leuphana University Lüneburg | x | x |
| 13 | Milstein, N. | 0000-0002-4328-7174 | Resources & Data Curation, Writing – review & editing | Bar-Ilan University | x | x |
| 14 | Molden, D. C. | 0000-0002-2182-5621 | Resources & Data Curation, Writing – review & editing | Northwestern University | x | x |
| 15 | Papenmeier, F. | 0000-0001-5566-9658 | Resources & Data Curation, Writing – review & editing | University of Tübingen | x | x |
| 16 | Pavlovic, Z. | 0000-0002-9231-5100 | Resources & Data Curation, Writing – review & editing | University of Belgrade | x | x |
| 17 | Rinn, R. | 0000-0002-2640-8325 | Resources & Data Curation, Writing – review & editing | University of Würzburg | x | x |
| 18 | Schreiter, M. L. | 0000-0002-4596-9195 | Resources & Data Curation, Writing – review & editing | University of Tübingen | x | x |
| 19 | Zimdahl, M. F. | 0000-0001-5808-2967 | Resources & Data Curation, Writing – review & editing | University of Mannheim | x | x |
| 20 | Bahník, Š. | 0000-0002-0579-6808 | Resources, Writing – review & editing | Prague College of Psychosocial Studies | x | x |
| No | Author          | ORCID              | Contribution (Credit)                  | Affiliation                                           | Author Has Checked His or Her Data | Author Has Emptied File-Drawer |
|----|-----------------|--------------------|----------------------------------------|-------------------------------------------------------|------------------------------------|----------------------------------|
| 21 | Bermeitinger, C.| 0000-0001-9977-7001| Resources, Writing – review & editing | University of Hildesheim, Germany                     | x                                  | x                               |
| 22 | Blower, F. B. N.| 0000-0002-5729-8077| Resources, Writing – review & editing | University College London                          | x                                  | x                               |
| 23 | Bögler, H. L.  | 0000-0003-2401-8945| Resources, Writing – review & editing | University of Bamberg                                | x                                  | x                               |
| 24 | Burgmer, P.     | 0000-0003-3664-0539| Resources, Writing – review & editing | University of Kent                                   | x                                  | x                               |
| 25 | Cheek, N. N.    | 0000-0003-3515-4141| Resources, Writing – review & editing | Purdue University                                   | x                                  | x                               |
| 26 | Dorsch, L.      |                    | Resources, Writing – review & editing | University of Tubingen                               | x                                  | x                               |
| 27 | Fels, S.        |                    | Resources, Writing – review & editing | University of Bamberg                                | x                                  | x                               |
| 28 | Frech, M.-L.    |                    | Resources, Writing – review & editing | Leuphana University Lüneburg                         | x                                  | x                               |
| 29 | Freira, L.      | 0000-0002-2710-0780| Resources, Writing – review & editing | Universidad Torcuato Di Tella                        | x                                  | x                               |
| 30 | Harris, A. J. L.|                    | Resources, Writing – review & editing | University College London                            | x                                  | x                               |
| 31 | Hausser, J. A.  | 0000-0001-8993-9919| Resources, Writing – review & editing | Justus-Liebig-University Giessen                     | x                                  | x                               |
| 32 | Hedgebeth, M. V.|                    | Resources, Writing – review & editing | Virginia Commonwealth University                     | x                                  | x                               |
| 33 | Henkel, M.      |                    | Resources, Writing – review & editing | University of Würzburg                               | x                                  | x                               |
| 34 | Horvath, D.     | 0000-0003-3954-1720| Resources, Writing – review & editing | Technical University of Darmstadt                    | x                                  | x                               |
| 35 | Intelmann, P.   |                    | Resources, Writing – review & editing | University of Tubingen                               | x                                  | x                               |
| 36 | Klamar, A.      | 0000-0002-5983-3707| Resources, Writing – review & editing | Federal University of Applied Administrative Sciences| x                                  | x                               |
| 37 | Knappe, Ella    |                    | Resources, Writing – review & editing | Harz University of Applied Science                   | x                                  | x                               |
| 38 | Köppel, L.-M.   | 0000-0002-1124-2262| Resources, Writing – review & editing | University of Bamberg                                | x                                  | x                               |
| 39 | Krueger, S. M.  |                    | Resources, Writing – review & editing | University of Bamberg                                | x                                  | x                               |
| 40 | Lagator, S.     | 0000-0001-6060-2941| Resources, Writing – review & editing | University College London                            | x                                  | x                               |
| 41 | Lopez-Boa, F.   |                    | Resources, Writing – review & editing | InterAmerican Development Bank, Washington DC, US     | x                                  | x                               |
| 42 | Navajas, J.     | 0000-0001-8765-037X| Resources, Writing – review & editing | Universidad Torcuato Di Tella                         | x                                  | x                               |
| 43 | Norem, J. K.    | 0000-0001-9470-230X| Resources, Writing – review & editing | Wellesley College                                    | x                                  | x                               |
| 44 | Novak, J.       |                    | Resources, Writing – review & editing | University of Tübingen                                | x                                  | x                               |

(Contd.)
| NO | AUTHOR          | ORCID              | CONTRIBUTION (CREDIT)                     | AFFILIATION                      | AUTHOR HAS CHECKED HIS OR HER DATA | AUTHOR HAS EMPTIED FILE-DRAWER |
|----|----------------|--------------------|------------------------------------------|----------------------------------|-----------------------------------|--------------------------------|
| 45 | Onuki, Y.      | 0000-0003-2918-802X | Resources, Writing – review & editing    | The university of Tokyo          | x                                 | x                              |
| 46 | Page, E.       | 0000-0001-8212-9833 | Resources, Writing – review & editing    | University College London        | x                                 | x                              |
| 47 | Rebholz, T. R. | 0000-0001-5436-0253 | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 48 | Sartorio, M.   |                    | Resources, Writing – review & editing    | Universidad Torcuato Di Tella     | x                                 | x                              |
| 49 | Schindler, S.  | 0000-0002-7054-5431 | Resources, Writing – review & editing    | University of Muenster           | x                                 | x                              |
| 50 | Shanks, D. R.  | 0000-0002-4600-6323 | Resources, Writing – review & editing    | University College London        | x                                 | x                              |
| 51 | Siems, M.-C.   |                    | Resources, Writing – review & editing    | Leuphana University Lüneburg      | x                                 | x                              |
| 52 | Staglich, P.   |                    | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 53 | Starkulla, M.  |                    | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 54 | Stitz, M.      |                    | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 55 | Straube, T.    | 0000-0002-5301-7549 | Resources, Writing – review & editing    | University of Muenster           | x                                 | x                              |
| 56 | Thies, K.      | 0000-0002-3723-4156 | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 57 | Thum, Elias    |                    | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 58 | Ueda, K.       | 0000-0003-1244-7945 | Resources, Writing – review & editing    | The university of Tokyo          | x                                 | x                              |
| 59 | Undorf, M.     | 0000-0002-0118-824X | Resources, Writing – review & editing    | University of Mannheim           | x                                 | x                              |
| 60 | Ulrichich, D.  | 0000-0002-0089-0918 | Resources, Writing – review & editing    | University College London        | x                                 | x                              |
| 61 | Vadillo, M. A. | 0000-0001-8421-816X | Resources, Writing – review & editing    | Universidad Autónoma de Madrid    | x                                 | x                              |
| 62 | Wolf, H.       |                    | Resources, Writing – review & editing    | University of Tübingen            | x                                 | x                              |
| 63 | Zhou, A.       | 0000-0001-6345-0816 | Resources, Writing – review & editing    | University of Bamberg            | x                                 | x                              |
| 64 | Schütz, A.     | 0000-0002-6358-167X | Funding acquisition, Resources, Supervision, Writing – review & editing | University of Bamberg             | x                                 | x                              |

1 An empty file-drawer means that all of this author’s studies that were completed before February 1st 2022 are included in the OpAQ-dataset. Resources co-Authors have provided data and checked them in the processed version of the OpAQ-dataset. Data Curation co-authors have processed their datasets themselves. All other datasets were processed by LR, LW, ES, and PT.
AUTHOR AFFILIATIONS

Lukas Röseler orcid.org/0000-0002-6446-1901
University of Bamberg, Germany

Lucia Weber
University of Bamberg, Germany

Katharina Helgerth
University of Bamberg, Germany

Elena Stich
University of Bamberg, Germany

Miriam Günther
University of Bamberg, Germany

Paulina Tegethoff orcid.org/0000-0002-4701-4309
University of Bamberg, Germany

Felix Wagner
University of Bamberg, Germany

M. Antunovic
University of Tübingen, Germany

F. Barrera-Lemarchand orcid.org/0000-0003-2031-1597
Universidad Torcuato di Tella, Argentina;
Universidad de Buenos Aires, Argentina

E. Halali orcid.org/0000-0001-5730-7677
Bar-Ilan University, Israel

K. Ioannidis orcid.org/0000-0003-2858-4688
University of Amsterdam, Netherlands

O. Genschow orcid.org/0000-0001-6322-4392
Leuphana University Lüneburg, Germany

N. Milstein orcid.org/0000-0002-4328-7174
Bar-Ilan University, Israel

D. C. Molden orcid.org/0000-0002-2182-5621
Northwestern University, United States

F. Papenmeier orcid.org/0000-0001-5566-9658
University of Tübingen, Germany

Z. Pavlovic orcid.org/0000-0002-9231-5100
University of Belgrade, Serbia

R. Rinn orcid.org/0000-0002-2640-8325
University of Würzburg, Germany

M. L. Schreiter orcid.org/0000-0002-4596-9195
University of Tübingen, Germany

M. F. Zimdahl orcid.org/0000-0001-5808-2967
University of Mannheim, Germany

Š. Bahník orcid.org/0000-0002-0579-6808
Prague College of Psychosocial Studies, Czechia

C. Bermeitinger orcid.org/0000-0001-9977-7001
University of Hildesheim, Germany

F. B. N. Blower orcid.org/0000-0002-5729-8077
University College London, United Kingdom

H. L. Bögler orcid.org/0000-0003-2401-8945
University of Bamberg, Germany

P. Burgmer orcid.org/0000-0003-3664-0539
University of Kent, United Kingdom

N. N. Cheek orcid.org/0000-0003-3515-4141
Purdue University, United States

L. Dorsch
University of Tübingen, Germany

S. Fels
University of Bamberg, Germany

L. Freira orcid.org/0000-0002-7101-0760
Universidad Torcuato di Tella, Argentina

A. J. L. Harris
University College London, United Kingdom

J. A. Häusser orcid.org/0000-0001-8993-9919
Justus-Liebig-University Giessen, Germany

M. V. Hedgebeth
Virginia Commonwealth University, United States

M. Henkel
University of Würzburg, Germany

D. Horvath orcid.org/0000-0003-3954-1720
Technical University of Darmstadt, Germany

P. Intelmann
University of Tübingen, Germany

A. Klamar orcid.org/0000-0002-5983-3707
Federal University of Applied Administrative Sciences, Germany

E. Knappe
Harz University of Applied Science, Germany

L.-M. Köppel orcid.org/0000-0002-1124-2262
University of Bamberg, Germany

S. M. Krueger
University of Bamberg, Germany

S. Lagator orcid.org/0000-0001-6060-2941
University College London, United Kingdom

F. Lopez-Boo
InterAmerican Development Bank, Washington DC, United States

J. Navajas orcid.org/0000-0001-8765-037X
Universidad Torcuato di Tella, Argentina

J. K. Norem orcid.org/0000-0001-9470-230X
Wellesley College, United States

J. Novak
University of Tübingen, Germany

Y. Onuki orcid.org/0000-0003-2918-802X
The university of Tokyo, Japan

E. Page orcid.org/0000-0001-8212-9833
University College London, United Kingdom

T. R. Rebholz orcid.org/0000-0001-5436-0253
University of Tübingen, Germany

M. Sartorio
Universidad Torcuato di Tella, Argentina

S. Schindler orcid.org/0000-0002-7054-5431
University of Muenster, Germany

D. R. Shanks orcid.org/0000-0002-4600-6323
University College London, United Kingdom

M.-C. Siems
Leuphana University Lüneburg, Germany

P. Stäglich
University of Tübingen, Germany

M. Starkula
University of Tübingen, Germany

M. Stitz
University of Tübingen, Germany

T. Straube orcid.org/0000-0002-5301-7549
University of Muenster, Germany

K. Thies orcid.org/0000-0002-3723-4156
University of Tübingen, Germany

E. Thum
University of Tübingen, Germany
References

Bahník, Š. (2021a). Anchoring does not activate examples associated with the anchor value. Advance online publication. DOI: https://doi.org/10.31234/osf.io/45wby

Bahník, Š. (2021b). Anchoring without scale distortion. Judgment and Decision Making, 16(1), 131. DOI: https://doi.org/10.31234/osf.io/2q8hj

Bergman, O., Elingsten, T., Johannesson, M., & Svensson, C. (2010). Anchoring and cognitive ability. Economics Letters, 107(1), 66–68. DOI: https://doi.org/10.1016/j.econlet.2009.12.028

Berthet, V. (2021). The measurement of individual differences in cognitive biases: A review and improvement. Frontiers in Psychology, 12, 630177. DOI: https://doi.org/10.3389/fpsyg.2021.630177

Brandt, M. J., Ijzerman, H., Dijkstra, A., Farach, F. J., Geller, J., Giner-Sorolla, R., Grange, J. A., Perugini, M., Spies, J. R., & van’t Veer, A. (2014). The replication recipe: What makes for a convincing replication? Journal of Experimental Social Psychology, 50, 217–224. DOI: https://doi.org/10.1016/j.jesp.2013.10.005

Bystranowski, P., Janik, B., Próchnicki, M., & Skórska, P. (2021). Anchoring effect in legal decision-making: A meta-analysis. Law and Human Behavior, 45(1), 1–23. DOI: https://doi.org/10.1037/lhb0000438

Cheek, N. N., & Norem, J. K. (2019). Are Big Five Traits and Facets Associated With Anchoring Susceptibility? Social Psychological and Personality Science, 92, 194855061983700. DOI: https://doi.org/10.1177/1948550619837001

Cheek, N. N., & Norem, J. K. (2022). Individual differences in anchoring susceptibility: Verbal reasoning, autistic tendencies, and narcissism. Personality and Individual Differences, 184, 111212. DOI: https://doi.org/10.1016/j.paid.2021.111212

Englich, B., Mussweiler, T., & Strack, F. (2006). Playing dice with criminal sentences: The influence of irrelevant anchors on experts’ judicial decision making. Personality & Social Psychology Bulletin, 32(2), 188–200. DOI: https://doi.org/10.1177/0146167205282152

Epley, N., & Gilovich, T. (2006). The anchoring-and-adjustment heuristic: Why the adjustments are insufficient. Psychological Science, 17(4), 311–318. DOI: https://doi.org/10.1111/j.1467-9280.2006.01704.x

Harris, A. J. L., Blower, F. B. N., Rodgers, S. A., Logator, S., Page, E., Burton, A., Urlichich, D., & Speekenbrink, M. (2019). Failures to replicate a key result of the selective accessibility theory of anchoring. Journal of Experimental Psychology. General. Advance online publication. DOI: https://doi.org/10.1037/xge0000644

Hedge, C., Powell, G., & Sumner, P. (2018). The reliability paradox: Why robust cognitive tasks do not produce reliable individual differences. Behavior Research Methods, 50(3), 1166–1186. DOI: https://doi.org/10.3758/s13428-017-0935-1

Kahneman, D. (2012). Thinking, fast and slow. Penguin Books.

Li, L., Maniadis, Z., & Sedikides, C. (2021). Anchoring in Economics: A Meta-Analysis of Studies on Willingness-To-Pay and Willingness-To-Accept. Journal of Behavioral and Experimental Economics, 90, 101629. DOI: https://doi.org/10.1016/j.jbeeco.2020.101629

Northcraft, G. B., & Neale, M. A. (1987). Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions. Organizational Behavior and Human Decision Processes, 39, 84–97. DOI: https://doi.org/10.1016/0749-5978(87)90046-X

Orr, D., & Guthrie, C. (2006). Anchoring, information, expertise, and negotiation: New insights from meta-analysis. Ohio State Journal on Dispute Resolution, 21(3), 597–628.

Parsons, S., Krujilt, A.-W., & Fox, E. (2018). Psychological Science needs a standard procedure of reporting the reliability of cognitive behavioural measurements. Advance online publication. DOI: https://doi.org/10.31234/osf.io/6ka9z

R Core Team. (2018). R [Computer software]. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/

Rösseler, L. (2021). Anchoring Effects: Resolving the Contradictions of Personality Moderator Research. University of Bamberg. DOI: https://doi.org/10.20378/irb-49951

Rösseler, L., & Schütz, A. (2022). Hanging the Anchor Off a New Ship: A Meta-Analysis of Anchoring Effects. Advance online publication. DOI: https://doi.org/10.31234/osf.io/wf2tn

Rösseler, L., Schütz, A., Baumeister, R. F., & Starker, U. (2020). Does ego depletion reduce judgment adjustment for both internally and externally generated anchors? Journal of Experimental Social Psychology, 87, 103942. DOI: https://doi.org/10.1016/j.jesp.2019.103942

Rösseler, L., Schütz, A., Blank, P. A., Dück, M., Fels, S., Kupfer, J., Scheelje, L., & Seida, C. (2021). Evidence against subliminal anchoring: Two close, highly powered, preregistered, and failed replication attempts. Journal of Experimental Social Psychology, 92, 104066. DOI: https://doi.org/10.1016/j.jesp.2020.104066
Röseler, L., Weber, L., Stich, E., Helgerth, K., Günther, M., Wagner, F.-S., & Schütz, A. (2022). Measurements of Susceptibility to Anchoring are Unreliable: Meta-Analytic Evidence From More Than 50,000 Anchored Estimates. DOI: https://doi.org/10.31234/osf.io/b6t35

Schindler, S., Querengässer, J., Bruchmann, M., Bögemann, N. J., Moек, R., & Straube, T. (2021). Bayes Factors show evidence against systematic relationships between the anchoring effect and the Big Five personality traits. Scientific Reports, 11(1), 7021. DOI: https://doi.org/10.1038/s41598-021-86429-2

Shanks, D. R., Barbieri-Hermitte, P., & Vadillo, M. A. (2020). Do Incidental Environmental Anchors Bias Consumers’ Price Estimations? Collabra: Psychology, 6(1), 19. DOI: https://doi.org/10.1525/collabra.310

Townson, C. D. (2019). The anchoring effect: A meta-analysis (Doctoral dissertation, Michigan State University). ProQuest Dissertations & Theses Global.

Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. Science (New York, N.Y.), 185(4157), 1124–1131. DOI: https://doi.org/10.1126/science.185.4157.1124

van ’t Veer, A. E., & Giner-Sorolla, R. (2016). Pre-registration in social psychology—A discussion and suggested template. Journal of Experimental Social Psychology, 67, 2–12. DOI: https://doi.org/10.1016/j.jesp.2016.03.004

Weber, L., & Röseler, L. (2022, August 11). Testing the Reliability of Anchoring Susceptibility Scores. Advance online publication. DOI: https://doi.org/10.31234/osf.io/2kh3

**PEER REVIEW COMMENTS**

Journal of Open Psychology Data has blind peer review, which is unblinded upon article acceptance. The editorial history of this article can be downloaded here:

- **PR File 1.** Peer Review History. DOI: https://doi.org/10.5334/jopd.67.pr1

**TO CITE THIS ARTICLE:**

Röseler, L., Weber, L., Helgerth, K., Stich, E., Günter, M., Tegethoff, P., Wagner, F., Antunovic, M., Barrera-Lemarchand, F., Halali, E., Ioannidis, K., Genschow, O., Milden, N., Molden, D. C., Papenmeier, F., Pavlovic, Z., Rinn, R., Schreiter, M. L., Zimdahl, M. F., Bahník, Š., Bermeitinger, C., Blower, F. B. N., Bogler, H. L., Burgmer, P., Cheek, N. N., Dorsch, L., Fels, S., Frech, M.-L., Freira, L., Harris, A. J. L., Häusser, J. A., Hedgebeth, M. V., Henkel, M., Horvath, D., Intelmann, P., Klamar, A., Knappe, E., Köppel, L.-M., Krueger, S. M., Lagator, S., Lopez-Boo, F., Navajas, J., Norem, J. K., Novak, J., Onuki, Y., Page, E., Rebholz, T. R., Sartorio, M., Schindler, S., Shanks, D. R., Siems, M.-C., Stäglich, P., Starkulla, M., Stitz, M., Straube, T., Thies, K., Thurm, E., Ueda, K., Undorf, M., Urlichich, D., Vadillo, M. A., Wolf, H., Zhou, A., & Schütz, A. (2022). The Open Anchoring Quest Dataset: Anchored Estimates from 96 Studies on Anchoring Effects. Journal of Open Psychology Data, 10: 16, pp. 1–12. DOI: https://doi.org/10.5334/jopd.67

Published: 26 October 2022

**COPYRIGHT:**

© 2022 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/4.0/.

Journal of Open Psychology Data is a peer-reviewed open access journal published by Ubiquity Press.