Exploring Global Perspectives from the Development Engagement Lab's Database

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Abstract

Public support is crucial for shaping effective development and foreign aid policies. The Development Engagement Lab (DEL) has conducted comprehensive surveys in France, Germany, Great Britain, and the U.S. to track and analyse public attitudes on foreign aid and engagement with sustainable development. This data descriptor presents multiple datasets curated by DEL, identifying shifts in public opinion and behaviour, alongside underlying mechanisms explaining these attitudes and actions. DEL's data comprises nationally representative panel data (2019 - 2023), repeated cross-sections (2019 - 2024), and several foreign aid subject-specific datasets. DEL has made available 87 datasets totalling 246,352 observations from 129,128 unique respondents. We have developed an R package, *DELdata*, to facilitate the use and dissemination of these datasets. DEL data will enable scholars and policymakers to produce valuable insights that will generate a better understanding of how citizens think about, and engage with, global poverty and sustainable development.[1]

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1 Backgroud and summary

Public support is essential for the quantity and quality of foreign aid spending, development policy, programming, and international cooperation. Although foreign aid is financed by the public purse through taxpayer contributions, and is subject to government approval and oversight, aid is spent in support of non-tax-paying citizens of other countries. This tension has been recognised by both policymakers and academics (Mosley, 1985, Baum and Potter, 2008, Heinrich and Kobayashi, 2020, Kiratli, 2020), who have long-argued that public support allows political elites to operate more effectively within a contested political space. Direct action from the public, including through donations, activism, or volunteering, also supports and legitimises the work of international development NGOs, who can advocate for further government efforts or who can deliver aid and support to developing countries directly as well (Darnton and Kirk, 2011, Micklewright and Wright, 2005).

As we approach the 2030 Sustainable Development Goals deadline, citizens' understanding of, and engagement with, development efforts will be a critical part of advancing and addressing global issues such as ending extreme poverty to achieving gender equality worldwide. Contemporary global and national events such as soaring inflation, refugee crises, and international conflict are shaping people's attitudes towards helping distant strangers in different ways. On the one hand, we witness increases in charitable donations in some countries (Charities Aid Foundation, 2023); and at the same time, we have also seen public support for development cooperation falling significantly (Development Compass, 2023).

The Development Engagement Lab (DEL) Database is the first publicly available, comprehensive source of longitudinal and cross-sectional data on key donor countries' attitudes and engagement with global poverty. We collected these data through a series of dedicated surveys and experiments described below.[2] A key feature of DEL data is the multidimensional measures of key indicators, for example, measuring the general concept of support for development as a set of attitudinal indicators ranging from 'concern about levels of poverty in poor countries' to 'support for current levels or increases in aid expenditures', and to 'support for giving aid in the national interest or for altruistic reasons'.

Beyond public attitudes, the data also allow for exploring and understanding public

[2]For more background on the Development Engagement Lab, including the team, history, blogs, reports, and other materials please go to `https://developmentengagementlab.org/`

engagement with global poverty and development through respondents' self-reported behaviours. The data include ten key indicators capturing actions the public take to tackle global poverty, lobby government, or support international NGOs. This battery is used to segment respondents into six groups - Negatively Engaged, Totally Disengaged, Marginally Engaged, Transactionally Engaged, Purposively Engaged, and Fully Engaged (Hudson et al., 2020). This audience segmentation helps us understand the characteristics of individuals who take specific actions over others, how to communicate with them, and what 'drives' their actions.

DEL data broadens the scope of research into public engagement with global poverty and sustainable development both methodologically and substantively. Methodologically, the Development Engagement Lab team have made use of a range of experimental approaches - e.g. survey, conjoint, and list experiments - aimed at teasing out people's preferences, beliefs, heuristics, and knowledge around a wide-range of development issues and the factors that affect these. Substantively, DEL data also provides deep dives into a broader set of thematic issues of importance for the development sector. Some issues are covered through ad-hoc surveys and experiments include public perceptions and engagement with climate change, COVID-19, global gender (in)equality and feminist development policy, and global conflicts, including the war in Ukraine.

We expect researchers in the fields of public opinion, foreign aid, and sustainable development will be able to take advantage of the granularity and richness of DEL data to shed new light on citizen's preferences, attitudes, and behaviours towards global challenges and development cooperation-related issues. One of the advantages of DEL's data is the large sample sizes and its panel structure. The richness of the data allows for sufficiently-powered sub-group analysis of certain segments of the population and to monitor change over time, as well as allowing researchers to leverage the temporal structure of the data using dynamic and latent class models. This is helpful not only for researchers to understand what drives changes in public opinion and engagement, as well as development NGOs and charities who need deep insights to target key audiences and drive change.

Methods

The DEL project (2019-2024) is a collaboration between University College London and the University of Birmingham funded by the Gates Foundation (1199734). DEL's is an independent reseach organisation charged with generating data, robust research, and evidence and insights on how donor publics engage with global poverty, sustainable development and international cooperation. To achieve this goal, our team developed three approaches to gather evidence on these topics: 1) track both short- and long-term changes in attitudes and behaviours over time, 2) identify the factors driving changes in public attitudes and behaviours within different groups and across countries, and 3) assess people's preferences, perceptions, beliefs, and expectations to long-standing global challenges, and investigating public preferences to tackle these through personal actions or through the work of governments and other non-governmental organisations.

Over the course of the DEL project, we conducted 87 online surveys in France, Germany, Great Britain[3] and the United States, collecting 246,352 observations from 129,128 unique respondents. Table 1 provides additional information on the data collection for three types

[3]Technically, it is Great Britain and not the UK as YouGov does not survey in Northern Ireland

of surveys. In this section, we describe the details of these data types.

Table 1: Summary Data Collection DEL's Data

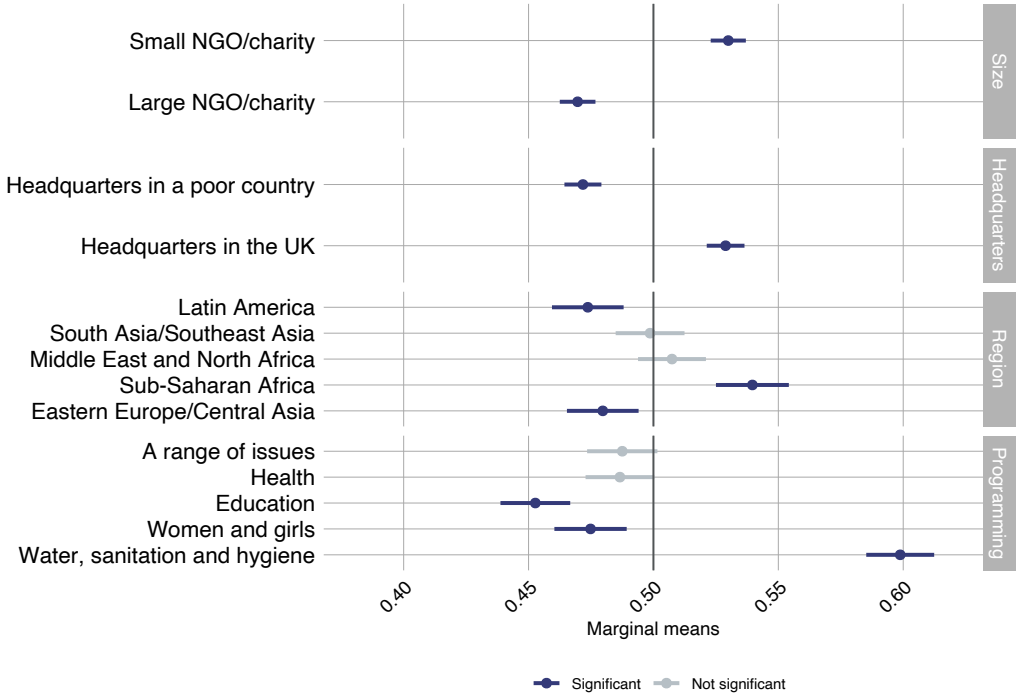
Country	Year/Periods	Number of surveys	Frequency (per year)	Sample
A. Panel				
France	2019 - 2023	5	1	6001 to 6073
Germany	2019 - 2023	5	1	6000 to 6050
Great Britain	2019 - 2023	5	1	8008 to 8281
United States	2019 - 2023	5	1	6004 to 6112
B. Trackers				
France	2020 - 2024	10	2	1000 to 1081
Germany	2020 - 2024	10	2	1001 to 1141
Great Britain	2020 - 2024	10	2	1036 to 2000
United States	2020 - 2024	10	2	1153 to 1343
C. Sandboxes				
France	2019 - 2023	9	1 (2019); 2 (2020-2023)	2000 to 2138
Germany	2020 - 2023	7	1 (2021); 2 (2020, 2022, 2023)	2002 to 3538
Great Britain	2020 - 2023	6	2	1761 to 3639
United States	2020 - 2023	5	2 (2020); 1 (2021); 2 (2023)	2009 to 3527

Note This table provides details of the data collection, sample size, and frequency of the three types of data collected throughout the Development Engagement Lab project. For Sandboxes, the periodicity of data collection varied by country and year. Given that the periodicity of Sandboxes varied year by year, we report the number of these surveys and the year they were conducted in parenthesis.

Panel. To capture long-term changes in attitudes and behaviour over time as well as key mediators, we developed a panel survey including 47 fixed questions and a varying number of context-specific questions. We collected panel survey data once a year between 2019 and 2023 in each of the four countries, yielding 20 panel datasets. The fixed questions section includes an extensive battery of items aimed at eliciting, among many issues, individuals' support for aid, charitable donations to international NGOs, perceptions of the costs and benefits of aid, attitudes towards migration, and questions on economic outlook and trust.

Table 2 in the appendix provides a full breakdown of all the questions in the *Panel*. The year-specific questions section contains a bespoke battery of items responsively developed in collaboration with the project's stakeholders – over 40 international development NGOs and government ministries – in collaboration with our research team. For instance, in the 2023 survey, we embedded a conjoint experiment to get a more nuanced understanding of which dimensions of aid projects (including purpose and region, to name a few) matter more for public support of aid projects[4] In 2021, we explored in-depth the features of NGOs make respondents more likely to donate (including the size of the NGOs, location of the headquarters, and issue worked on). The results of this conjoint experiment are shown in Figure 1.

Figure 1: Small and Large NGOs Experiment



Note: This figure shows the marginal means of all levels within each attribute of a forced-choice conjoint experiment included in Wave 3 in Great Britain. Respondents were presented with two profiles of NGOs. Exact wording of the question and response options are in the appendix.

Each year, we collected nationally representative samples using YouGov's Plc online panels. The sample sizes ranged from at least 6,000 observations in France, Germany, and the

[4]Forthcoming paper Hudson et al. (2024)

United States to at least 8,000 in Great Britain. We systematically collected all *Panel* waves between September through October/November of each year. In Table 5 in the appendix, we summarise the data collection dates, sample size, and retention rates of the data. All surveys include survey weights to yield nationally representative samples. Table 10 in the appendix provides a visual metric of the depth of the topics covered in each country and wave.

Panel is an unbalanced panel where, on average, across all countries, the retention of the original first wave respondents gradually decreases from 70% in second wave to 39% in the fifth and final wave in 2023. Samples were topped up with new respondents to keep sample sizes consistent in size over the waves. Table 7 in the appendix shows the aggregate retention rate pooling all countries together. Looking at each country individually, we find similar retention rates, except for Great Britain, where dropout rates are considerably lower than the other three countries. [5] This level of attrition falls within the expected dropout rates in longitudinal studies that range from 30 to 70% Lugtig (2014), Gustavson et al. (2012). Table 11 in the Appendix summarises some key demographics included in *Panel*.

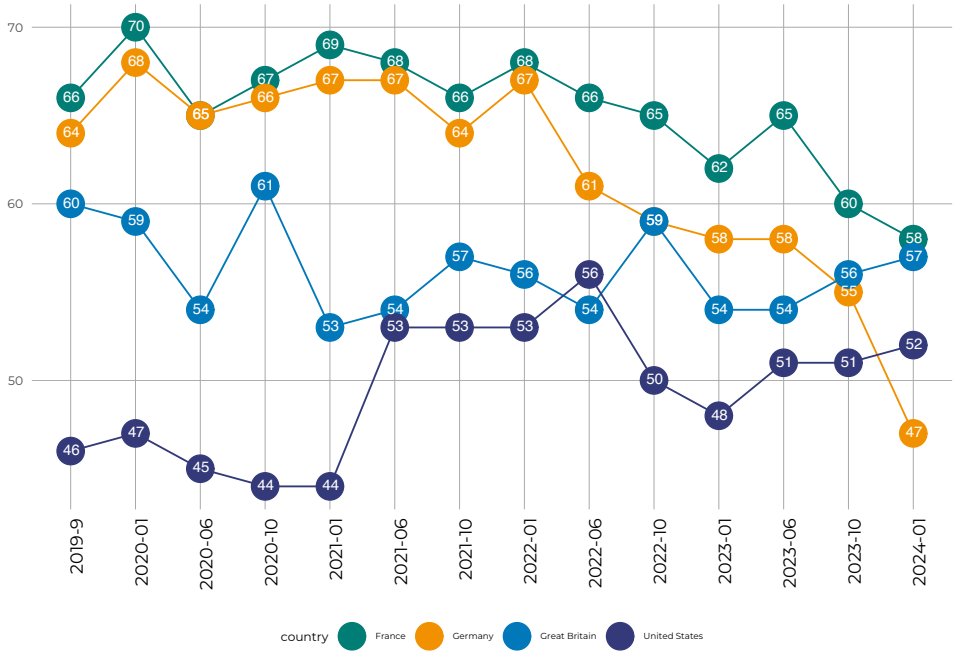
Tracker. In addition to the annual longitudinal panel survey, we collected two smaller repeated cross-sectional samples each year capturing key attitudinal and behavioural indicators. These data aim to identify and highlight higher frequency changes in public engagement, especially around key events and changes in the political, economic, and social landscapes. *Tracker* data were collected through a reduced 20-question survey drawn from the larger *Panel* instrument, implemented in all four countries from 2019 until 2024 (10 waves). [6] This means for these 20 items we effectively have three data points per year. Sample sizes for German, French, and American *Tracker* surveys are at least 1,000 responses, with larger samples of 2,000 respondents available for some samples in Great Britain. Table 3 in the appendix summarises details of these samples, including collection dates and sample sizes. Figure 2 illustrates how *Panel* and *Trackers* datasets can be merged into a single file to examine long-term trends in levels of public support for aid. This figure shows the percentage of respondents who say they would like their government to keep or increase the current

[5] See Table 5 in the appendix reports the find retention rates by country. Table 6 in the appendix reports the retention rates between two subsequent waves by country.

[6] For the U.S., we only collected ten questions from the *Panel* instrument that capture attitudes towards foreign aid.

levels of development aid expenditure. Table 12 in the Appendix summarises some key demographics included in *Tracker*.

Figure 2: Trend Support for Foreign Aid



Note: This figure shows the average level of support for foreign aid in all four countries. We measured support for overseas aid if respondents wanted to maintain or increase the money their government spends on overseas aid. Estimates are weighted to be nationally representative. Exact wording of the question and response options are in the appendix.

Sandbox. Sandboxes are the responsive component of the DEL project. Sandboxes are deep dives into specific topics of interest connected to the main question of public engagement with sustainable development, identified and developed in collaboration with project stakeholders across the four DEL countries. Throughout the DEL project, we conducted 27 surveys examining topics ranging from citizens' beliefs and responses to the Syrian refugee crisis to global gender (in)equality. The frequency of *Sandboxes* varied from year to year and country, driven by research priorities. For example, we conducted 9 *Sandboxes* in France and 5 in the U.S. Most Sandboxes have a minimum and typical sample size of 2,000 responses, but for specific studies, this is much larger, up to 5,591 for a U.S. sample. Table 4 in the appendix provides information on the data collection dates, sample sizes of these surveys, and themes covered.

In these deep dives, we frequently used experimental designs to investigate citizens' attitudes towards addressing humanitarian crises, war/conflict or tackling global challenges. For example, in 2022, we studied how citizens in Great Britain were engaging with the conflict in Ukraine, seeking to understand, among other key questions, whether respondents were willing to reallocate financial aid and donations from humanitarian crises in Africa and the Middle East to support Ukraine. In 2021, we looked at U.S. citizens' engagement with security as a key question for international cooperation, including public support for withdrawing their military forces from Afghanistan, and whether the public deemed the primary role of foreign aid spending as an important instrument to promote global stability. In Table 8 in the appendix we provide further information on the topics covered in these surveys.

We also frequently used *Sandboxes* to test the effectiveness of different messages and forms of communication with the public, to create evidence informing charities', NGOs' and governments' campaigning, education, engagement efforts. In these surveys, we investigated the the role of different "frames" and "narratives" and how they impacted on support for development actors or policies. For example, in 2023, across all four DEL countries, we tested how public attitudes varied using different ways of framing gender equality.

Another recurring theme across *Sandboxes* is the role of imagery in campaigning efforts. In light of the rapid growth of digital photography, the internet, and social media, images and video content have become one of the primary sources through which citizens consume political information (Banducci and Karp, 2016, Bennett and Iyengar, 2008, Entman, 2004, Hindman, 2018). In *Sandboxes* conducted in 2021 and 2023, we investigated the role of images and videos as a medium to encourage citizen engagement with aid appeals and impact on charitable donations.[7]

Pre-Harmonisation and Survey Design. To ensure cross-linguistic comparability, the survey questionnaires were initially developed in (British) English. The harmonisation involved translation by qualified professionals. In Germany, translations are handled initially by YouGov Plc's translators, followed by verification by DEL's local German consultant team for linguistic, semantic, and technical accuracy. In the case of France, DEL's French con-

[7] The imagery and video content used in these studies will not made available, as we do not have authorisation to share them with third parties.

sultants took the lead in the translation, with YouGov Plc providing an additional check. Finally, for the U.S. surveys, the DEL team adapted the questionnaire to match American terminology and writing conventions.

We have followed several practices to improve the quality of data collected through online surveys. We simplified the wording and length of the surveys to reduce survey fatigue[8]. We randomised item order within question batteries, including when asking respondents to rank different options, and we systematically aimed to ease cognitively demanding question batteries by limiting the number of items and response options. We actively avoided including double-barrelled, vague, or all-or-nothing types of questions (Stantcheva, 2023). For unipolar and bipolar items, we consistently used a small but sufficient number of categories, still obtaining sufficient variation in respondents' answers (Dillman et al., 2014). Cross survey contamination between *Trackers* and *Panels* was also low, as out of 40,605 respondents that answered *Trackers* across the four countries, only 8,561 were also included in the *Panels*. We provide further detail about the different quality controls we underwent in the technical validation section of this paper.

Data Records

DEL data comprises an unprecedented collection of datasets for France, Germany, Great Britain and the United States, four major development aid donors from 2019 until 2023[9]. All datasets include a unique identifier for each respondent, making it easy for researchers to link respondents to previous or subsequent waves or to merge different data types.

All datasets are available in .sav format. These files can be read using R, Python, SPSS, and Stata statistical software. A survey questionnaire text file accompanies each dataset. The survey questionnaires also include information on the coding protocol for each answer option and, if applicable, any randomisation or split sample procedures. We also provide a codebook for each dataset in table format. The codebooks provide extensive details of all the variables in each dataset, such as numerical codes for all questions and numeric values

[8]We also used split sampling approaches whenever we needed to increase the number of questions while keeping the overall length of the survey fixed.

[9]These countries are some of the largest donors by aid volume in the OECD Development Assistance Committee, see: `https://www.oecd.org/en/data/indicators/net-oda.html?oecdcontrol-03506f24e9-chartId=bb70a1f537`

for missing/don't know or prefer not to say answers. We complement these files with a data table file that provides summary statistics for key selected variables. We also make available a readme file that summarises some of the meta-data of each dataset, such as the type of data, the topics covered, the fieldwork dates, and the sample size.

Interested parties can download all these files, freely available for non-commercial use, from the DEL's Harvard Dataverse: `https://dataverse.harvard.edu/dataverse/devengagement`. We separated the datasets into three Dataverses: *Panels*, *Trackers*, and *Sandboxes*.

R Data Package We also created an R Package called *DELdata* to facilitate access to the DEL database. Researchers using *DELdata* can easily load datasets from the DEL repository using very few commands. We also made additional documentation of this package available through Github: `https://github.com/ftraposo/DELdata/tree/gh-pages`. We also include a vignette that explains how researchers can load the data into an R session. The vignette is available at `https://ftraposo.github.io/DELdata/docs/reference/get_del_data.html`

Technical Validation

We employed several strategies to validate the data throughout the survey design and data collection life cycle. Before rolling out the surveys, we pre-tested the questionnaires amongst the DEL research team in collaboration with consultants from all participating countries. This test ensured that the survey features, such as question randomisation, skip logic, and answer recording, were functioning correctly and consistently. Country consultants' participation was essential to highlight and resolve any issues with the translation and wording of the questions, both for country-specific surveys and for those we fielded in multiple geographies to allow for cross-country comparisons. In collaboration with YouGov research managers, we also conducted extensive pre-testing to ensure that all the survey questions were appropriately displayed, particularly for experiments containing complex randomisation of information or response options displayed or those question modules which employed imagery or large amounts of text.

Once the DEL team approved the questionnaire, we piloted the surveys using small samples of around 100 respondents. In these pilots, we checked the numeric codes in the data

to ensure they matched the numeric values on the survey. We perform outlier and cross-tabulation analysis to find suggestive evidence of leading/biased questions in the survey. We also checked that survey logic testing worked, including checks that skip logic, branching, and other automated features worked as intended and were reflected in the data. We implemented a third quality control stage by obtaining and inspecting partial samples during the data collection period. These larger sets underwent the same quality controls undertaken during the pilot testing described above. We also extended our inspection by computing the proportion of respondents who systematically answered "Don't know/Prefer not to say" as a signal of low engagement or survey fatigue. We also checked for unusual skewness in the respondents' answers. A final set of similar tests were conducted on the final dataset once all data collection was completed.

Post-Harmonisation We recoded the original data to homogenise their structure across the different types of datasets. Specifically, we standardised the numeric codes for 5-point and 10-point Likert scale items. We also homogenised the naming conventions used in the datasets, so researchers can easily merge the datasets [10]. We inspected all codebooks, questionnaires, and data tables, ensuring this documentation matched with the datasets [11].

Code availability

We make the DEL data available in a readily accessible format along with the R scripts used to clean the data in DEL's dataverse. These R code files include code to check that values fall within expected ranges and standardising variable names and values. We also made an annotated R script available to create the DEL behavioural segmentation variable *DELseg* available. This script allows researchers to replicate the segmentation created by the DEL team. This variable aims to capture different forms of engagement with development issues. A description of this segmentation is available in DEL's Harvard Dataverse. [12]

[10] All the survey question variables follow this structure *variablename_wave* or *variablename_wave_number*

[11] Due to the long period through which the study was conducted, and due to limits both legal and technical about what demographic and political data can be collected across the four countries, there are some minimal differences in classification schemes across waves and countries and data types in some of the covariates such as party preferences, voting records, and employment status.

[12] We have not validated this classification method.

Usage Notes

Academic Usage The benefits of longitudinal data should allow scholars to unlock new modelling approaches using dynamic data. A more comprehensive set of questions is essential to unlocking factor/latent class analysis (LCA) approaches to capture constructs better. The current literature on public engagement with development and aid has been the lack of robust measures of public support for foreign aid (Hudson and vanHeerde Hudson, 2012), which would allow for accurate estimates of latent public opinion. DEL data allows for departing the existing single-question indicators and provide an unbiased, efficient underlying measure of foreign aid support [13].

Country-level indexes have been widely used to compare countries in specific dimensions such as corruption, democracy, and governance. DEL data and surveys can serve as templates for researchers interested in constructing a country-level foreign aid support index. Some of these indexes combine country-expert surveys with nationally representative surveys. With these new data available, researchers in the future could use the numerous items included in the 83 surveys to construct new forms of these indexes.

Pedagogical Usage Given its depth and structure, DEL data can also be an important pedagogical tool. Instructors of quantitative methods courses can use the data to teach introductory concepts such as regression analysis and hypothesis testing or more advanced methodologies such as panel data estimation or conjoint experiments. The data also allow researchers to conduct multivariate analyses. Instructors can teach students the different methods to measure unobservable underlying traits, including principal component analysis and item response theory, as the data contains several sets of items that aim to capture specific constructs such as morality, social norms, and perceptions of personal or aid effectiveness.

NGO Usage As DEL project stakeholders, international development NGOs have relied on DEL data to gain insight into the evolution of public attitudes and values around global poverty, development, and international cooperation and the factors that shape these atti-

[13] This approach has shown promise in the research of scholars in other fields such as on European integration (di Vettimo, 2022), or polarisation in the U.S. (Zhou, 2019)

tudes. These data and insights can be used by users from the third sector and development agencies to improve advocacy, messaging, and communications strategies. In particular, these insights can provide evidence on the frames, messages, and messengers that resonate or are more persuasive for donor publics. Our analysis of messengers(Hudson et al., 2020) is an example of where the data have proved particularly useful for NGOs and development agencies. Moreover, data and research around what attributes of campaign images lead to a greater sense of activation, efficacy, and urgency have been communicated to and used by international development NGOs(Oh et al., 2023)

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Appendix

Figures & Tables

Table 2: Summary of questions in Panel

Area	Number of questions
Track	10
Engagement	4
Charitable donations	2-4
Core Aid	3
Economy	3
Costs and benefits	4
Morality	4
Social norms	3
Trust	3
Efficacy	2
Democracy and Partisanship	6
Immigration	4
Sustainable Development Goals	1
Other issues	4

Note: This table reports the structure of the survey used for *Panel*. It summarises the number of topics covered and the number of questions asked in each battery.

Table 3: Details Tracker Data

Country	Year	Collection period	Sample
France	2020	9 to 13 January	1003
	2020	3 to 7 June	1000
	2021	6 to 8 Jan	1060
	2021	7 to 9 June	1081
	2022	14 to 17 Jan	1055
	2022	1 to 2 June	1005
	2023	4 to 10 January	1081
	2023	30 May to 2 June	1003
	2024	8 to 15 January 2024	1020
	2024	3 to 9 June 2024	1028
Germany	2020	9 to 16 January	1141
	2020	3 to 7 June	1025
	2021	6 to 7 Jan	1004
	2021	2 to 6 June	1001
	2022	13 to 14 Jan	1015
	2022	26 May to 6 June	1038
	2023	3 to 9 Jan	1100
	2023	30 May to 2 June	1003
	2024	8 to 13 January 2024	1021
	2024	3 to 7 June 2024	1004
Great Britain	2020	9 to 13 January	1036
	2020	3 to 4 June	1705
	2021	5 to 6 Jan	1708
	2021	2 to 3 June	1703
	2022	12 to 13 Jan	1690
	2022	30 May to 1 June	2082
	2023	5 to 6 January	1693
	2023	30 to 31 May	2000
	2024	8 to 9 January 2024	2031
	2024	4 to 5 June 2024	2147
United States	2020	8 to 13 January	1153
	2020	3 to 4 June	1343
	2021	6 to 7 Jan	1207
	2021	4 to 9 June	1227
	2022	12 to 13 Jan	1240
	2022	27 to 31 May	1237
	2023	4 to 5 Jan	1163
	2023	30 to 31 May	1326
	2024	9 to 10 January 2024	1164
	2024	3 to 4 June 2024	1208

Note: This table reports the collection times, sample sizes, and retention samples of *Trackers* for all countries from the first cross-section in 2019 until the last round in 2024.

Table 4: Details Sandboxes Data

Country	Year	Collection period	Sample
France	2019	8 to 30 May 2019	2138
	2020	5 to 13 February	2003
	2020	21 to 28 July	2042
	2021	30 April to 5 May	2066
	2021	5 to 10 August	2001
	2022	13 to 21 Jan	2017
	2022	7 to 15 June	2070
	2023	20 Feb to 1 Mar	2046
	2023	19 to 25 May	2000
Germany	2020	7 to 14 February	2009
	2020	15 to 23 July	2012
	2021	28 July to 3 Aug	2010
	2022	11 to 23 Mar	2036
	2022	22 to 29 June	2059
	2023	17 to 28 Feb	2002
	2023	10 to 16 October	3538
Great Britain	2020	26 to 17 Apr	1761
	2020	7 to 13 July	2009
	2021	11 to 18 June	3023
	2022	23 to 28 June	2187
	2023	20 to 28 Feb	2007
	2023	9 to 18 Oct	3639
United States	2020	28 May to 1st June	2425
	2020	10 to 14 July	2009
	2021	6 to 22 Sep	5591
	2023	21 to 24 Feb	2345
	2023	11 to 16 October	3527

Note: This table reports the collection times, sample size, retention rates, and retention samples of *Sandboxes* for all countries from the first round in 2019 until the last round in 2023.

Table 5: Details Panel Data

Country	Year	Collection Period	Sample	Sample retention	Retention rate (%)
France	2019	27 September to 19 October	6073	-	-
	2020	21 September to 12 October	6001	4173	69
	2021	24 September to 22 October	6106	3603	59
	2022	30 September to 4 November	6051	2668	44
	2023	15 September to 23 October	6028	2211	36
Germany	2019	24 September to 10 October	6004	-	
	2020	10 September to 13 October	6000	4296	72
	2021	22 September to 22 October	6000	3733	62
	2022	30 September to 3 November	6008	2665	44
	2023	19 September to 23 October	6050	2189	36
Great Britain	2019	18 September to 10 October	8037	-	-
	2020	10 September to 12 October	8079	5932	74
	2021	23 September to 25 October	8281	4456	55
	2022	30 September to 28 October	8008	3880	48
	2023	15 September to 18 October	8018	3680	46
United States	2019	20 September to 9 October	6004	-	-
	2020	11 September to 18 October	6018	3811	63
	2021	23 September to 27 October	6112	2680	45
	2022	30 September to 24 October	6102	2508	42
	2023	15 September to 16 October	6095	2178	36

Note: This table reports the collection times, sample size, retention rates, and retention samples of *Panel* for all countries from the first round in 2019 until the last round in 2023.

Table 6: Retention rates Wave by Wave (%)

Waves	France	Germany	Great	United
Wave 1 - Wave 2	69	72	74	63
Wave 2 - Wave 3	72	68	65	52
Wave 3 - Wave 4	62	63	65	65
Wave 4 - Wave 5	65	63	69	61

Note: This table reports the retention rates for subsequent waves for all countries.

Table 7: Retention rates Panel

Wave	Sample (All countries)	Retention rate (%)
Wave 1	26118	-
Wave 2	18212	70
Wave 3	14472	55
Wave 4	11721	45
Wave 5	10258	39

Note: This table reports the total sample from *Panel* by wave, aggregating all four countries. It also provides the retention rate by wave.

Table 8: Topics covered across sandbox surveys

Country	Year	Month	Topics
France	2019	May	Role of France; Feminist Development Policy; Gender equality; Development Finance; Health; Deservingness
	2020	February	Gender equality
	2020	July	Knowledge; Information; Misinformation; SDGs; Cooperation; Trust
	2021	May	Finance; Africa; Challenges; Outlook; COVID; Cooperation; Climate Change; Corruption; International ;Organisations
	2021	August	COVID; Migration; Climate; Change (Energy production; transportation; Impact); Paris Agreement; Vaccines
	2022	Jan	COVID; Cooperation; Immigration/Migration; Climate Change (Health/Well-being; Taxation); Gender Equality; Women's Leadership
	2022	June	Cooperation; Refugees; Africa; Terminology; France Role
	2023	Mar	Feminist Development Policy; Gender Equality; Aid allocation; Cooperation; Knowledge; Citizenship
	2023	May	Imagery; Donations
Great Britain	2020	Apr	COVID; Messenger Testing
	2020	July	Knowledge; Information; Misinformation; SDGs; Cooperation; Trust
	2021	June	Video/Images and donations; Budget allocation
	2022	June	Ukraine; Refugees; Feminist Development Policy
	2023	Feb	Gender equality; Feminist Development Policy
	2023	Oct	Imagery; Donations
Germany	2020	February	Sustainable consumption; human rights; gender equality
	2020	July	Knowledge; Information; Misinformation; SDGs; Cooperation; Trust
	2021	Aug	Development Priorities; Climate Change (CC and development, investments in CC mitigation; gov & personal actions on CC); COVID-19 (Vaccine equity); SDGs (Knowledge; perceptions of achievement; trade-off)
	2022	Mar	Priorities in government spending; G7; Afghanistan; Climate Change; Vaccine equity
	2022	June	Crises; Funding; 0.7%; Terminology around "poor" countries; Ukraine; Cost of living crisis; Deservingness; Feminist Development Policy
	2023	Feb	Feminist Development Policy; Gender inequality; Women's policies; NGO types and donations
	2023	October	Imagery; Donations
US	2020	June	Information & misinformation; SDGs; Cooperation & trust
	2020	July	COVID-19
	2021	Sep	Climate finance; Aid allocation; Synergy between issue areas; America's place in the world; Message testing
	2023	Feb	Feminist Development Policy; Gender inequality; Women's policies
	2023	October	Imagery; Donations

Note: This table reports the topics covered across sandboxes by country, year, and month. The themes are based on the batteries of questions included in each survey.

Table 9: Topics covered across tracker surveys

Country	Topics
France	Areas of concern, SDGs, sense of connectedness, donation, concern for poverty and development, attitudes on aid, efficacy, refugees, battery of engagement
GB	Areas of concern, perception on state of the world, sense of connectedness, donation, concern for poverty and development, attitudes on aid, efficacy, trust in NGOs, battery of engagement
Germany	Areas of concern,donation, concern for poverty and development, arguments for aid, attitudes on aid, efficacy, trust in NGOs, battery of engagement
US	Areas of concern, perception on state of the world, sense of connectedness, donation, concern for poverty and development, attitudes on aid, efficacy, trust in NGOs

Note: The topics covered in the respective country's trackers are consistent across all trackers as it tracks individuals' attitudes over time, three times a year.

Table 10: Coverage of topics covered across panel surveys

	France					Germany					Great Britain					United States				
	W1	W2	W3	W4	W5	W1	W2	W3	W4	W5	W1	W2	W3	W4	W5	W1	W2	W3	W4	W5
Charities/NGO attitudes																				
Climate & environment																				
Conflict																				
Development aid																				
Donations																				
Education																				
Efficacy																				
Humanitarian aid																				
Gender																				
Global health																				
Imagery																				
Inequality																				
Media																				
Migration & Refugees																				
Poverty																				
Sustainable Development Goals																				
Trust																				

Note: This table provides information about the coverage of the topics covered in *Panel*. Red represents no coverage. Green represents coverage of that topic. Blue represents extensive coverage.

Table 11: Demographics - Panels

Gender (Proportion of Women)					
Country	2019	2020	2021	2022	2023
France	0.52	0.52	0.51	0.51	0.51
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Germany	0.52	0.51	0.51	0.52	0.52
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Great Britain	0.52	0.51	0.52	0.52	0.52
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
United States	0.52	0.51	0.51	0.51	0.52
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age (Yrs)					
France	48	49	50	32	48
	(0.23)	(0.34)	(0.27)	(0.21)	(0.27)
Germany	49	50	50	49	48
	(0.27)	(0.37)	(0.27)	(0.19)	(0.27)
Great Britain	31	50	48	49	48
	(0.28)	(0.28)	(0.21)	(0.2)	(0.25)
United States	49	33	32	48	48
	(0.3)	(0.28)	(0.22)	(0.29)	(0.25)
Partisanship (0 to 10 scale)					
France	7	7	6	8	6
	(0.05)	(0.06)	(0.04)	(0.04)	(0.05)
Germany	7	6	6	6	6
	(0.05)	(0.05)	(0.04)	(0.04)	(0.05)
Great Britain	8	6	7	6	6
	(0.05)	(0.04)	(0.04)	(0.04)	(0.05)
United States	6	7	8	6	6
	(0.05)	(0.04)	(0.04)	(0.06)	(0.05)
Monthly income ($USD)					
France	2988	3022	2979	3075	3145
	(32)	(34)	(34)	(36)	(66)
Germany	2883	2941	3024	3085	3263
	(39)	(35)	(33)	(37)	(37)
Great Britain	4001	4093	4301	4369	4659
	(44)	(46)	(46)	(46)	(49)
United States	5611	5267	5751	6186	5883
	(116)	(93)	(105)	(113)	(96)

Note: This table provides a summary of the main covariates for all five waves of the Panel. The ″Gender″ category indicates the percentage of respondents who identified as women. ″Age″ refers to the age of the respondents at the time of the survey. ″Partisanship″ is based on a self-reported scale ranging from 0 to 10. The monthly income covariate is reported in USD for all four countries. For respondents in France and Germany, we used a conversion rate of 1.11 USD. For Great Britain, the conversion rate used was 1.32 USD. Survey weights were applied to ensure that the estimates are nationally representative. Standard errors are reported in parenthesis.

Table 12: Demographics - Trackers

Country	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Wave 9	Wave 10
Gender (Proportion of Women)										
France	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Germany	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.51	0.51	0.51
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Great Britain	0.52	0.51	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
United States	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age (Yrs)										
France	48	48	49	49	50	50	50	49	50	49
	(0.57)	(0.79)	(0.56)	(0.59)	(0.58)	(0.56)	(0.59)	(0.64)	(0.83)	(1.03)
Germany	50	50	50	50	50	50	50	50	50	50
	(0.54)	(0.66)	(0.69)	(0.72)	(0.7)	(0.83)	(0.68)	(0.61)	(0.61)	(0.59)
Great Britain	49	49	49	49	49	49	49	50	49	48
	(0.62)	(0.43)	(0.48)	(0.45)	(0.49)	(0.46)	(0.44)	(0.45)	(0.42)	(0.43)
United States	48	47	48	48	48	49	48	48	48	48
	(0.65)	(0.62)	(0.58)	(0.54)	(0.61)	(0.57)	(0.65)	(0.61)	(0.62)	(0.57)
Monthly income ($USD)										
France	-	1604	1611	1555	1548	1548	1563	1622	1618	1609
	-	(38)	(37)	(37)	(32)	(36)	(36)	(53)	(43)	(43)
Germany	1535	1559	1455	1492	1465	1597	1590	1525	1698	1866
	(41)	(48)	(41)	(36)	(36)	(45)	(42)	(42)	(49)	(64)
Great Britain	2351	2350	2358	2348	2364	2373	2585	2427	2729	2590
	(78)	(59)	(57)	(57)	(55)	(54)	(58)	(55)	(52)	(50)
United States	3116	3123	2972	3172	3207	3110	3301	3370	3269	3385
	(138)	(99)	(95)	(119)	(118)	(118)	(117)	(121)	(115)	(112)

Note: This table provides a summary of the main covariates for all ten waves of the Panel. The "Gender" category indicates the percentage of respondents who identified as women. "Age" refers to the age of the respondents at the time of the survey. "Partisanship" is based on a self-reported scale ranging from 0 to 10. The monthly income covariate is reported in USD for all four countries. For respondents in France and Germany, we used a conversion rate of 1.11 USD . For Great Britain, the conversion rate used was 1.32 USD. Survey weights were applied to ensure that the estimates are nationally representative. Standard errors are reported in parenthesis.

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Author contributions statement

Professors JH and DH are the co-founders and principal investigators of the Development Engagement Lab. Both were heavily involved in all project stages, from the overall strategy of the lab to the dissemination of findings and data. They also contributed to questionnaire design, validations and data checks. Drs. PM, SO, and FTR contributed by developing research ideas and streams for different research projects. They also contributed to the questionnaire design and testing and validation of the data. They also contributed to disseminating the findings from this research. All authors contributed to the outline, revision and writing of this paper. FTR developed the DELdata R Package. SO and FTR coordinated the creation of the DEL's Harvard Dataverse repository.