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## ORIGINAL ARTICLE

# Survey participation as a function of democratic engagement, trust in institutions, and perceptions of surveys

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## Abstract

**Objective:** With response rates of large-scale surveys having decreased significantly over the years and rebounds seeming unlikely, many studies now examine how response rates vary with methodological design and incentives. This investigation delves into how individual-level factors shape survey participation. Specifically, we examine the influence of individuals' democratic engagement and their trust in institutions on intent to participate in surveys, both directly and indirectly through their perceptions of surveys.

**Methods:** We collected survey data from a probability sample of adults ( $N = 1343$ ) in Mannheim, Germany, from November 2019 to March 2020. Structural equation models were estimated to test the hypothesized relationships.

**Results:** The analyses support most, but not all, hypothesized relationships. Democratic engagement bolstered intent to participate, directly as well as indirectly through perceptions of surveys. Institutional trust, on the other hand, only influenced the outcome measure indirectly. Perceptions of surveys had a strong bearing overall effect on intent to participate.

**Conclusion:** The study's results suggest that the response rates and larger issues related to the perceived legitimacy of public opinion and survey research might be intertwined with orientations related to people's civic and political life. The article discusses potential ways survey researchers can counteract distrust in surveys.

## KEYWORDS

survey attitudes, survey climate, survey response

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Recent decades have witnessed a multitude of challenges that have undermined the legitimacy of public opinion research around the globe. These include preelection polls that bear little resemblance to vote outcomes (Prosser and Mellon 2018) as well as public and elite discourse deriding the value of polls (Jacobs and Shapiro 1995; Kim et al. 2011). In addition, polls are conducted using deceptive marketing techniques (Johnson 2018) and a prevalence of robocalling (Bernard 2018). At the same time, individuals are expressing increasingly strong concerns about data privacy (Auxier et al. 2019). It is not surprising then that many individuals are declining to engage with public opinion surveys as reflected by dramatic drops in once-robust response rates (de Leeuw, Hox, and Luiten 2018).

Motivated by the need to better understand people's declining engagement with public opinion surveys, this study aims to contribute to our understanding of how people perceive surveys, how these perceptions are formed, and how these perceptions in turn shape individuals' engagement with surveys. We begin by outlining research on the sociopolitical aspects of survey participation and present a theoretical model that articulates a process of influence that ultimately shapes engagement with surveys. We then present a study and empirical analyses based on a probability sample of respondents from Mannheim, Germany. Our findings illustrate the processes by which people's engagement with surveys derive not only from their perceptions of surveys but also their levels of democratic engagement and trust in institutions. The article ends with a discussion of the results and implications of the study.

## SOCIOPOLITICAL ASPECTS OF SURVEYS PARTICIPATION

Research striving to understand the causes of survey participation has been overwhelmingly methodological in nature, focusing on the impact of modes of data collection, prepaid incentives, and survey structure (e.g., Daikeler, Bosnjak, and Lozar Manfreda 2020; Toepoel and Lugtig 2022). However, survey participation rates are tied to macro-level factors. For example, refusal rates for government surveys tend to be higher during periods of lower presidential approval ratings (Harris-Kojetin and Tucker 1999). But refusal rates also tend to be higher in rosy economic times, specifically during periods of low inflation and unemployment (Larsen, Lineback, and Reist 2020), suggesting that economic health may lead some individuals to perceive less need for government intervention and by extension less need for feedback to the government via surveys. However, engagement with surveys is not merely a function of these methodological, individual, and contextual factors.

From a social interaction perspective, survey participation can be seen as an expression of engagement with one's larger community and the sociopolitical world. Taking part in a survey is a means of opinion expression and engagement (Gordon and Schmidt 2010), similar to how signing a petition, wearing a button, "liking," or reposting a message on social media expresses one's views on certain issues. Thus, public opinion surveys afford individuals an opportunity to share their concerns about contemporary key issues (Verba 1996). Moreover, surveys tap into individuals' sense of efficacy, specifically their belief in having a say in the political process and, therefore, affect change (Gamson 1968). If surveys provide a vehicle by which one chooses to communicate one's social and political preferences, then by subtractive logic, the inclination to not engage in surveys can be viewed as a choice to avoid or disengage from politics or their community and/or not express their views on an issue. Additionally, data privacy concerns may explain limited participation as demonstrated by the 2020 U.S. Census count (McGeeney et al. 2019), thus mirroring distrust of the federal government (echoing Harris-Kojetin and Tucker 1999).

If survey participation is viewed as a form of engagement, it might be a function of respondents' attitudes about the sociopolitical world more broadly as well as how they perceive surveys (Loosveldt and Storms 2008; Sjoberg 1954). With this in mind, this study focuses on underlying individual-level factors that might help explain survey participation: one's general sense of democratic engagement (Delli Carpini 2004); trust in the institutions that govern social and political life (e.g., Newton, Stolle, and Zmerli 2018); and perceptions of surveys in general (de Leeuw et al. 2019).

## DEMOCRATIC ENGAGEMENT

The democratic theory highlights the inherent value of citizens being politically attentive, knowledgeable, and active and having an enlightened understanding of the issues of the day (Dahl 1989). Despite minor theoretical variations, the consensus is that involvement in public life—democratic engagement—benefits both the individual and society at large. Such involvement in public life can occur in electoral settings as well as civically when citizens work with one another to solve common problems. Socially integrated individuals act consistently with the expectations of the social group to which they belong, and they tend to be more active in other realms, including politics, sports, and religious activities. Survey cooperation is thus similar to voting and boycotting in that it links individual-level activities with societal-level outcomes (Amaya and Presser 2017).

While political behavior is important, democratic engagement also assumes *political interest* (Delli Carpini and Keeter 1996). Those who are more interested in politics also tend to be more attentive to political news vis-à-vis other (non-political) topics (Lupia and Philpot 2005), are more likely to vote (Grönlund and Setälä 2007), and participate more often in surveys (Brehm 1993). If political interest serves as a motivational prerequisite for political participation in general, similar mechanisms may be at work with respect to topic interest when it comes to survey participation (Keusch 2013).

Political behaviors are shaped also by feelings that one's political actions are consequential and important for democracy (Campbell, Gurin, and Mille 1954; Dubrow et al. 2022). This tendency to engage in political behaviors is positively related to two forms of *political efficacy*: internal efficacy, the belief that individuals can understand politics and effect change, and external efficacy, the belief that the government responds to their demands (Finkel 1985). Political efficacy represents an important motivational mechanism through which individuals might participate in surveys; after all, they can express their political attitudes, will, and desires through surveys.

To the extent that democratic engagement can shape participation in surveys, this impact aligns with research on how response rates tend to be higher when the individual cares about the topic (e.g., Groves, Presser, and Dipko 2004; van Kenhove, Wijnen, and de Wulf 2002). People who vote are also more likely to participate in surveys (DeBell et al. 2020), especially political surveys (Lahtinen et al. 2019). If the topic is considered relevant to the groups to which the respondent belongs, then individuals' orientations toward their communities are likely to shape their survey participation. If survey participation is a means of opinion expression, then those who are already more *democratically engaged* (e.g., through voting) should also be more likely to engage with surveys.

## TRUST IN INSTITUTIONS

The second set of predictors relates to *institutional trust*, the confidence that individuals have in their institutions to “fulfill [their] role in a satisfactory manner” (Hudson 2006, p. 46). The study of institutional trust has cut a broad swath across political and civic structures (e.g., Lipset and Schneider 1987; Ward et al. 2016). Institutional trust stems from a host of factors, including generalized trust, or the extent to which people trust others (Rosenberg 1956); individuals' knowledge about the institution (Delli Carpini, and Keeter 1996); their experiences with that institution (Berg and Johansson 2020); and perceptions of responsiveness (Esaïasson and Wlezien 2017). Of particular relevance to this study, institutional trust reflects individuals' motivation for sociotropic concerns and the belief that institutions consider the best interests of the collective (as opposed to individual self-interests; Kinder and Kiewiet 1981). Likewise, in case of unexpected or unwanted turns of events, institutions will be responsive to the concerns raised by individuals (Karremans and Lefkofridi 2020). Such perceptions of system responsiveness suggest that individuals with high levels of institutional trust are more likely to express their opinions and therefore participate in surveys.

Potentially relevant to this study is trust in three institutions. First, as an expression of support for the political system and satisfaction with its institutions and/or political leaders (Citrin and Green 1986; Dalton 2004), *political trust* is often seen as a “pragmatic running tally” of government or political party performance vis-à-vis citizen expectations at a given point in time (Hetherington 2005, p. 9). Polls offer regular mechanisms by which individuals express their confidence in the system and/or their leaders, as well as support for specific policies under debate.

Second, individuals’ willingness to take part in surveys can be shaped by their *trust in media*, which widely disseminates survey results and sometimes conduct their own polls. Given an increasingly fragmented and polarized high-choice media environment with strong partisan media (Van Aelst et al. 2017) as well as proliferating disinformation designed to sow distrust in news media, individuals can grow more suspicious and less trusting of established media and thus view their surveys as not worthy of their time or support.

Third, *trust in scientific organizations* might explain survey participation patterns. Not only do many people believe that scientists act in the best interests of the public (Funk et al. 2019), but also high levels of trust in science and research suggest that individuals are more likely to advocate for—or at least be comfortable with—technological advancement and societal change. Since evidence-based public policies may be one important way to achieve those objectives, people may consider surveys one tool to express their views to foster change.

## PERCEPTIONS OF SURVEYS

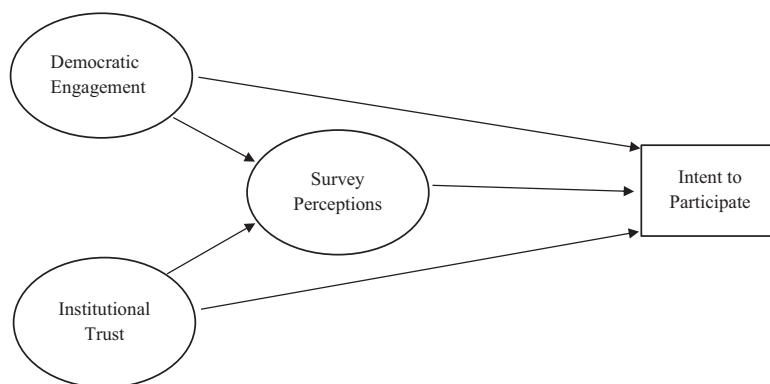
Scholarly work on “survey climate” has identified macro-level and micro-level dimensions that are associated with how people feel about participating in surveys (e.g., Goyder 1986; Loosveldt and Joye 2016; Price and Stroud 2006). These include the value people see in surveys, the perceived burden of survey participation (de Leeuw et al. 2019), the perceived credibility of surveys (Stocké 2014), and the *trust* people have in survey organizations (Goldman 1944–1945; Loosveldt and Joye 2016). Naturally, those who have more favorable *perceptions of surveys* will be more inclined to engage with them.

The perceived benefits people see in surveys with respect to their private interests as well as society in general (Stocké 2014), and the function that surveys play in the democratic process by informing politicians (Page 1994; Shapiro 2011), are captured by the concept of *survey value*. Accordingly, individuals who value surveys consider the usefulness of the information the survey provides (Loosveldt and Storms 2008) and whether participation in surveys is a meaningful investment of their time (de Leeuw et al. 2019).

However, surveys can be perceived as an intrusion into respondents’ privacy (Struminskaya et al. 2020), especially if they ask questions about sensitive topics (Tourangeau and Yan 2007). Conceptually, *survey privacy* relates to the burden people perceive when it comes to sharing confidential information (Loosveldt and Storms 2008; Stocké and Langfeldt 2004), a trend reflected by individuals in the United States becoming increasingly reluctant to share sensitive information via surveys (Kim, Lee, and Elias 2015).

Another aspect of perceptions of surveys is *survey reliability*, which refers to the perceived quality and credibility of surveys (Kuru, Pasek, and Traugott 2017; Loosveldt and Storms 2008; Stocké 2014). These perceptions are largely shaped by the degree to which respondents put in the necessary effort to provide meaningful answers (Loosveldt and Storms 2008), whether surveys are conducted consistent with the standard in the field (Kuru et al. 2017, 2020), and whether surveys can accurately display the current situation and predict future events such as election outcomes (Graefe 2014).

Last, given that a large number of surveys conducted by professional survey organizations are in direct contact with respondents, public *trust in survey organizations* (including their staff) shapes perceptions of surveys and affects survey participation (e.g., Heerwegh and Loosveldt 2006; Presser, Blair, and Triplett 1992). Since it is in their business interest to foster continued participation (e.g., in panel surveys), survey organizations strive to build trust with respondents. Some entities maintain their own pool of face-to-face or telephone interviewers and operate their own commercial online access panels. Survey organizations



**FIGURE 1** Predicted model: Intent to participate as a function of democratic engagement, institutional trust, and survey perceptions

are often private but may have strong ties to universities, which tend to be viewed as non-partisan. Given their direct link to data collection, higher levels of trust in survey organizations should transfer in a higher likelihood of survey participation.

## PREDICTING SURVEY PARTICIPATION

Although most studies of survey participation identifying factors associated with greater participation use experimental designs or observational studies (e.g., comparison against sample-frame information or panel attrition), surveys themselves are leveraged as well. These surveys examine one's intention to participate in future surveys (Bosnjak et al. 2005; Gordoni and Schmidt 2010). Our study is predicated on the expectation that three distinct sets of influences (democratic engagement, institutional trust, and perceptions of surveys) will shape survey participation. Because democratic engagement and political attitudes are typically shaped early on in one's life through longstanding processes of political socialization (Owen 2014), they appear in Figure 1 as exogenous. While we expect democratic engagement and institutional trust to shape individuals' intent to participate in surveys directly, we also expect them to exert an influence through perceptions of surveys, which appears as a mediating variable in Figure 1 and exerts its own direct effect on our criterion variable.

## METHODS

### Data

Data used to test the proposed model come from a random, address-based sample of the residential population aged 18 years and older in Mannheim, Germany. The cross-sectional survey, fielded between November 2019 and March 2020, was a self-administered mixed-mode (online and mail) survey.<sup>1</sup> The final sample included 1343 respondents, with 809 answering via mail and 534 online. The response rate (American Association for Public Opinion Research [AAPOR] RR 2) was 24.3 percent (AAPOR 2016).

<sup>1</sup> Half of the gross sample was allocated to a sequential design and only received the paper questionnaire if they did not respond to the initial request (i.e., in the reminder). Independent of mode sequence, 75 percent of the sample were also assigned to groups with a small prepaid incentive (a 1- or 2-Euro coin), either provided with the first or second contact.

## Measures

### Intent to participate

The dependent variable, intent to participate (Bosnjak et al. 2005; Gordoni and Schmidt 2010), was measured by asking respondents whether they would participate again if selected. Respondents could estimate the probability of their future participation on a 7-point rating scale (“very unlikely” to “very likely” with labeled endpoints). The exact wording for all items appears in the Online Appendix A.

### Democratic engagement

Democratic engagement was measured with indicators that tapped political and civic orientations. Respondents were asked whether they had *voted* in the 2017 national election. Respondents were also asked a single item assessing their level of *political interest* (on a 7-point rating scale ranging from “not at all” to “very strongly” with labeled endpoints) and two items relating to their *internal efficacy* ( $\alpha = 0.79$ ,  $r = 0.68$ )<sup>2</sup>: the extent to which they can understand and assess important political issues, and the extent to which they trust themselves to be actively engaged in a discussion on political issues. Each efficacy item was asked on a seven-point rating scale (“strongly disagree” to “strongly agree” with labeled endpoints); the items were summed for our analyses.

### Institutional trust

Respondents were asked their level of trust in various institutions: (1) *the government*; (2) *science and research*; and (3) *the media*. The items utilized a 7-point rating scale ranging from “not at all” to “completely” with labeled endpoints. Trust in the government was a composite measure based on the summing of two items: trust in the federal government and trust in political parties ( $\alpha = 0.82$ ,  $r = 0.69$ ). In contrast, the remaining trust dimensions were each measured by a single item.

### Survey perceptions

Likewise, perceptions of surveys tapped four concepts, the indicators for almost all used a seven-point rating scale ranging from “strongly disagree” to “strongly agree” with labeled endpoints. *Surveys as an invasion of privacy*, which should have a negative factor loading, included two items: whether surveys “violate the privacy of participants” and whether questions are often “too personal” ( $\alpha = 0.76$ ,  $r = 0.63$ ). *Beliefs in the reliability of surveys* was measured with six items that asked whether respondents “believe the results of surveys,” whether survey results “are correct in most cases,” whether survey results “are influenced by personal interests of those who conduct the survey,” whether surveys are used “to manipulate or mislead people,” whether “participants usually say their true opinion,” and whether survey participants “answer correctly” ( $\alpha = 0.69$ ). *Beliefs in the value of surveys* for science or society as a whole comprised two items that asked whether surveys “are important (e.g., for science, politics, business)” and whether surveys “make the society more democratic” ( $\alpha = 0.57$ ,  $r = 0.41$ ). *Trust in organizations that conduct surveys* was measured on a 7-point rating scale ranging from “not at all” to “completely” with labeled endpoints.

<sup>2</sup> For each measure that included at least two variables, we calculated Cronbach’s alpha as a measure of internal consistency. For measures that include only two variables, we calculated Pearson’s correlation coefficient in addition to Cronbach’s alpha.

## Demographics

The survey also included several demographic questions about *age* (in years, mean = 52.87,  $SD = 17.46$ ), gender (43 percent female), and education, coded as low (20.4 percent), medium (22.9 percent), and high (56.7 percent) based on the German school system. Descriptive statistics for all study variables are presented in Table A.1.

## Analyses

To examine the hypothesized relationships, we employed structural equation modeling (SEM) with latent variables (Bollen 1989). SEM models offer important advantages, including the ability to incorporate multiple indicators into the measurement model, to estimate simultaneously measurement and structural models, and the assessment of direct, indirect, and total effects, as well as correlated error terms. All analyses were conducted using Mplus Version 8 (Muthén and Muthén 2017) with maximum likelihood estimation (the output of all analyses is included in Section B of the Online Appendix). The sample size for these analyses was 1220: Demographics were included as control variables. Missing data were imputed by Mplus using the full information maximum likelihood estimation (Enders 2010). Additionally, we conducted a robustness check in which we estimated the model without imputation (see the Results section). A small number of post hoc model modifications were added to improve the model's fit and parsimony (see Online Appendix A Table A.2). In addition, we removed non-significant paths in the empirical model. The empirical model was evaluated using three goodness-of-fit measures: the Bentler comparative fit index (CFI), the root-mean-squared error of approximation (RMSEA), and the standardized root mean square residual (SRMR). All analyses used unweighted data.

We conducted two additional robustness checks of the main analyses. First, we estimated the structural equation model separately for early and late respondents to account for the initial response propensity with respect to the present survey. Early respondents took part in the survey before the reminder had been sent out; late respondents completed the survey after the reminder. Second, we estimated an alternative model that includes a bidirectional path between democratic engagement and institutional trust.

## RESULTS

### Measurement model

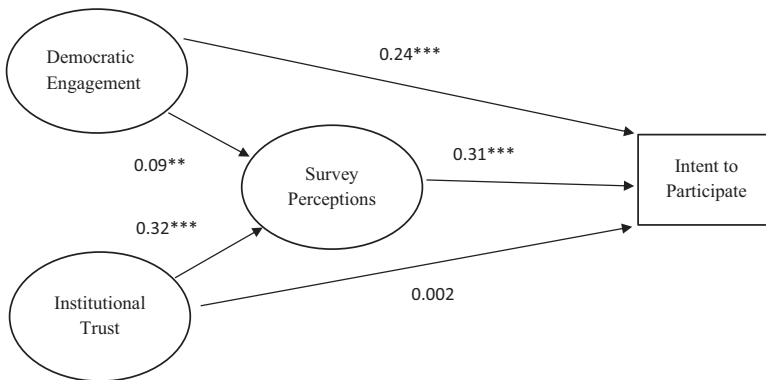
The measurement model provided an exceptional fit to the data, with an RMSEA of 0.060, an SRMR of 0.040, and a CFI of 0.950. We hypothesized four indicators for the survey perceptions latent variable and three indicators each for latent measures of institutional trust and democratic engagement (see Table 1). The latent variable, survey perceptions, was represented by respondents perceiving surveys as being reliable ( $\hat{\beta} = 0.45, p < 0.001$ ), as having value ( $\hat{\beta} = 0.42, p < 0.001$ ), as an invasion of privacy (negatively scored,  $\hat{\beta} = -0.17, p < 0.001$ ), and respondents expressing trust in survey organizations ( $\hat{\beta} = 0.82, p < 0.001$ ). Democratic engagement was represented by indicators that related to being interested in politics ( $\hat{\beta} = 0.83, p < 0.001$ ), to manifesting internal political efficacy ( $\hat{\beta} = 0.74, p < 0.001$ ), and to having voted in the previous national election ( $\hat{\beta} = 0.22, p < 0.001$ ). The model also confirmed the expected indicators of institutional trust, as represented by trust in science and research ( $\hat{\beta} = 0.58, p < 0.001$ ), the government ( $\hat{\beta} = 0.50, p < 0.001$ ), and the news media ( $\hat{\beta} = 0.55, p < 0.001$ ).



**TABLE 1** Measurement model predicting intent to participate: standardized and unstandardized parameter estimates (standard errors) for latent variables ( $n = 1220$ )

Variables		Coefficients			
Latent	Observed	Standardized	Unstandardized	Standard errors	$p$ -values
<i>Institutional</i>	<i>Science and Research</i>	0.58	1.00 <sup>a</sup>	*	–
<i>Trust</i>	<i>Media</i>	0.55	1.13	0.08	0.000
	<i>Government</i>	0.50	0.90	0.07	0.000
<i>Democratic</i>	<i>Political Interest</i>	0.83	1.00 <sup>a</sup>	*	0.000
<i>Engagement</i>	<i>Internal Efficacy</i>	0.74	0.94	0.09	0.000
	<i>Voted</i>	0.22	0.04	0.01	0.000
<i>Survey Perceptions</i>	<i>Trust in Survey Organizations</i>	0.82	1.00 <sup>a</sup>	*	–
	<i>Survey Value</i>	0.42	0.52	0.05	0.000
	<i>Survey Privacy</i>	–0.17	–0.24	0.05	0.000
	<i>Survey Reliability</i>	0.45	0.44	0.04	0.000

<sup>a</sup>Fixed parameter.



**FIGURE 2** Empirical model: Intent to participate as a function of democratic engagement, institutional trust, and survey perceptions. note. the model shows standardized coefficients. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ \*\*\*\* $p < 0.001$ .

## Structural model

Next, we added the hypothesized structural parameters to the measurement model. Overall, this structural model also produced a very good fit with the data, with an RMSEA value of 0.071, an SRMR value of 0.054, and a CFI value of 0.895. It explained 21 percent of the variance in intent to participate in future surveys. As shown in Figure 2, which reports standardized coefficients (or changes in standard-deviation units in the endogenous variable per standard-deviation change in the predictor variable), not all paths showed significant effects in the expected direction (unstandardized coefficients are also presented in Table A.3). Individuals' level of democratic engagement significantly influenced their intent to participate in future surveys, both directly ( $\hat{\beta} = 0.24$ ,  $p = 0.001$ ) and indirectly through perceptions of surveys ( $\hat{\beta} = 0.03$ ,  $p = 0.01$ , see Table 2 for the complete set of indirect and total variable effects). Individual levels of institutional trust did not have a direct effect on intent to participate. Rather, its effects were only indirect, working through perceptions of surveys

**TABLE 2** Standardized direct, indirect and total effects on intent to participate ( $n = 1220$ )

	Direct effects	Indirect effects	Total effects
<i>Perceptions of Surveys</i>	0.31***	–	0.31***
<i>Institutional Trust</i>	0.002	0.10***	0.10**
<i>Democratic Engagement</i>	0.24***	0.03**	0.27***
<i>Female</i>	–	–0.07***	–0.07***
<i>Age</i>	–0.15***	–0.004	–0.15***
<i>Education</i>	–	0.13***	0.13***

#  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

( $\hat{\beta} = 0.32, p = 0.001$ ), which in turn influenced intent to participate ( $\hat{\beta} = 0.31, p = 0.001$ ). The total effect of institutional trust on our criterion variable was statistically significant ( $\hat{\beta} = 0.10, p = 0.01$ ).

The model offers support for the expectation that perceptions of surveys would mediate the influence of democratic engagement and institutional trust on intent to engage with surveys. Indeed, respondents' perceptions of surveys exerted a significant direct effect ( $\hat{\beta} = 0.32, p = 0.001$ ). In other words, holding favorable perceptions of surveys in terms of their value, reliability, respect for privacy, and the organizations that conduct them was significantly associated with willingness to agree to participate in future surveys.

While the model fits the data well, with most hypothesized paths emerging, the relative strength of some effects is noteworthy. Especially strong are the direct effects of institutional trust on perceptions of surveys as well as the direct effect of survey perceptions on intent to participate. Even though the institutional trust had a positive total effect on the intention to participate, the direct effect was non-significant.

As a sensitivity test, the empirical model presented was re-estimated using listwise deletion of missing data, resulting in a total of 1014 complete cases. The final standardized model parameters for this alternative model closely replicated those with imputation of missing values, with the 33 structural and measurement parameters of these alternate versions being correlated at  $r = 0.93$ . Goodness-of-fit statistics for this model were also strong and closely paralleled those reported earlier for the empirical model (RMSEA = 0.076, SRMR = 0.057, CFI = 0.886).

## Response propensity

The separate models for respondents with low and high response propensity confirm the previous results (see Figure A.1, A.2 in the Online Appendix A). The only difference with respect to significance levels was that in each of these two models the path between democratic engagement and survey perceptions was non-significant but very similar ( $\hat{\beta} = 0.08, p = 0.098$  for high propensity and  $\hat{\beta} = 0.06, p = 0.193$  for low propensity respondents). However, the effect was in the same direction and of similar magnitude as the effect for the full model ( $\hat{\beta} = 0.09, p = 0.006$ ). The difference in the significance levels can likely be attributed to the lower sample size in each of these models. Notably, the model explained 24 percent of the variance among late respondents but only 17 percent among early respondents. Given how late respondents are thought to be closer to nonrespondents than early respondents (see Fricker and Tourangeau 2010), this finding suggests the impact of our predictor variables on survey participation might be even higher in the population than reported in this study.

## Alternative model

The alternative model, which included a bidirectional path between democratic engagement and institutional trust did not show substantively different results (see Figure A.3 in the Online Appendix A).

Specifically, the fit statistics did not differ substantively across the two models (RMSEA = 0.071, CFI = 0.895 in the model without the additional path; RMSEA = 0.067 and CFI = 0.909 in the model with the additional path) nor did the explained variance vary substantively (21 percent for the model without and 22 percent for the model with the additional path).

## DISCUSSION

Motivated to empirically test the assumption that participation in surveys reflects engagement with the sociopolitical environment and attitudes toward surveys themselves, our research illustrates that participating in surveys is more than a simple transaction and should be viewed in its sociopolitical context. This study supports our theoretical model, which postulates that survey participation can be seen as a function of democratic engagement, institutional trust, and perceptions of surveys. Several findings are worth highlighting.

Although trust in institutions did not exert a direct effect, it had a strong indirect effect through perceptions of surveys, suggesting a more complex association between those concepts. Specifically, the way surveys are generally perceived by respondents, for example, in terms of privacy considerations or their scientific and societal value, had a critical mediating role, which underlines the importance of taking into consideration the general survey climate and current survey evaluation (e.g., de Leeuw et al. 2019; Loosveldt and Joye 2016; Loosveldt and Storms 2008). Moreover, that institutional trust was not statistically significantly related to survey-participation intent suggests that individuals who trust their institutions do not actively express their views. This finding echoes previous research (Moy et al. 2004) showing “participation by proxy,” whereby citizens who trust those in positions of authority are more willing to let these very individuals take action on their behalf. Second, the data showed only limited evidence for survey participation as a result of people’s democratic engagement: The effects of voting were weak, while in contrast, political interest and internal efficacy were considerably stronger. Thus, “good citizens” are only somewhat inclined to participate in surveys.

Against the backdrop of declining response rates, our study shows that future survey participation is, on the one hand, strongly affected by individual-level factors that are directly related to surveys, such as perceptions of surveys. Those can be optimized by specific methodological improvements and the implementation of more rigorous standards with respect to the dissemination of survey results. For instance, while survey design strategies can increase response rates in general, our findings point to the need for survey researchers (and, if applicable, interviewers) to shape messages aimed at addressing respondents’ privacy concerns, highlighting the value of survey research for science and society as a whole, and increasing trust in the survey organization. Additionally, it appears to be crucial for survey developers to provide a pleasant survey experience for the respondents (Keusch and Zhang 2017). To increase awareness that surveys can affect political decision-making, survey researchers can emphasize in the invitation letter, if applicable, how the survey results might be used to make policy recommendations. By increasing transparency in how survey results might be used politically, individuals who are less politically engaged may see greater value in contributing their own opinions (Silber et al. 2022).

On the other hand, survey participation seems to be strongly affected by more general orientations related to people’s civic and political life, which are in turn shaped by various societal and group processes. For example, sparking interest in politics and strengthening beliefs that one can understand politics and effect change (i.e., internal efficacy) are typical outcomes of a long-lasting process of political socialization via family, peer groups, school, media sources, and/or other entities like religious or political organizations (Owen 2014). While those aspects are much harder to change, our findings highlight the need to better understand these underlying processes using qualitative or mixed-method approaches, including the nuanced ways in which social and community ties and other forms of civic engagement influence one’s willingness to participate in surveys.

An important implication of the declining trust in surveys themselves as a measurement tool for social research is that researchers should be very transparent about the data collection. Specifically, they are

well-advised to follow each step of the detailed disclosure standards of the AAPOR (2021) to make sure that the data collection process is transparent. They should also discuss how potential nonresponse error may affect the results.

As with all studies, our findings must be interpreted in view of certain methodological, measurement, and theoretical caveats. First, future research may build on our path model based on a single cross-sectional survey and replicate it with longitudinal (e.g., repeated cross-sectional or panel) designs to examine the robustness and consistency of the relationships identified herein. Second, our focal dependent variable did merely measure the intent to participate in a future survey. While meta-analytic research shows a strong relationship between the intention to perform a given behavior and its execution (e.g., Sheeran 2002), using multiple empirical indicators or an actual behavioral outcome, such as responding to (and ideally completing) a follow-up survey, may help minimize measurement error and other types of response biases like social desirability bias. Future research on survey participation would certainly benefit from nonresponse studies, qualitative research (MacPhail et al. 2022), and comparisons with administrative data (Fortunato et al. 2022) that investigate reasons behind (non)response. Additional opportunities for future research include experimental studies into the interdependencies between sociopolitical attitudes and behaviors and methodological characteristics such as the study sponsor, topic, and study population. Only in this way can we develop a better understanding of the myriad factors and mechanisms that shape people's engagement with research more generally.

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