

RESEARCH NOTE

To Give or Not to Give, That Is the Question: How Methodology Is Destiny in Dutch Giving Data

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In research on giving, methodology is destiny. The volume of donations estimated from sample surveys strongly depends on the length of the questionnaire used to measure giving. By comparing two giving surveys from the Netherlands, the authors show that a short questionnaire on giving not only underestimates the volume of giving but also biases the effects of predictors of giving. Specifically, they find that a very short module leads to an underestimation of the effects of predictors of giving on the amount donated but an overestimation of their effects on the probability of charitable giving. Short survey modules may lead researchers to falsely reject or accept hypotheses on determinants of giving due to underreporting of donations.

Keywords: *philanthropy; methodology; survey; questionnaire design*

There is a lively debate, in research on giving and volunteering, over how to ask respondents about their philanthropic behavior. More extensive questionnaire modules with a higher number of survey prompts uncover a greater incidence of giving and volunteering, as well as higher amounts of money donated and a higher number of hours volunteered by respondents

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(O'Neill, 2001; Rooney, Steinberg, & Schervish, 2001, 2004; Steinberg, Rooney, & Chin, 2002). A problem with these method effects is that it becomes very difficult to make statements about the volume of philanthropic donations and volunteering activity in a specific population.

There is, however, another issue in survey methodology of philanthropic behavior that is even more pressing. Economists and social scientists are not so much interested in the absolute magnitude of giving but rather in the effects of economic and social conditions on giving. Rooney et al. (2001) assume that "the various survey modules do not alter the coefficients of other variables" (p. 566; i.e., predictors of giving and volunteering). However, it is unlikely that this assumption is valid. Actually, Rooney et al. (2001), and Steinberg et al. (2002) question the validity of this assumption themselves when they call for further research on "what kinds of giving people tend to remember and forget without being prompted" and on "regional, racial, social class or other differences in how respondents react to [different types of] surveys" (Rooney et al., 2001, p. 566). Recently, Rooney, Mesch, Chin, and Steinberg (2005) reported that men and single minorities report higher donations in more extensive modules.

We extend this line of research and address the issue of how different questionnaires to measure charitable giving lead to different parameter estimates for effects of predictor variables. Our objective is to answer the question, How are the effects of key predictors on donating behavior biased by the length of the questionnaire used to measure giving?

Our main finding is that shorter survey modules lead to an overestimation of the estimated effects of predictor variables on the likelihood of giving but to an underestimation of the effects on the amount donated. The biases are probably due to underreporting of smaller donations in shorter survey modules. This implies that results from studies on giving using concise questionnaires need to be interpreted with care.

KEY PREDICTORS OF CHARITABLE GIVING

In recent years, considerable empirical research on charitable giving has been published. We reviewed this literature and made a list of characteristics that emerge as predictors of philanthropy in a variety of studies in different countries. Due to space limitations, we refer to a more elaborate version of this article for the review, and we briefly present our conclusions.

The following characteristics are positively related to the likelihood that households engage in philanthropy as well as the amount donated: income, age, education, religious involvement (church attendance and Protestant denomination), and marriage. Rural residence seems to promote the likelihood of engaging in philanthropy but not the amount donated. Home ownership and wealth income seem to promote the amount donated but not the

likelihood of giving at all. Specific findings for the Netherlands are that left-wing political orientation and postmaterialistic values are positively related to engaging in philanthropy as well as to the amount donated.

DATA

We test the impact of survey methods by comparing predictors of philanthropy in two data sets from the Netherlands. The first data set is the first wave of the Giving in the Netherlands Panel Survey (Schuyt, 2003), which contained an extensive method and area (method+area) module on giving. Respondents were first given a list of 25 methods that they may have used to donate money. Respondents indicated whether they donated any money to charities using each of these methods. Next, they were given a list of nine subsectors in which charities and nonprofits are active, and a category Other. For each of these subsectors, respondents indicated whether their household had donated money to charities in those sectors and if so, how much.

The second data set that we use is the Family Survey of the Dutch Population conducted in 2000 (De Graaf, De Graaf, Kraaykamp, & Ultee, 2000; see also Bekkers, 2004), which contained a very short module for charitable giving. The very short giving module consisted of only two questions: (a) whether households in which respondents resided had donated any money to charities in the past year and if so, (b) how much.¹

RESULTS

As in previous research (Rooney et al., 2001, 2004; Steinberg et al., 2002), we find that the method+area module reveals a higher incidence of donations, as well as a higher amount donated. The very short module revealed a lower incidence of giving (77%) than the method+area module (97%).² The very short module also revealed a 60% lower mean donation than the method+area module (110 euros vs. 273 euros).

In a series of multivariate analyses, we estimated Heckman (1979) two-stage regression models (for an application to charitable giving, see Smith, Kehoe, & Cremer, 1995). Table 1 reports the results of the analyses. This type of regression analysis yields two sets of results: effects of predictor variables on the likelihood that a household reports donations (columns 1-3) and effects on the amount donated (columns 4-6). Columns 3 and 6 report whether the effects of predictor variables are significantly different in the very short module from the method+area module. The sign represents the direction of the bias in the very short module: A plus indicates that the effect is more positive in the very short module; a minus represents a less positive (more negative) effect.

Table 1. Effects of Predictor Variables on Amount Donated in Very Short and Method + Area Module

	<i>Whether Households Report Gifts (Stage 1)</i>			<i>Amount Donated (Stage 2)</i>		
	<i>Method + Area</i>	<i>Very Short</i>	<i>Bias</i>	<i>Method + Area</i>	<i>Very Short</i>	<i>Bias</i>
Younger than 30	—	-	0	—	-	—
Older than 55	0	0	0	++	0	-
Female	0	++	+	0	0	0
Catholic	(+)	0	0	++	(+)	-
Reformed Protestant	0	+	0	++	+	—
Rereformed Protestant	++	++	—	++	++	—
Other religion	0	0	0	++	(+)	—
Church attendance	0	+	+	++	++	0
Small town	++	0	—	0	0	0
Educational level	0	++	++	++	++	++
Income(ln)	++	+	-	++	+	—
Wealth(ln)	0	++	0	++	+	0
Home owner	0	++	+	+	++	0
Household size	0	0	0	0	-	-
Shares household	0	0	0	0	+	+
Left-wing orientation	0	++	0	++	0	-
Postmaterialism	+	0	0	+	++	+

Note: ++ = positive effect, $p < .01$; + = positive effect, $p < .05$; (+) = positive effect, $p < .10$; — = negative effect, $p < .01$; - = negative effect, $p < .05$; (-) = negative effect, $p < .10$; 0 = no relationship.

In both data sets, donations to charitable causes are less often observed among respondents younger than 30, more often among respondents affiliated with the Rereformed Protestant churches, and among respondents from higher income households. We find many differences between the two surveys in the analysis of whether respondents report gifts at all. Our analyses reveal that method effects lead to considerable biases in the effects of predictor variables of giving.

The differences can be interpreted as a result of differences in the salience of giving among specific groups. Hall (2001) discussed a number of measurement issues in research on giving and concluded that more salient events are more likely to be reported accurately. Many charitable gifts are not very salient acts in life. For instance, small donations in response to door-to-door fund-raising campaigns or street canvassing are part of everyday routine. Such donations are less likely to reflect a strong involvement with the cause supported than large donations that are the outcome of careful deliberation. Because small donations are not very salient acts, they are likely to be under-reported in concise questionnaires that do not use extensive prompts. As a rule, those who give more will know better what they give because to give or not to give is a more salient issue in their lives. Therefore, short questionnaires

will reveal stronger relations of independent variables with the probability of giving. In addition, the salience of philanthropy is related to decision-making responsibility for financial decisions and to general cognitive competence. Women, who more often bear responsibility for decisions on donations (Andreoni, Brown, & Rischall, 2003; Schuyt & Gouwenberg, 2005), are more likely to remember correctly what the household donated in the past year. The higher educated are also more likely to report accurately what they give, because they have a better memory. The converse holds for the effect of age. The elderly will be more likely to underreport their giving behavior in concise questionnaires due to memory problems.

Although the very short module leads to an *overestimation* of the effects of predictors of giving on the probability of charitable giving, most effects are *underestimated* when the amount donated is considered. In short surveys, small donations are more likely to go unreported. In extensive surveys, households that made small donations will be included among the households that donated. As a result, the amounts donated reported in a short survey module have a smaller variance than in an extensive survey module. When the variance in amounts donated is smaller, the effects of predictors of giving appear to be smaller than they actually are.

Broadly speaking, our findings are consistent with these arguments. The effects of gender, church attendance, level of education, and home ownership are more strongly related to the likelihood that a household reports gifts in the very short module than in the method+area module. On the other hand, however, effects of Rereformed Protestant denomination, small-town residence, and income are smaller in the very short module. These differences are not in line with a salience perspective and may have different roots.

The results of the second stage (the amount donated) indicate that the level of charitable donations in both surveys are lower among respondents younger than 30 but higher among respondents with Reformed and Rereformed Protestant denomination, among those who attend church more frequently, have higher levels of education, higher income from wages and wealth, among home owners, and among respondents with a more postmaterialist value orientation. In the method+area module, we also find significantly positive effects of being older than 55, Catholic and other religious affiliation, income, and left-wing political self-placement, whereas we do not find these effects in the very short module. These differences are in line with the argument that short modules underestimate effects of predictor variables on the amount donated. The effects of sharing a household and postmaterialism, however, are more pronounced in the very short module.

CONCLUSION AND DISCUSSION

We compared determinants of giving in two national surveys from the Netherlands, using different modules to measure giving. As in previous

research, we found that lengthier modules reveal a higher incidence of giving (20% more donors) as well as higher amounts of money donated (60% higher median donation). We extended previous research by examining the effect of a long (method+area) rather than a short (very short) survey module on different predictor variables of donating behavior. We found that different survey modules lead to sometimes dramatically different parameter estimates for determinants of giving. Generally speaking, a very short module overestimates the effects of these variables on the probability of giving but underestimates the effects of variables on the amount donated. Specifically, we found smaller effects of old age, religious affiliation, income, household size, and left-right political self-placement on the amount donated in the very short module than in the method+area module. We find that effects of the level of education, church attendance, female gender, and home ownership on the probability of giving are overestimated in the very short module due to selective underreporting.

IMPLICATIONS

What are the implications of our results for research on philanthropy? First of all, our results confirm that shorter questionnaires on giving lead to an underestimation of the volume of charitable giving. Researchers should be aware that population estimates are a function of the length of the questionnaire used to measure giving and volunteering. The shorter the questionnaire, the larger the underestimation.

Second, the validity of research on determinants of charitable giving is compromised when a very short module is used to measure giving. A very short module leads to underreporting of donations, especially among respondents who mainly make small donations, among respondents who do not bear responsibility for donations made within the household, and among respondents with lower cognitive ability. A longer questionnaire helps these respondents to recall their donations. Researchers should be aware that the effects of predictor variables observed in regression analyses of the probability of giving are biased in short questionnaires. The bias is upward in analyses of the probability of giving. Effects of predictors of giving in short questionnaires appear larger than they actually are in analyses of having made a donation in the past year, due to selective underreporting. The bias is downward in analyses of the amount donated. The effects of predictors of giving appear smaller than they actually are due to the smaller variance in the amount donated. Correction for selective reporting using a Heckman two-stage regression model partly solves this problem, but not completely.³

The amount of time that is available to researchers to measure giving is always limited. When giving is not the primary focus of interest in a survey, the module to measure giving is often shorter. In many surveys that contain

data on charitable giving, short modules are used. When researchers use such data, they should use appropriate regression models to correct for selective underreporting and be very careful in the interpretation of the results.

Notes

1. The two surveys do not differ merely in the length of the questionnaire modules on giving but also in other ways: with respect to the data collection period, interviewing method, and sampling frame. However, we have good reasons to believe that the questionnaire length is the key difference. An exposition of these reasons is available in the full version of this article.

2. Among donors, we recoded "don't know" responses to the questions on the amount donated into the median value, because Brooks (2004) shows that treating don't know responses as zeros leads to biases in effects of predictors of giving. Analyses excluding don't know responses (reported in the full version of this article) lead to different conclusions for both the effects of predictor variables in the very short module and in the method+area module.

3. When respondents who report "no gifts" are included as zeros in an ordinary least squares regression, the bias is downward for most variables (results available from authors). Because a very short module yields more respondents who report no gifts, analyses of the amount donated in such a module reveal fewer significant and generally weaker effects of predictor variables.

References

- Andreoni, J., Brown, E., & Rischall, I. (2003). Charitable giving by married couples. Who decides and why does it matter? *The Journal of Human Resources*, 38(1), 111-133.
- Bekkers, R. (2004). *Giving and volunteering in the Netherlands: Sociological and psychological perspectives*. Ph.D. dissertation, Utrecht University, the Netherlands.
- Brooks, A. C. (2004). What do "don't know" responses really mean in giving surveys? *Nonprofit and Voluntary Sector Quarterly*, 33(3), 324-434.
- De Graaf, N. D., De Graaf, P., Kraaykamp, G., & Ultee, W. (2000). *Familie-Enquête Nederlandse Bevolking* [Family survey of the Dutch population: data file]. Nijmegen, Netherlands: Nijmegen University, Department of Sociology.
- Hall, M. H. (2001). Measurement issues in surveys of giving and volunteering and strategies applied in the design of Canada's National Survey of Giving, Volunteering and Participating. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 515-526.
- Heckman, J. (1979). Sample selection bias as specification error. *Econometrica*, 47, 153-162.
- O'Neill, M. (2001). Research on giving and volunteering: Methodological considerations. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 505-514.
- Rooney, P. M., Mesch, D. J., Chin, W., & Steinberg, K. S. (2005). The effect of race, gender, and survey methodologies on giving in the US. *Economics Letters*, 86(2), 173-180.
- Rooney, P. M., Steinberg, K. S., & Schervish, P. G. (2001). A methodological comparison of giving surveys: Indiana as a test case. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 551-568.
- Rooney, P. M., Steinberg, K. S., & Schervish, P. G. (2004). Methodology is destiny: The effect of survey prompts on reported levels of giving and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 628-654.
- Schuyt, T. N. M. (Ed.). (2003). *Geven in Nederland 2003: Giften, Legaten, Sponsoring en Vrijwilligerswerk* [Giving in the Netherlands 2003: Donations, bequests, sponsoring and volunteering]. Houten/Mechelen, Netherlands: Bohn Stafleu van Loghum.

- Schuyt, T. N. M., & Gouwenberg, B. (Eds.). (2005). *Geven in Nederland 2005: Giften, Legaten, Sponsoring en Vrijwilligerswerk* [Giving in the Netherlands 2005: Donations, bequests, sponsoring and volunteering]. Amsterdam: Elsevier.
- Smith, V. H., Kehoe, M. R., & Cremer, M. E. (1995). The private provision of public goods: Altruism and voluntary giving. *Journal of Public Economics*, 58, 107-126.
- Steinberg, K. S., Rooney, P. M., & Chin, W. (2002). Measurement of volunteering: A methodological study using Indiana as a test case. *Nonprofit and Voluntary Sector Quarterly*, 31(4), 484-501.

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