PUBLIC ATTITUDES TOWARD DATA SHARING BY FEDERAL AGENCIES

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Because of the high cost of the 1990 census and the continued undercoverage of some population subgroups, it has been suggested that administrative records be used to supplement or replace conventional census-taking activities. Very little information exists concerning public knowledge and attitudes on this topic. The most extensive information to date comes from questions asked on several IRS surveys of taxpayers. In late 1993 an opportunity presented itself to add a small number of questions about data sharing to national telephone surveys conducted by the Wisconsin Letters and Sciences Survey Center. In this paper we report on a preliminary analysis of these data.

Hypotheses about Data Sharing Attitudes

It seems likely that public beliefs and feelings about data sharing among federal statistical agencies do not conform to the classical definition of attitudes, which carries with it the implication of an enduring predisposition (Allport, 1935). On the contrary, like many subjects on which the opinions of the public are sought by public opinion pollsters, data sharing among federal agencies is a topic not likely to have engaged the attention of many of those unlucky enough to fall into the pollster's net. The survey itself may be the first time many of those questioned have encountered the topic, and as a result the questions themselves, as well as the way they are framed, are likely to have stronger effects on the results than would be the case if the attitudes were firmly held and buttressed by other belief and value systems, as is the case, for example, with attitudes toward abortion or the death penalty.

In fact, attitudes about data sharing are very likely to fall into the category of "nonattitudes," or "pseudo-attitudes". In 1980, Bishop and his colleagues found that about one third of the public were willing to express an opinion on a totally fictitious issue, the 1975 Public Affairs Act, a finding that has often been interpreted as evidence of the unreliability and invalidity of a substantial portion of public opinion. Schuman and Presser, however, pointed out in 1981 that this interpretation was perhaps too strong; that what people were likely to do, when confronted with an issue they had not encountered before, was to assimilate it to information and attitudes which they did, in fact, possess-"to call on more general attitudes to help with their specific evaluations. Indeed, general attitudes can be conceptualized in just this way--as broad orientations that provide guidance about how to respond in novel situations." (p. 153) Indeed, in a series of experiments they demonstrated that opinions about a real but obscure "Agricultural Trade Act" as well as an equally obscure "Monetary Control Bill" were related in predictable ways to attitudes about government economic policy and to confidence in government more generally.

It seemed to us that a similar process would likely be at work here. That is, respondents' attitudes to the largely unfamiliar concept of data sharing among federal agencies would reflect, on the one hand, specific concerns about data sharing and about the Census Bureau's promise of confidentiality; and, on the other hand, they would reflect more general attitudes of trust toward the federal government. Furthermore, we expected that the relative importance of specific vs. general attitudes in predicting willingness to have government agencies share data would depend on people's familiarity with the concept of data sharing. Among those who said they had heard or read some or a lot about data sharing, we expected concern about data sharing and confidence in the Census Bureau's promise of confidentiality to play a more important role than trust in government in general; and among those who had heard or read nothing or only a little, we expected trust in the federal government to play a more important role than specific concerns about data sharing or confidence in the Census Bureau's assurance of confidentiality. We also expected trust in the government (the general attitude) to be a more important predictor of willingness to share data among those who had heard little or nothing about the issue than among those who had heard more; and we expected specific attitudes about data sharing to be a more important predictor of willingness to share data among those who had heard more about the issue than among those who had heard little or nothing at all.

On the basis of prior research, we also hypothesized that people would be less willing to have the Census Bureau get data from the IRS than from the Social Security Administration; and that they would be more willing to have the Census Bureau get data from other agencies than to give their Social Security Number to the Census Bureau to make this possible. We also expected that people with a greater sense of political efficacy would be more willing to have government agencies share data about them, because they would have more confidence in being able to control the conditions under which such data would be shared and used.

We also expected confidence in the Census Bureau's promise of confidentiality to be shaped by more general attitudes of trust in government, plus demographics. On the basis of prior research, we predicted that better educated people would have more confidence in the Census Bureau's promise of confidentiality, and that Black Americans would have less confidence in such an assurance (Singer, Mathiowetz, and Couper, 1993).

Methods

The vehicle we used to test these hypotheses was a CATI survey carried out by the Letters and Sciences Survey Center of the University of Wisconsin, to which we added a handful of questions about data sharing. An independent national sample is drawn for each day of the week, and respondents are randomly selected from among those 18 and older. The interview schedule is modified every few weeks, and the study on which we report today, Project 77, ran from January to April 1994. The CASRO response rate for the study is estimated to be approximately 50%;¹ the number of respondents was 646.

The concepts of interest to us were operationalized by the following questions:

1. Concern about data sharing

"How concerned would you say you are about this issue [data sharing]--very concerned, somewhat concerned, not very concerned, or not at all concerned?"

Not at all concerned	9.2%
Not very concerned	23.0
Somewhat concerned	46.6
Very concerned	21.1

2. Trust in government (2 indicators)

(a) "You can generally trust the people in government to do what is right. Do you agree strongly,

agree somewhat, disagree somewhat, or disagree strongly?"

Agree strongly	4.4%
Agree somewhat	21.8
Disagree somewhat	43.3
Disagree strongly	30.5

(b) An index consisting of the sum of responses to the following three items:

"Our next questions have to do with government. On a scale of 1 to 10, where 1 means very poor and 10 means excellent, how would you rate the job the President is doing?

"On the same scale of 1 to 10, where 1 means very poor and 10 means excellent, how would you rate the job the Congress is doing?

"On the same 1 to 10 scale, where 1 means very poor and 10 means excellent, how would you rate the job the Supreme Court is doing?"

0	0.5%	15	9.5%
1	0.2	16	6.6
2	0.2	17	6.6
3	3.1	18	7.5
4	0.9	19	6.9
5	1.6	20	5.8
6	1.6	21	4.8
7	2.8	22	3.0
8	2.2	23	2.0
9	3.9	24	2.0
10	3.3	25	1.3
11	5.3	26	1.3
12	4.8	28	0.3
13	4.2	29	0.3
14	6.9	30	0.8

3. Confidence in confidentiality

"And now some questions about government agencies. As you know, every 10 years there is a census of the population of the United States. How confident are you that the Census Bureau protects the privacy of personal information about individuals and does not share it with other government agencies--very confident, somewhat confident, not too confident, or not at all confident?"

Not at all confident	15.5%
Not too confident	28.1
Somewhat confident	45.1
Very confident	11.3

4. Information about data sharing

"How much have you heard or read about the issue of federal agencies sharing information about

¹ Numbers not found to be out of sample are included in the denominator. Numbers not answered in 10 or more calls are assumed to be residential in the same proportion found among numbers that are answered.

individuals--a great deal, some, not very much, or nothing at all?"

A great deal	7.8%
Some	36.1
Not very much	36.7
Nothing at all	19.4

5. Political Efficacy

An index consisting of the sum of responses to the following two items (alpha = .63):

"People like me don't have any say about what the government does. Do you agree strongly, agree somewhat, disagree somewhat, or disagree strongly?

"If public officials are not interested in hearing what the people think, there is really no way to make them listen. Do you agree, etc."

0 (high efficacy)	0.5%
1	0.5
2	11.1
3	8.1
4	18.2
5	19.6
6	20.8
7	12.2
8	9.1

6. Willingness to have agencies share data

Three questions were asked about willingness to share data: One tapped the respondent's feelings about the issue (favor/oppose); the second asked whether the respondent would be willing to provide his/her Social Security Number to facilitate record matching; and the third asked how willing the respondent would be to provide his/her SSN to the Census Bureau if it would increase the accuracy of items in the respondent's files. These questions were asked about two different agencies: The Social Security Administration and the Internal Revenue Service. Approximately half of the sample was asked about each of these agencies in a split-ballot design. The actual questions are shown in the Appendix.

We explored several ways of combining responses to these questions into one dependent variable. On the basis of correlations with predictor variables, we selected a "Willingness" index which assigns one point for responses of "favor it strongly" or "favor it somewhat;" one point for "agree" to provide SSN for matching; and one point for being very or somewhat willing to provide SSN for accuracy. Thus, scores on this index can range from 0 to 3. (Correlations based on this index are almost identical with those derived from a simple summation of responses to the three questions, which ranges from 0 to 9 and has an alpha of .70, but we preferred the former because it provides a clearer conceptual match to the notion of willingness to share data.)

0 (Not at all willing)	18.9%
1	11.1
2	16.0
3	54.0

Results

The results of a regression equation predicting willingness to share data from concern about data sharing, trust in government, confidence in the Census Bureau's assurance of confidentiality, and efficacy, controlling for gender, education, race, income, and a variable labeled "Impute," which indexes the need to impute income for those who refused to provide it, are shown in Table 1.

As can be seen from Table 1, concern about data sharing, political efficacy, trust in government, and, marginally, confidence in institutions and having heard about data sharing are all related to willingness to have the Census Bureau get data about them from other government agencies. The more trust and confidence people have in government, and the greater their sense of political efficacy, the more willing they are to have agencies share data. On the other hand, the more concern they express about the specific issue of data sharing, and the more they have heard about the issue, the less willing they are to have the Census Bureau obtain data about them from other agencies. The only variable that does not behave as expected is confidence in the Census Bureau's assurance of confidentiality, which is unrelated to willingness to have the Bureau obtain data from other agencies. Income is positively associated with willingness to have government agencies share data, and, as predicted, people are significantly less willing to have Census get data from the IRS than from the Social Security Administration. Those for whom income had to be imputed (because they failed to answer the question about income) were consistently less likely to favor data sharing than those who provided information about their income. This finding provides a behavioral validation for our measure of willingness to share data, and it is statistically significant in every analysis.

In order to test the hypothesis that among those who had heard little or nothing about data sharing, trust in government would be a more important predictor of willingness to share than specific concerns about data sharing, whereas the reverse would be true among those who had heard something or a great deal, we ran separate regression equations for these two groups. As predicted, among those who had heard little or nothing about data sharing, only trust in government (B=.178, S.E.=.081), income (B=.199, S.E.=.088), and impute (B=-.384, S.E.=.148) are significant predictors of willingness to share (N=315; R²=.095 [adj., .049]), whereas among those who had heard something or a great deal, only concern about data sharing (B=-.281, S.E.=.095), impute (B=-.309, S.E.=.179; p<.10), and IRS (B=-.582, S.E.=.156) are significant predictors of willingness to share (N=260; R²=.162 [.111 adj.]). Confidence in the Census Bureau's assurance of confidentiality is not a indicates that the four-way interaction among heard, trust, significant predictor in either group. Preliminary analysis concern, and willingness to share is not significant; we are continuing to investigate this hypothesis.

We also looked at predictors of expressed confidence in the Census Bureau's assurance of confidentiality. Trust in government (B=.208, S.E.=.046), confidence in institutions (B=.031, S.E.=.007) and being female (B=.138, S.E.=.071) were significant predictors of greater confidence; Black (B= -.309, S.E.=.130) and older respondents (B= -.005, S.E.=.002) were significantly less confident.

 Table 1

 Predictors of Willingness to Have Census Bureau Obtain Data from SSA and IRS

Variable	В	Standard Error
Heard or Read about Data Sharing	102	.061+
Confidence in Census Bureau's Assurance	.047	.060
Concern about Data Sharing	174	.059**
Political Efficacy	058	.029*
Trust in Government	.161	.064*
Confidence in Institutions	.017	.010+
Female	068	.097
Black/Am.Indian	192	.185
Less than High School	236	.183
High School Grad.	.044	.144
Some College	181	.132
Associate's Degree	.221	.152
Age	.002	.003
Income (logged)	.173	.069*
Impute	332	.113**
IRS	297	.097**
(Constant)	.779	.830

** *p*<.01 **p*<.05 + *p*<.10

Given the high level of distrust being expressed in government today, we were interested in whether people would be more willing to give their SSN to a business establishment than to a government agency. Accordingly, we asked, "How willing would you be to give your SSN to a business you deal with, such as a department store or a credit card company, if having this would increase the accuracy of items in your credit card report?" This question was asked immediately after the one asking if people would be willing to give their SSN to the Census Bureau if this would increase the accuracy of items in their files. Although it has been argued that the hypothetical in the business item is implausible, no one seems to have raised this objection during the survey, and only 2.2% of the sample replied DK or refused to answer the question. (In fact, Harris had asked the identical question in 1991, obtaining a very similar distribution of answers.)

It is clear that people are more reluctant to give their SSN to a business than to the Census Bureau: 48.6% vs. 65.6% expressed a willingness to do so. However, willingness to support data sharing among federal agencies is a significant predictor of willingness to give one's SSN to a business--it is, in fact, the strongest predictor of such willingness. Younger people are significantly more willing to give their SSN to a business they deal with than older people are (data not shown). None of the attitudes toward government are significantly related to a willingness to provide one's SSN to a business organization, which again supports our interpretation that it is general attitudes toward government (along with other, as yet unmeasured, variables) that drive the public's willingness to have government agencies share data about them with the Census Bureau.

Conclusions

We began this paper by arguing that so-called pseudo attitudes may, in fact, be related in meaningful ways to other beliefs and attitudes. In the case of data sharing among federal agencies, it seems fairly clear that very few people are knowledgeable about what such a practice would entail either in terms of benefits or in terms of risks involved. Asked how much they have heard or read about data sharing, 55% respond by saying very little or nothing at all--a figure that if anything we assume to be an underestimate. Nevertheless, for the most part, they express an opinion on the matter, and this opinion seems to be related in predictable ways to their trust in government, to the confidence they attach to the Census Bureau's promise of confidentiality, to their confidence in their own ability to influence government, and to a more general inclination to share or withhold information, as indexed by their willingness or refusal to share information about their income. In a sense, the findings, like the earlier ones by Schuman and Presser (and, for that matter, Allport, 1935) are an argument for the function of general attitudes in helping individuals to

orient themselves to new and changing features of their environment.

References

- Allport, Gordon W. "Attitudes." In C. Murchison (ed.), *A Handbook of Social Psychology.* Worcester, Mass.: Clark University Press, 1935.
- Bishop, George F., R. W. Oldendick, A.J. Tuchfarber, and S.E. Bennett. "Pseudo-Opinions on Public Affairs." *Public Opinion Quarterly*, 44: 198-209, 1980.
- Schuman, Howard and Stanley Presser. Questions and Answers in Attitude Surveys. New York, Academic Press, 1981.
- 1990 Taxpayer Survey. Conducted for the U.S. Internal Revenue Service by Louis Harris & Associates.

Appendix

QUESTION WORDING FOR QUESTIONS MAKING UP WILLINGNESS SCALE

The specific questions read as follows (with one small change, the questions about favoring SSA and IRS data sharing are taken from the Taxpayer Surveys; they are surely among the longest and most complex ever asked on a telephone survey, and contain some ambiguity about just what information is to be shared):

"You have given me your general views on government agaencies sharing information with each other. Now I'd like to ask you some specific questions about the Census. The Census Bureau is required by Congress to count the entire population once every ten years. Census tries to get information about each person in the country either by sending them a form to complete and mail in, or by sending someone to their home to complete the form. Each decade it is becoming more difficult and costly for the Census Bureau to locate and collect information for each and every person. The Social Security Administration (Internal Revenue Service) already has information in their files about census items like date of birth and sex for nearly everyone; and place of residence for many people. Some people have suggested that this information should be given to the Census Bureau for use in the population census in order to reduce the cost of the census and the number and length of the forms that people have to fill out. How would you feel about the Social Security Administration (Internal Revenue Service) giving its information about you to the Census Bureau for use in the population census? Would you favor it strongly, favor it somewhat, oppose it somewhat, or oppose it strongly?"

"Would you be willing to give your Social Security number to the Census Bureau so that they could match the information in your Social Security/IRS record with the information in their own files?" (Yes/no) "How willing would you be to give your Social Security number to the Census Bureau if this would increase the accuracy of items in your files? Would you be very willing, somewhat willing, not very willing, or not willing at all?"