

An instrument for collecting informed opinions

PETER NEIJENS, JAN A. DE RIDDER & WILLEM E. SARIS

University of Amsterdam, Oude Hoogstraat 24, 1012 CE Amsterdam, the Netherlands

Abstract. For collecting informed public opinions a special kind of questionnaire has been developed: the Choice Questionnaire. With this questionnaire, information relating to a decision problem is made available to respondents. This information includes the various options from which a choice has to be made, and the consequences of these options. The Choice Questionnaire also contains a procedure that is designed to assist participants in processing this information and in making a choice based on it.

This paper studies the extent to which the Choice Questionnaire is a useful instrument for collecting informed opinions and the effects the instrument has on the decision-making process of the participants. The factors influencing its performance are also considered. This evaluation study has been carried out in a real life context: the choice made by the Dutch population concerning the further application of nuclear power.

1. Introduction

In certain situations one may be interested in opinions based on information concerning a particular problem and given after the pros and cons of the various standpoints have been weighed. 'Informed opinions' are of interest in, for example, citizen participation procedures that involve important policy questions which are intended to influence governmental decisions.

Existing instruments for the collection of opinions are not adequate to register an 'informed public opinion'. On the one hand there are instruments, such as public hearings, in which the participants may be adequately informed but not representative of the population whose opinion one is interested in. Participants in public hearings generally consist of a select group of middle-aged people with a higher educational background (Verba and Nie, 1972; Neijens, 1987). On the other hand, there are instruments such as public opinion surveys or referendums in which representative participation is probably achieved, but in which respondents cannot be expected to be informed about the problem (Converse, 1964).

Neijens, De Ridder, and Saris (1988) wished to establish whether a questionnaire containing information about the issue at hand could be used. A number of questions were raised: How should the information be presented in a questionnaire? Are respondents willing and able to fill in such a questionnaire? Would the information provided lead to a change of opinions? Would

the 'quality' of the opinions given be improved? Which method of providing information would show the best results?

This paper presents the design of what we call the Choice Questionnaire and the results of an evaluation study of its performance.

2. Design of the choice questionnaire background

Background

The Choice Questionnaire was designed for a General Social Debate (GSD) in the Netherlands. This debate, over the further application of nuclear power in electricity production, was initiated by the Dutch Government because of the substantial extra-parliamentary opposition to the use of nuclear power. The goal of the GSD was to involve the population in the formulation of an energy policy. A Steering Committee, consisting of persons recruited from parties with different standpoints in the debate and respected by a broad spectrum of people, was given the task of organizing the debate. In the first phase – the information phase – the Steering Committee prepared an Interim Report containing the information pertinent to the choice-making problem. In this phase the Steering Committee consulted with interested organizations and action groups, organized public hearings to discuss controversial aspects, and so on.

In the second phase the Committee collected the opinions of members from all strata of society. The Choice Questionnaire which contained information based on the Interim Report, was used. The Steering Committee was responsible for the final formulation of the information in the questionnaire.

The information

Given the design of the General Social Debate we had to develop a 'decision aid' in which information about a decision-making problem would be presented to users, on the basis of which they could make a decision. We had to determine the type of information to be presented and how this should be done so as to make adequate processing of the information possible.

According to the theory of 'decision analysis' (Keeney and Raiffa, 1976; Edwards, 1977), information about options and their consequences as described by a number of attributes, e.g. costs, environmental aspects, etc., is relevant to a decision making problem. If any uncertainty is involved, each option is, of course, characterized by probability distributions covering possible outcomes of the attributes.

The Interim Report of the Steering Committee summed up (1) the various energy supply options for electricity production, (2) which attributes were considered relevant by the population and (3) how the options scored on these attributes. Consequently the Choice Questionnaire for the General Social Debate gave financial, social, health and environmental consequences for a number of options.

This information about the consequences of each option was presented on information cards in the Choice Questionnaire. The various consequences were given in the form of statements. Each statement concerns a 'consequence', i.e., each statement mentions one aspect (attribute) and indicates the possible outcomes thereof as well as the extent to which they are likely to occur. Obviously, precise information was not always available and in such cases only inexact information could be provided. Sometimes the experts disagreed over the outcomes. The different experts' opinions were then included in the statement and the background to the disagreement was mentioned on the back of the information card.

Table 1 shows the information card describing one of the options in the Choice Questionnaire for the GSD: the use of a specified extra amount of natural gas.

Six options were proposed: the use of specified amounts of energy resources (natural gas, oil, coal, nuclear power, and wind energy) plus a conservation strategy. Respondents were asked to choose three options. The options were so constructed that each combination of three would provide sufficient energy. Twenty combinations are thus possible. The number of information statements pertinent to each option varied between 6 and 9.

Aiding information processing

We tried to facilitate information processing in the Choice Questionnaire by an evaluation procedure. Respondents were asked to evaluate the attractiveness of each consequence. The rationale behind this procedure was our expectation that the respondents would absorb the information more thoroughly as a result of the various judgements they would have to make; they would be actively involved with the information. It was also assumed that an evaluation of the consequences in the same units would facilitate the respondents' comparison of the consequences (Slovic and MacPhillamy, 1974).

Respondents were asked to make one evaluation of each consequence, thereby taking into account the outcomes of the aspect considered, and the probabilities of their occurrence. This is shown in Table 1. Respondents were first asked whether they considered the consequence to be important or

Table 1. Example of an information card

15 EXTRA UNITS OF NATURAL GAS

Some experts suggest that 15 extra units of natural gas should be used. Others consider this excessive because of the disadvantages connected with it. Below are listed the most important advantages and disadvantages of the use of approximately 15 extra units of natural gas.

- The price of natural gas is controlled by the Dutch government and is maintained at the same level as the price of oil. In the near future this price could vary enormously. In the long term this fuel will, however, almost inevitably become more expensive. The use of 15 extra units of natural gas will slightly raise the price of electricity. This will slightly raise the cost of living and will raise costs to industry.

- The money earned from the sale of natural gas for the generation of electricity goes largely directly to the Dutch treasury, which means that it is used for the general good of Dutch society. The use of 15 extra units of natural gas will provide the government with a considerable amount of extra money.

- The quantity of natural gas available in The Netherlands and elsewhere in the world is limited. The total world supply is sufficient for the coming 40 or 50 years. Here we should consider the fact that natural gas is eminently suitable for industrial use and for domestic heating and cooking. The use of 15 extra units of natural gas for generating electricity means that less is available for these applications.

Place a cross in this column if you think that the consequence mentioned is not important	Advantage	Disadvantage
.....	An advantage that is neither great nor small = 400	A disadvantage that is neither great nor small = 400
.....
.....
.....

<p>- The burning of fossil fuels can affect the climate of the world in the long term. Like oil, natural gas is less of a problem than coal, but it can still contribute slightly to the risk. The consequence of this can be that the temperature worldwide will gradually rise (greenhouse effect) which leads to drastic changes in the climate: areas that at present are favourable for agriculture can gradually acquire a desert climate. In other regions, agricultural land can deteriorate because of an increase in rainfall. In addition, a higher worldwide temperature can cause a gradual melting of the polar ice-caps which will cause the sea-level to rise. It is not at all certain whether these consequences would, in fact, occur. But if they do, there is nothing that can be done to correct them. The use of approximately 15 extra units of natural gas would make a slight contribution to this risk.</p>	<p>.....</p>
<p>- Atmospheric pollution resulting from the use of fossil fuels produces harmful effects. Natural gas is less of a problem than oil or coal, but it can still contribute in a very slight way, to these consequences. These consequences are harmful to the human breathing mechanism which means that people suffering from lung diseases can face more problems. In addition, there are damaging consequences for plants and animals; for instance, crops and horticultural products. The use of approximately 15 extra units of natural gas contributes in a very slight way to these effects.</p>	<p>.....</p>
<p>- The burning of fossil fuels can give rise to 'acid rain'. Natural gas is less of a problem than oil or coal, but it can still contribute in a very slight way, to this phenomenon. It seems very likely that acid rain has a harmful effect on life in the ground, on plants and trees and on life in the water. The use of 15 extra units of natural gas contributes to these effects in a very slight way.</p>	<p>.....</p>
<p>TOTAL</p>	<p>.....</p>

unimportant. If they believed the consequence to be important, they were asked to indicate whether they considered it as advantageous or disadvantageous, and to give the magnitude of the advantage or disadvantage. A magnitude estimation scaling procedure was used (standard: a (dis)advantage which is neither great nor small; modulus: 400).

It was also believed that the respondents' task would be simplified if they summarized their evaluations of each option since this 'book-keeping system' would not require them to recall all the information when asked to make their choice. They were therefore asked to add up for each option the advantageous and disadvantageous evaluations, respectively.

Having made these evaluations, the respondents now had six options, each written on a card. Each card contained the consequences of an option, the respondent's evaluations of these consequences and the two overall evaluations. They were then asked to choose three options. No prescription (decision rule) is given for the choice.

3. Research design

Research questions

To what extent is the Choice Questionnaire a useful instrument for collecting informed opinions of a population and what effect does this instrument have on the decision-making process of the respondents? The indicators for usefulness are derived from the goals of the Choice Questionnaire: to give insight into the opinions of broad strata of society based on information about the problem. The following research questions were posed:

1. To what extent does the Choice Questionnaire afford insight into opinions that are representative of a population? The Choice Questionnaire might be too difficult or respondents insufficiently motivated to devote time to its completion, which would lead to (a biased) non-response.
2. To what extent are the choices made based on the information provided? The decision-making problem could be too complicated for respondents or they could process the information in the light of their existing preferences.
3. Even if the choices made by the respondents are in agreement with the information provided, has the Choice Questionnaire itself *influenced* the respondents' decision process? In other words, what are the effects of the Choice Questionnaire on the decision-making process?
4. Which aspects of the Choice Questionnaire – provision of information,

evaluation of the consequences, and the book-keeping system whereby the evaluations are totalled – contribute to informed choices, and to what extent? An answer to this question is important because it tells us about how respondents are helped in making a choice. This will provide insight into the respondent's process of choosing as well as serve as a basis for the construction of further Choice Questionnaires.

Fieldwork

The field procedure for the Choice Questionnaire was as follows. Before the interviewer presented the Choice Questionnaire to the respondent, some questions were asked to elicit background information. The instructions for filling in the Choice Questionnaire were also given during this 'face-to-face interview'. The respondent filled in an example under the guidance of the interviewer. In this process the various steps in the Choice Questionnaire were clarified.

At the end of the face-to-face interview, the interviewer handed the respondent a booklet containing the Choice Questionnaire and requested that it be filled in at home within a week.

When collecting the completed questionnaires, the interviewer asked some additional questions, which were intended to provide insight into the opinions of the respondent regarding the filling in of the questionnaire.

The Choice Questionnaire was presented in May 1983 to a representative sample of the Dutch population aged 18 years and older. For this study, the Dutch Gallup organization NIPO took a random sample of the Dutch population.

In our study into the effects of the Choice Questionnaire two other types of questionnaire were also presented. Below we will discuss the design of these questionnaires. For these questionnaires, NIPO selected another random sample of the Dutch population.

At about 70% of the given initial addresses of each sample an interview took place (not at home 13%; refusals 15%; uninhabited, not a dwelling house 2%). Again in about 70% of the cases the 'random walk' resulted in an interview. There were 1574 respondents for the Choice Questionnaire, and 408 and 413 respectively for the other two questionnaires. The sample size for the Choice Questionnaire (one of the procedures in the GSD) was much larger than for the other two questionnaires (which were 'merely' for scientific purposes).

A check showed that the profiles of the respondents to the questionnaires did not differ with respect to education, age, sex, residence and composition of household. A comparison of the respondents' profiles with the national

census data showed that the respondents differed slightly from the Dutch population, mainly with respect to age. People in their thirties are somewhat over-represented and people in their seventies are somewhat under-represented in the surveys.

4. Results

Participation

Respondents are selected persons who participated in the face-to-face interview. *Participants in the Choice Questionnaire* were those respondents who carried out all the tasks required by the Choice Questionnaire booklet.

Nearly 7% of the respondents did not participate at all in the Choice Questionnaire. When the interviewer returned after a week, the booklet was completely blank. Not all of the other respondents filled out the Choice Questionnaire completely. For each task (evaluation of the consequences, determination of overall evaluations and answering of questions regarding choices), there was approximately an extra 3% of the respondents who failed to complete it. All the tasks were completed by 80.7% of the respondents (1243 persons).¹

Although the extent of the non-participation is not unimportant, the nature of the non-participation is particularly important with respect to the usefulness of the Choice Questionnaire: if the non-participation is 'random' the representativeness of the participants is not jeopardized. When studying the relationship between a number of background variables and the participation, we found that participation is not biased with respect to sex, residence and the composition of the respondent's household. However, participation is biased with respect to education and age. The participants were somewhat under-represented in the lower education categories and somewhat over-represented in the higher education categories. With respect to age, they were somewhat over-represented in the younger age groups and somewhat under-represented in the older age groups. The differences are small (explained variance in participation by these two variables: 5%).

The profile of the participants in the Choice Questionnaire thus differs to a limited extent from the profile of the Dutch population as a whole. The differences are partly due to the 'normal' bias in survey research, and partly caused by the extra requirements set by the Choice Questionnaire.

Informed choices?

To investigate whether the choice made by a respondent was based on the information provided, we checked whether his choice was consistent with his evaluations of the consequences of the options mentioned in the information provided.

A consistent choice is defined as choosing those three options which are the most attractive, where the attractiveness of an option is determined by a combination of the evaluations of the consequences of that option. We found that 68% of the respondents who filled out the Choice Questionnaire completely made a consistent choice and that they did so by trading off the positive and negative consequences of an option in a compensatory way ('addition of utilities decision rule'; the rule assumes an addition of the evaluations of the consequences, whereby the disadvantageous evaluations are given a negative value).

There is a slight effect due to respondent characteristics: 'cognitive ability' and 'involvement with the issue' were associated positively with the consistency of the choice. These variables, however, explain no more than 7% of the variation in consistency.

Evaluation of the consequences

Underlying the above reasoning is the assumption that respondents' evaluations of the consequences were based on the information provided. If this were not so the consistency between choice and evaluations is of little value. Respondents were of course free to express their own values and personal concerns when evaluating the consequences of the options, but a number of checks is possible.

When halo effects are found it is questionable whether the evaluations of the consequences are based on the information provided. A halo effect occurs when 'Individuals who favor an alternative tend to rate it high on all desirable attributes, while individuals who dislike the alternative tend to rate it low on all attributes' (Beckwith and Lehmann, 1975, 265). Halo effects indicate that respondents evaluate the consequences in the light of their existing preferences: the evaluations are then merely a proxy measure of the choice itself.

Halo effects result in high associations between the evaluations of the consequences of an option: supporters of the option give high (less negative) scores on all consequences, and opponents of the option give low (less high) scores on all consequences. An analysis of the evaluations shows that the correlations between the various consequences (per option) were very low

Table 2. Association between the judgements made of the consequences (per option)

	Average	Minimum	Maximum
Gas	0.24	-0.13	0.73
Oil	0.26	0.10	0.68
Conservation	0.08	-0.26	0.32
Coal	0.25	-0.12	0.72
Nuclear power	0.25	0.08	0.49
Wind energy	0.12	-0.13	0.49
Average	0.20		

Table shows Pearson's correlation coefficients. Data from Choice Questionnaire survey ($N = 1243$). In the calculation of the correlation coefficients, the evaluations rated as disadvantageous have a minus sign. Consequences marked 'unimportant' are given a zero value.

(see Table 2). The average correlation is 0.20. Three options (gas, oil and coal) do show higher correlations (see the right hand column). The reason for this is that these three options all have consequences of a similar sort: global climatic effects, atmospheric pollution and acid rain. These high correlations are of course not suspect. Since the correlations are of a very low order, the hypothesis of halo effects can be rejected.

A number of other checks were carried out to see whether the evaluations of the respondents were unusual in the light of the information provided. It was investigated, for example, whether respondents evaluated consequences which only had negative outcomes as advantageous, or vice-versa. Space does not permit a detailed discussion of these analyses here, but we concluded that in general the judgements are of good quality and were made in accordance with the information provided (see Neijens, 1987; Neijens *et al.*, 1988 for further details). A large majority of the respondents thus made a choice that was in accordance with the information provided.

Research into the effects of the Choice Questionnaire on the choices

In order to investigate whether the Choice Questionnaire had an effect on the responses, the choices made therein were compared with those made under a standard public opinion condition in which respondents made choices without any information being provided to them. The data for the latter situation were acquired from a second survey (see above). In this survey the choice problem (choose three options out of six) was presented immediately in a face-to-face interview. No information about the consequences of the options was given.

The respondents in both surveys faced the same decision problem: they could choose between 20 combinations of three energy options. The hypothesis that the distributions of the choices over these combinations in the

two surveys are similar had to be rejected ($\chi^2 = 95.94$; $df = 19$; $sign. = 0.000$; $N = 1543$).² Comparison of the choices per option in the two surveys shows that in a 'no information' situation respondents have a greater tendency to opt for the familiar sources of energy (coal and oil). Conservation, nuclear power and wind energy were chosen less frequently.

After the interview, the respondents in the public opinion situation survey were asked to fill in a questionnaire with 'more detailed questions'. Practically the same procedure as in the Choice Questionnaire study was followed: a booklet with (the same) information about the consequences of the options, presented on information cards, was left with the respondents and collected a week later. Respondents were asked to evaluate these consequences and (again) to make a choice ('second choice'). The information and the evaluation procedure were the same as in the Choice Questionnaire. However, respondents were not asked to give overall evaluations of the options as in the Choice Questionnaire.

A comparison of the first and second choices made by the same respondents in this survey showed the following. After reading and evaluating the information, 48% of the respondents made a different choice: 40% of the respondents made one change in the combination of the three energy options and 8% made two changes. None of the respondents changed all three options. The hypothesis that the distributions of the choices at both measurement points are equal (hypothesis of the equality of the marginal distributions – 'marginal homogeneity') can be tested by analysing the turnover table and investigating whether the 'symmetry model' deviates significantly from the 'quasi-symmetry model' (Bishop *et al.*, 1975; Hagenaaers, 1985). Analysis of the data shows that the hypothesis of marginal homogeneity has to be rejected: the distribution of the first choices made differs significantly from that of the second choices (likelihood ratio = 34.03; $df = 5$; probability = 0.000).³

From these comparisons it can be concluded that there are considerable differences between the choices 'with information' and the choices 'without information'. In the next section we will show that these differences are related to the information provided.

Aiding information processing: effects of different aspects of the Choice Questionnaire

Does the Choice Questionnaire lead to informed choices? And if so, what are the contributions of the different aspects of the Choice Questionnaire? Three aspects of the Choice Questionnaire were distinguished: provision of information, the evaluation of consequences task and the book-keeping sys-

Table 3. Percentage of consistent decisions under four conditions

Condition	% of consistent dec.	<i>N</i> (100%)
1. No information	37%	300
2. Information only	48%	299
3. Information + evaluations of the consequences	57%	300
4. Information + evaluations of the consequences + overall evaluations	68%	1243

N (100%): respondents who carried out the tasks given in the various conditions completely.

tem whereby the evaluations are totalled per option. We expect (see above) that only the provision of information may be inadequate and that the facilities to process information (evaluation of the consequences and the book-keeping system) are necessary to produce its effect.

To investigate this point we studied the consistency of the choices under four conditions (1) 'no information' condition, (2) 'information only' condition, (3) 'information with a request to evaluate the consequences' condition, (4) 'information with a request to evaluate the consequences and to provide overall evaluations of the options' condition.

The data in condition 4 were obtained from the Choice Questionnaire study. The data for the 'no information' condition (public opinion situation) and the 'information with a request to evaluate the consequences' condition were obtained from the survey introduced in the previous section. The consistency of the choices in the public opinion situation was determined by comparing them with the evaluations of the consequences of the options given in the booklet.

The data in the 'information only' condition were obtained on a questionnaire in which the information was presented in story form in a booklet but was otherwise the same as that in the Choice Questionnaire. The booklet was left with the respondents who were asked to read through it. They were not asked to evaluate the individual consequences or make overall evaluations of the options, but were asked to make a choice after they had read the booklet. They were then requested to evaluate the consequences of the options, as in the Choice Questionnaire. This allowed subsequent investigation of the consistency between their choices and their evaluations of the consequences.

Table 3 shows that when no information was provided on the energy options, 37% of the respondents made a consistent choice (information presentation condition 1). A majority of the respondents thus made a choice that did not agree with their own judgement of the consequences of the options. Comparing information presentation conditions 1 ('no information')

and 2 ('information only') we see that the provision of information has an effect: the percentage of consistent decisions is 11 percentage points higher in condition 2. The task of evaluating the consequences also has an effect: the percentage of consistent decisions in condition 3 ('information + evaluations') is 9 points higher than in condition 2. The determination of overall evaluations also has an effect on the percentage of consistent decisions: in condition 4 it is 11 points higher than in condition 3.

From these data we conclude that all three aspects of the Choice Questionnaire contribute to its effect on the use of information. The contribution of each aspect is nearly the same (about 10 percentage points).

We also see that the provision of information alone is not enough. Although the percentage of consistent decisions rose by 11 percentage points in condition 2, the majority of the respondents still failed to make a consistent decision. The figure for the 'no information' situation can be improved a further 20 percentage points by giving the respondents two extra tasks: evaluation of the consequences and determination of overall evaluations.

5. Conclusions

The Choice Questionnaire is a useful instrument for collecting informed opinions – in other words, opinions based on information regarding the matter at hand – that are representative of a population. Although not all respondents filled out the Choice Questionnaire completely, there is only a slight difference between the profile of the respondents who did and that of the Dutch population as a whole. Furthermore, a large majority of the participants in the Choice Questionnaire made a choice based on the information provided.

The Choice Questionnaire had an effect on the choice-making process of the respondents. After completing the Choice Questionnaire a large number of respondents made a different, qualitatively better choice – in other words, a choice more in agreement with their evaluation of all aspects of the problem covered by the information. The effects produced by the Choice Questionnaire stem from the information presented as well as from the evaluation procedures used in the processing of this information.

As regards the differences between respondents, those more subjectively involved with the issue and those with greater cognitive ability were more likely to complete the questionnaire and also to judge and choose in accordance with the information provided more frequently. The extent to which differences between respondents can be explained by the degree of involvement and capacity variables is limited.

It can thus be concluded that the Choice Questionnaire is a useful instrument for collecting informed opinions in citizen participation procedures and in public opinion polls on complex issues. For an optimum effect, none of the elements of the Choice Questionnaire (information and evaluation procedures) should be omitted.

Notes

1. 33 persons satisfied all criteria, but as it was not possible to determine whether they filled out the Choice Questionnaire themselves, they are left out of consideration. Whether or not the respondents filled in the questionnaires themselves was determined when the interviewer collected the completed questionnaire and asked some additional questions regarding the filling in thereof.
2. The number of respondents satisfying the response criteria of the second survey was 300. These respondents answered the choice questions in the face-to-face interview completely and filled out the booklet part (see below).
3. Because a large number of cells in the 20 by 20 turnover table are empty, the categories least chosen (less than 5%) are combined. The figures presented show the results of the analysis of the resulting (6 by 6) turnover table.

References

- Beckwith, N.E. & D.R. Lehmann (1975) The importance of halo effects in multi-attribute attitude models. *Journal of Marketing Research* 12: 265–275.
- Bishop, Y.M.M., S.E. Fienberg, & P.W. Holland (1975) *Discrete Multivariate Analysis: Theory and Practice*. Cambridge, Mass.: The MIT Press.
- Converse, P.E. (1964) The nature of belief systems in mass publics. In D. Apler (ed.), *Ideology and Discontent*. New York: Free Press.
- Edwards, W. (1977) Use of multiattribute utility measurement for social decision making. In D.E. Bell, R.L. Keeney, & H. Raiffa (eds.), *Conflicting Objectives in Decisions*. New York: Wiley.
- Hagenaars, J.A.P. (1985) Loglineaire analyse van herhaalde surveys. *Panel-, trend-, en cohortonderzoek*. PhD dissertation, University of Brabant.
- Keeney, R.L. & H. Raiffa (1976) *Decisions with Multiple Objectives: Preferences and Value Tradeoffs*. New York: Wiley.
- Neijens, P. (1987) *The Choice Questionnaire. Design and Evaluation of an Instrument for Collecting Informed Opinions of a Population*. Amsterdam: Free University Press.
- Neijens, P., J.A. de Ridder, & W.E. Saris (1988) Variation in response functions and prescription for information integration. In W.E. Saris (ed.), *Variation in Response Behavior: A Source of Measurement Error in Attitude Research*. Amsterdam: Sociometric Research Foundation.
- Slovic, P. & D. MacPhillamy (1974) Dimensional commensurability and cue utilization in comparative judgment. *Organizational Behavior and Human Performance* 11: 172–194.
- Verba, S. & N.H. Nie (1972) *Participation in America*. New York: Harper and Row.