

Center for Demography and Ecology

University of Wisconsin-Madison

**NSFH Experience with the Use of
Self-Administered Questionnaires**

James A. Sweet

NSFH Working Paper No. 22



NSFH Experience with the Use of Self-Administered Questionnaires

James A. Sweet

Center for Demography and Ecology
University of Wisconsin
4412 Social Science Building
Madison WI 53706

March 1990

The National Survey of Families and Households was funded by grant HD 21009 from the Center for Population Research of the National Institute of Child Health and Human Development, and the analysis was supported under HD 22433, using facilities provided under HD 05876.

NSFH Experience with the Use of Self-Administered Questionnaires

James A. Sweet

This paper describes and evaluates the use of self-administered questionnaires as a part of the interview with the primary respondent in the National Survey of Families and Households. Self-administered questionnaires were also used with the spouse or cohabiting partner of the primary respondent and also with the householder in cases where the primary respondent was an adult son or daughter or other relative of the householder. Here, however, we discuss only the self-administered questionnaire completed by the primary respondent as a part of the main interview. The first section describes how the self-administered questionnaires were used in the NSFH. This is followed by an analysis of differentials in the probability that the interviewer had to read the questionnaire to the respondent because of illiteracy, vision impairment, or other reasons. Then we examine patterns of non-response, including the level of non-completion of the various sub-parts of the questionnaire and patterns of item non-response on two portions which were to have been completed by all respondents.

Reasons for Using Self-Administered Questionnaires in the NSFH

We decided to use self-administered questionnaires during the course of the personal interview for several reasons:

1. Having the more sensitive portions of the interview self-administered ensures greater privacy, and should help to improve data quality. In a household interview it is not possible to ensure that only the respondent and the interviewer will be present (or within hearing range) during the interview. There are some questions, such as those on conflict between spouses or the respondent's perceived likelihood of separation or divorce, that require privacy to maximize data quality (and, in some cases, to permit the interview

to continue).

2. Some question sequences, such as the series on sex-role and family attitudes or the semantic differential on role performance, can be done more efficiently in self-administered format. We have timed this series using both an interviewer and self-administration; it goes considerably more quickly when self-administered.

3. It may be easier for some respondents to answer questions involving the use of multi-point scales if they can actually look at the scale.

4. In a long interview, mixing self-administered and interviewer-administered sections help to break up the monotony of the interview and improve respondent morale. It also provides a welcome break for the interviewer.

What is the Content of the Self-Administered Questionnaires

The self-administered questionnaire is divided into 13 sections. We will refer to these sections as sub-parts. Three of these sub-parts were completed by all respondents, and the remaining ten are completed only when they were relevant - e.g., if the respondent was married, or had an adult child living in the household, or was cohabiting. The average number of parts completed by a respondent was 5.54. The following table lists the subject of each SE; defines the population for which it each was relevant; and gives the approximate proportion of respondents for whom it was relevant.

SE#	Topic	Applicable Population	Percent of sample
SE-1	Household tasks	All respondents (except 17 cases living in dorms/ barracks)	99.9
SE-2	Well-being, role performance, health social support, social participation	All respondents	100.0
SE-3	Feelings and plans regarding living in parental household	Respondents living in parental household	5.7
SE-4	Experience of marital separation	Respondents experiencing marital separation in past 10 years	17.5
SE-5	Feelings about marriage and cohabitation	Unmarried, non-cohabiting respondents, age 35 younger	18.4
SE-6	Couple relationship; feelings about marriage and cohabitation	Cohabiting respondents	5.2
SE-7	Couple relationship	Married respondents	52.9
SE-8	Considerations affecting decision to have a child	Females age <40; Males with spouse/partner age <40 or age <45 and no spouse/partner	56.0
SE-9	Parenting and step-parenting	Respondents with child or step-child under age 5 and none age 5-18 in household	10.4
SE-10	Parenting and step-parenting	Respondents with child or step-child age 5-18 in household	33.3
SE-11	How having adult child in household works out	Respondents with child or step-child age 19+ in household	8.2
SE-12	Quality of relationship with children and step-children	Respondents with living children or step-children	75.6*
SE-13	Relationship with parents and siblings; attitudes/opinions	All respondents	100.0

* This is the percent actually completing SE-12. Because of ambiguity of the precise meaning of the word "children," it proved impossible to precisely designate who should have completed SE-12.

How Were the Questionnaires Administered?

The first of these self-administered segments occurs very early in the interview. The interviewer reads an introductory statement that defines the task as she hands the questionnaire to the respondent:

"This booklet contains some forms that you can fill out on your own at different times during the interview. You won't do all the forms, just those appropriate for you. The first form, on Page 1, asks about who in your household normally spends time doing various household tasks. If no time is spent doing the task, write in zero.

Tell me when you are finished with this page."

In training interviewers, we asked them to watch to see if the respondent was having any difficulty with the task. In instances where the respondent was not sufficiently literate or for other reasons was not able to fill out the questionnaire on his/her own, interviewers were instructed to complete the questionnaire verbally or to provide assistance when requested.

Note that the directions to complete the self-administered sections are built directly into the routine administration of the interview. For example while interviewing a currently married respondent, the interviewer (following the skip instructions in the interview) comes to question 187. She reads the "question:"

187. "Please turn to page 35 in your booklet. Here are some questions about your marriage. Tell me when you are finished"

The self-administered questionnaire booklet was printed so that alternate sections were on contrasting white and yellow paper. This helped the respondent realize that he/she had completed the task and it helped the interviewer unobtrusively monitor whether the respondent was in the right place. There was also the instruction, "PLEASE TELL THE INTERVIEWER YOU ARE FINISHED," at the end of each part.

One major challenge in developing the self-administered questionnaires was to avoid complex skip patterns. We used the following strategies:

1. We tried to design the individual sections of the self-administered questionnaire so that all questions within the section would be answered by all respondents who received it.
2. When that was impossible, we tried to put questions that many respondents would skip at the end of the section, so that if the skip was missed, the respondent would be answering irrelevant questions, but no one would miss questions that they should be answering because of a missed skip.
3. When skips were necessary, we tried to avoid skips within a page. Most skips moved the respondent to the next page. This seemed to minimize misdirection.
4. When skips within a page were necessary, we used a system of arrows and boxes. Arrows went from where an answer was circled to a box containing the questions to which the respondent giving a particular answer should go next. This appears to have worked quite well.

Respondents Who Needed to Have the Questionnaire Read to Them by Interviewer

As noted above interviewers were instructed to administer the questionnaire orally if the respondent appeared to be having difficulty doing on their own. Unfortunately, we did not provide a place on the questionnaire for the interviewer to indicate that this had been done. However, ISR interviewers are trained to write notes in the interview whenever anything unusual or ambiguous occurs. After the data entry was completed, we had a clerk look through each questionnaire booklet for any comments that suggested that it might have been read by the interviewer. We found 890 cases, 6.8 percent of the

total, who definitely had the questionnaire read to them by the interviewer. The true proportion was undoubtedly somewhat higher than this, but we believe that this is a reasonably close estimate.

We have coded the reason specified by the interviewer for having to administer the questionnaire. In many cases the interviewer simply noted that it was read, but did not explain why. Following is a distribution of the reasons given by the interviewer.

	Number of Cases	% of Those Read
1. Physical disabilities (other than eyesight) (includes few "can't write" "can't write well")	54	6.1
2. Visually impaired (cataract, glaucoma, legally blind, etc.)	39	4.4
3. Weak eyesight ("have to read for R because of small print" "no glasses")	83	9.3
4. Lack of Literacy (R said "Can't read" or poor reading skills, "slow reader"	143	16.1
5. Lack of Literacy (R said "can't see" but interviewer thinks R can't read.)	16	1.8
6. Elderly, "too old to read"	30	3.4
7. R. said "not feeling well" (physically or emotionally) includes "didn't feel like it"	26	2.9
8. R. declined, said "did not feel like it", "too tired", refused to fill in unless interviewer helped	60	6.7
9. R. occupied (holding baby, preparing dinner, in middle of eye treatment, etc.)	38	4.3
10. R. confused about interview or unable to determine how to mark questions.	43	4.8
11. R. "could not do interview on his/her own" (reason not specified)	23	2.6
12. R. could not read well AND eyesight problems	4	0.4
96. No specific reason listed	308	34.6
97. Telephone Interview	22	2.5
98. Comments not readable	1	0.1
	890	100.0

The proportion of respondents who had the self-administered questionnaire read to them by the interviewer varied by age, education, race/ethnicity, and other characteristics. Table 1 shows the percent read by the interviewer for subpopulations. The

proportion that were read increases with age beyond age 50. Twelve percent of respondents in their 60s, 21 percent of those in their 70s, and a third of those in their 80s required the interviewer to read the questionnaires to them. Persons with less than a high school education were also much more likely to require that the questionnaire be read. One-tenth of respondents who dropped out of high school and more than a quarter of those who did not attend high school had the questionnaire read to them.

Six percent of majority whites, ten percent of blacks, and 11 percent of Mexican Americans had the questionnaires read to them. Not surprisingly, the foreign born had higher than average proportions read. This is probably due to the fact that many immigrants have little education, and many cannot read and write English very well.

There is only a small sex difference; men are slightly more likely than women to have had the questionnaire read.

Table 2 presents reports the results of a multivariate analysis (multiple classification analysis) of the proportion requiring that the questionnaires be read to them. The age and education differentials are attenuated somewhat. Respondents with little education are more likely than average to be elderly and also more likely to be Black or Mexican American. After adjusting for these confounding effects, persons who are age 60 and older and persons with less than a high school education are substantially more likely to have had the questionnaire read to them. The black white differential is reduced from 4.3 to 2.7 points and the Mexican American - white differential is reduced from 5.7 to 0.5 points. The small sex differential is increased by controls on other characteristics.

The disability variable is based on responses to a question, "Do you or anyone living here require care or assistance because of a disability or chronic illness?" This was followed by a question regarding who it is that requires care or assistance. If the

respondent mentioned him/herself, he/she is regarded as "disabled." Those respondents who "required care or assistance" were about 8 points more likely than average to have required the questionnaire to be read.

There is an additional issue that should be mentioned. These analyses are based on those respondents who were actually interviewed. There are other persons who fell into the sample, but who could not be interviewed because of illness or disabling conditions. It is likely that if an interview had been conducted, many of these persons would also required that the questionnaire be read to them. This is important, particularly when thinking about the coverage of the very elderly. We have included some information about the "too ill to interview" sample members in an Appendix.

Table 1

Proportion of Respondents Completing the
Self-administered Questionnaires Orally

Age	
<30	2.5%
30-39	3.0
40-49	4.2
50-59	8.6
60-69	12.4
70-79	20.7
80+	34.3
Total	6.8
Education Differences	
0-4	35.6
5-8	24.3
9	14.1
10	11.3
11	10.5
12	4.3
13-15	2.4
16	1.7
17+	1.5
NA	14.5
Race/ethnicity differences	
Black	10.0
Non-hispanic White	5.8
Mexican American	11.4
Puerto Rican	8.3
Birthplace	
U.S.	6.4
Puerto Rico	10.3
Foreign	11.9
NA	15.2
Sex	
Male	7.2
Female	6.6
Marital Status	
Married	4.9
Separated	9.6
Divorced	5.3
Widowed	21.2
Married	4.8
Disability (from m29bp01-p4)	
Yes	6.1
No	21.2

Table 2
Differentials in the Proportion of Respondents Completing
the Self-Administered Questionnaires Orally
(mean = 6.8 percent)
Deviation from Mean

	N	Gross	Net1	Net2
Education				
0-4 years	265	29.0	22.8	23.6
5-8	1122	17.6	11.9	12.1
9	420	7.4	5.5	5.4
10	576	4.6	3.5	3.3
11	670	3.7	3.1	3.0
12	4873	-2.6	-1.9	-1.9
13-15	2696	-4.4	-3.0	-3.1
16	1126	-5.3	-4.0	-4.0
17+	1060	-5.4	-4.2	-4.2
NA	31	15.7	12.3	8.2
Age				
<30	3372	-4.4	-2.8	-3.0
30-39	3430	-4.0	-1.9	-2.0
40-49	1963	-2.7	-1.6	-1.6
50-59	1385	1.8	.5	.7
60-69	1359	5.5	2.9	3.1
70-79	975	14.0	8.0	8.3
80+	355	28.0	18.8	19.5
Race/Ethnicity				
Black	2356	3.2	2.2	2.2
Nonhispanic White	9307	-1.1	-.4	-.5
Mexican American	621	4.6	-.9	-.1
Puerto Rican	190	.5	-2.3	-2.9
Other	365	-1.7	-1.9	-.3
Marital Status				
Married	6850	-2.0	-1.0	-1.0
Separated	622	2.8	1.4	1.5
Divorced	1724	-1.5	.3	.2
Widowed	1337	14.4	3.4	3.4
Never Married	2306	-2.1	.4	.6
Sex				
Male	5127	.4	1.2	1.2
Female	7712	-.3	-.8	-.8
Disability				
No	12240	-.7	-.4	
Yes	599	14.3	7.5	
Place of Birth				
United States	11803	-.4	-.2	
Puerto Rico	126	3.4	-.9	
Foreign	877	5.0	2.8	
NA	33	8.3	5.5	

What Proportion of Respondents Completed the Questionnaires

One way to evaluate the "success" of the self-administered questionnaires is to look at the extent to which we were successful in getting high quality responses to the questions in them. There are several ways to evaluate this:

1. We can form a judgement of whether the overall pattern of responses appears to make sense - i.e., whether the data on specific subjects derived from the questionnaires appear to be valid; whether distributions replicate those obtained in earlier surveys and whether differentials "make sense," given what is known about the processes being measured.
2. We can examine the extent to which eligible respondents did not do a particular sub-questionnaire, or stopped before completing it.
3. We can examine the extent to which there is a significant amount of item nonresponse in the sub-questionnaires that were completed by a respondent.

1. Do the patterns of responses "make sense?"

We will spend little time on this point. We, and our colleagues at Wisconsin and elsewhere, have used data from many parts of the self-administered questionnaires, and have the sense that the data are of high quality.

Another piece of subjective evidence is based on the fact that we have read through hundreds of the self-administered questionnaires. In general this has convinced us that respondents took the task of completing the questionnaires very seriously, and did it with considerable care. We see little evidence that any significant numbers have (out of frustration, confusion or haste) raced through the questionnaires by randomly checking

responses or by skipping over questions. Some respondents did have difficulty with the skip instructions (which we had taken great care to simplify) and occasionally they misinterpreted a question, could not answer a question, or did not wish to answer a question. This, however, was the exception.

2. Failing to Complete Sub-parts.

A respondent could fail to complete a sub-part for several reasons.

A. Because of interviewer error, they may never have been told to do it.

B. They may have done the wrong sub-part, one that was really inapplicable, and failed to do one that they were supposed to have done.

C. For one reason or another they may have chosen not to complete the questionnaire, either because they did not wish to or were unable to do it

D. They may have started it, but stopped before completing it, either mistakenly believing that they were finished or refusing to finish it.

In this analysis, we are not able to deal specifically with reasons for failure to complete the questionnaires. We can, however, examine the degree to which specific sub-parts were not completed, and to whether individuals who failed to complete one sub-part also failed to complete others.

In the course of processing the questionnaires a "Completion Status" variable for

each of the sub-parts was entered. This is included in the data file as SE1STAT, SE2STAT . . . SE13STAT. The codes for this variable are:

1. Completed
2. Refused or Missing
4. Inapplicable
5. Terminated Before Completion
9. Entire Questionnaire Missing

Most of these are self-explanatory. The "9" code refers to 52 cases for which the entire questionnaire was never processed at ISR. We believe that most of these are questionnaires that were lost, probably by interviewers, before being returned to ISR. In some cases there may have been some difficulty that led the interviewer never to administer the questionnaires. Needless to say, the interviewer was not supposed to have done the interview without administering the questionnaire. The "5" code refers to sub-parts that were begun, but not completed. The respondent stopped before completing it; it does not refer to cases where the sub-part was completed with a lot of item non-response. This situation would be included as "Completed."

Table 3 shows the distribution of cases by completion status for each of the thirteen sub-parts.

Table 3

Distribution of Completion Status of Sub-parts of the NSFH
Self-Administered Questionnaires

(Restricted to cases for which the
individual sub-part was applicable)

Completion Status

	Com- pleted (1)	Miss- ing (2)	Termin- ated (5)	Not Rec'd (9)	Total	Number of Respondents for Whom Applicable
SE1	98.5	1.1	0.0	0.4	100.0	13000
SE2	95.3	0.6	3.7	0.4	100.0	13017
SE3	78.9	19.5	1.3	0.3	100.0	743
SE4	88.9	8.5	2.3	0.3	100.0	2284
SE5	92.3	3.1	4.0	0.5	100.0	2398
SE6	92.0	4.4	2.9	0.6	100.0	679
SE7	93.8	2.3	3.5	0.4	100.0	6881
SE8	93.7	5.8	0.1	0.4	100.0	7295
SE9	93.7	3.0	3.0	0.4	100.0	1351
SE10	92.4	4.2	2.9	0.5	100.0	4335
SE11	67.6	29.7	2.1	0.7	100.0	1072
SE12	96.3	3.1	0.0	0.5	100.0	9842
SE13	97.2	1.0	1.4	0.4	100.0	13017

There are only two of the sub-parts which were completed by less than 92 percent of the eligible respondents. Both of these were sub-parts relating to adult children living in the parental household. SE-3, for which there was an 79 percent completion rate, was filled out by adult sons and daughter living in the parental household. Very few of these were terminated in the middle; instead they were not completed at all. We suspect that this happened largely because the interviewer inadvertently skipped the instructions, which were in a box at the bottom of a page, after the interviewer figured out who the "tertiary respondent" was supposed to be and, if possible gave the tertiary respondent the questionnaire to fill out.

The most serious problem was with SE-11 which was to have been filled out by respondents who had adult sons or daughters living in the household. Only 68 percent of eligible respondents completed this sub-part. As it turned out, the whole sequence at the end of which that SE-11 was to be given to the respondent was the most difficult part of the interview for the interviewers. The low response rate can be attributed entirely to interviewer error that occurred because we did not do a good job of structuring the interview.

Of all the sub-parts that were applicable, 94.9 percent were completed. An alternative summary measure is the proportion of respondents who completed all of the questionnaires for which they were eligible. This proportion was 81.7 percent. Table 4 shows the distribution of respondents by number of applicable sub-parts and the number of sub-parts actually completed.

Table 4

Distribution of Respondents by Number of Self-Administered Questionnaires Which Were Applicable and Number Completed

Number of Sub-parts	Applicable Sub-parts		Sub-parts Completed: Percent Distribution
	Percent Distribution	Percent Completing All	
0			0.6
1			0.2
2			0.9
3	3.7	93.4	6.0
4	11.3	89.7	14.1
5	29.2	85.6	29.3
6	18.6	75.1	18.5
7	28.5	78.9	24.1
8	8.4	73.2	6.2
9	0.3	55.6	0.2
Total	100.0	81.3	100.0
Mean		5.83	5.54

Percent of Total Applicable that Were Completed = 94.9

Note: This table includes the 52 cases (0.4 % of the sample for which the self-administered questionnaire was lost.

Most of the respondents who failed to complete any sub-part were missing only one of them (see TABLE 5). Only 4.8% failed to complete more than one sub-part for which they were eligible. Note that "failure to complete" a sub-part includes parts that were not administered because of interviewer error, as well as parts that given to the respondent but not completed. Most of the latter were partially completed.

Table 5

Distribution of Respondents by Number of SE's for Which
They Were Eligible That Were Not Completed

(excludes the 52 cases that were lost)

Completed All		81.7
At least one not completed		18.3

1 not completed		13.6
2 not completed		2.5
3 not completed		1.2
4+ not completed		1.1

Total		100.0

Table 6 reports the results of a multiple regression analysis predicting the probability that a respondent did not complete all of the SE sub-parts for which they were eligible. We will focus on the last column which is a model including individual characteristics as well as whether or not the SE's were read to the respondent and the number of sub-parts for which the respondent was eligible. There is a modest education differential, with respondents with less than a 9th grade education having a lower than average completion rate and those with a college education having a slightly higher than average rate.

After controlling for the number of sub-parts for which they were eligible, there is a sharp increase with age in the proportion of respondents failing to complete at least one sub-part. Persons age 50 and older had a higher than average probability of missing at least one sub-part. Those under age 40 have a lower than average probability.

Net of other characteristics, married people are least likely to miss a sub-part, while widows and never married persons are most likely to have done so.

Blacks are about 2.5 points more likely than majority whites to have missed at least one sub-part. Mexican Americans had a level similar to that of blacks, while Puerto Ricans had a considerably higher level.

Men were about 3 points more likely than women to have failed to complete all sub-parts for which they were eligible.

Those who had the SE's read to them had a lower proportion with one or more sub-parts missing.

Finally, and not surprisingly, the more sub-parts for which the respondent was eligible, the lower the probability that they completed all that were relevant.

Table 6

Differentials in the Probability that a Respondent Failed
to Complete at Least One Applicable Sub-Part
of the Self-Administered Questionnaire
(Mean = 18.3 percent)

	N	Deviations			
		Gross	Net1	Net2	Net3
Education					
0-4 years	268	1.4	1.2	3.0	3.1
5-8	1128	1.5	3.0	4.0	3.4
9	425	.7	.8	1.2	.4
10	581	-.4	.2	.5	-.5
11	675	1.4	.8	1.1	-.1
12	4926	.5	.6	.5	.1
13-15	2720	-.7	-1.1	-1.3	-1.3
16	1132	-3.3	-3.5	-3.8	-1.9
17+	1058	-1.9	-2.4	-3.2	-1.0
NA	51	-	-	-	-
Age					
<30	3447	-.4	-.1	-.4	-4.8
30-39	3450	.9	1.0	.8	-4.1
40-49	1971	3.3	3.0	2.9	2.8
50-59	1389	1.0	.5	.5	5.8
60-69	1362	-3.7	-3.7	-3.5	5.1
70-79	982	-4.1	-3.9	-3.2	6.8
80+	363	-2.4	-1.9	-.4	10.1
Race/Ethnicity					
Black	2376	2.4	2.0	2.2	1.6
Nonhispanic White	9393	-1.2	-1.0	-1.0	-.8
Mexican American	626	3.9	2.3	2.3	1.4
Puerto Rican	190	8.5	7.3	7.0	6.6
Other	379	4.9	3.4	3.3	3.9
Marital Status					
Married	6856	-.1	-.0	-.1	-2.6
Separated	632	4.4	2.6	2.7	.9
Divorced	1729	2.5	2.2	2.2	.9
Widowed	1348	-4.1	-2.2	-1.9	3.9
Never Married	2399	-.4	-.9	-.9	4.4
Sex					
Male	5196	1.4	1.5	1.6	1.8
Female	7768	-.9	-1.0	-1.0	-1.2
Read to Respondent					
Yes	890	-6.1		-7.1	-6.3
No	12074	.4		.5	.5
Number of Sub-parts Applicable					
3	487	-11.8			-21.1
4	1461	-8.3			-15.8
5	3800	-4.0			-5.2
6	2397	6.0			5.3
7	3690	2.4			6.9
8 or 9	1129	8.8			13.3

Note: analysis does not include the 52 cases where the SE's were lost.

3. Levels of Item Non-response

Next we will look at differentials in the proportions of respondents who had relatively high levels of item nonresponse in the sub-parts that they completed.

We will focus on SE-2 and SE-13 which were to be completed by all respondents. These were the longest of the sub-parts. If respondent fatigue was a factor, it should have happened in these sequences, particularly in SE-13 which came at the very end of the interview. We have selected two sections of SE-2 and one section of SE-13 which all respondents should have answered to examine the extent of large scale item nonresponse.

The sections that were selected were:

1. Two questions that are fairly early in SE-2: an overall assessment of their own health and a question asking whether or not anyone in the household has a drug or drinking problem. This latter question might have been perceived as threatening to some respondents.
2. A series 25 questions later in SE-2 asking about social activities, participation in various types of organizations, and to whom they could turn to for help if they had specified problems. These are not very threatening; the organizational participation and social activities might have been regarded as "irrelevant" or "uninteresting" to some respondents.
3. A section of SE-13 at the very end of the very end of the interview, where respondent were asked for responses to a series of family attitude items, along with 2 items relating to desired family size and desired hours worked for the respondent. (Two of these items which were contingent on being a parent or being employed were not included as part of this set.) 0

The distribution of non-response to these sets is summarized below:

2 Items in SE-2 (self-assessment of health and whether anyone has drug/drinking problem)

88.9% Answered both items
 6.1% One answered, other not answered
 5.0% Missing Both Items
 1.2% "Completed"
 0.6% "SE Missing"
 3.2% "Terminated"

If one of these item was missed, it was much more likely to be the drug/drinking problem item.

25 Items in SE-2

78.2% All items completed
 8.2% Missing 1 item
 2.2% Missing 2 items
 2.0% Missing 3 items

 1.9% Missing 4-12 items
 2.8% Missing 13-24 items
 4.7% Missing all 25 items
 0.8% "Completed"
 0.6% "SE Missing"
 3.3% "terminated"

25 Items at end of SE-13

86.6% All items completed
 5.7% Missing 1 item
 1.5% Missing 2 items
 0.4% Missing 3 items

 1.2% Missing 4-12 items
 1.0% Missing 13-24 items
 4.7% Missing all 25 items
 0.8% "Completed"
 0.6% "SE Missing"
 3.3% "terminated"

Note: the 52 cases where the entire SE Questionnaire was missing are not included.

We can conclude that:

1. The great majority of respondents answered all items in each of these sections.
2. In the two long segments of items considered, a large share of those who did not complete every item skipped only one or two of them. This could have been due to haste, uncertainty about the intent or meaning of the item, ambivalence about the answer, or to a data entry error.
3. There may have been as many as 6 percent of respondents who evidently found the task of completing the questionnaires too difficult, or sufficiently ambiguous or alienating that they failed to complete the sub-part or skipped a significant number of items.

Next we turn to a regression analysis of differentials in the probability of satisfactorily completing these sequences. The numbers shown in Table 7 are net deviations from the grand mean in the probability of answering virtually all of the items. The dependent variable equals 100 if fewer than 4 of the 25 items were not answered; otherwise it equals 0; in the case of the 2 items in SE-2 it equals 100 if both items were answered and 0 if one or both were not.

Differentials in non-response to these items were remarkably small. Respondents under age 50 had a somewhat lower level of non-response than those in their 50's, while persons aged 60 and older and especially age 70 and older had a higher level of non-response. Education is related to non-response on these items. The very lowest education groups had average or lower than average levels of non-response, probably because those with greatest difficulty had the questions read to them by the interviewer. Beyond 9 years of education, there tends to be a very modest decrease in non-response with increased education. Blacks and Mexican

Americans had a slightly higher rate of non-response on these items than majority whites. Widowed persons had a slightly higher rate of non-response. There was no difference by sex.

Table 7

Differentials in Having a Low Level of Item Non-response
on SE-2 and SE-13 Series: Net Deviations from Mean

(The dependent variables are missing fewer than four of
the 25 items; missing neither of the two SE-2 items)

	25 items SE-2	2 items SE-2	25 items SE-13
Grand Mean	90.6	95.0	94.2
Education			
0-4 years	2.9	1.6	.4
5-8	1.2	.9	-.2
9	-3.9	-.8	-3.0
10	-1.5	.7	-1.8
11	-1.0	-1.0	-.6
12	-.5	-.4	-.4
13-15	.5	.0	.7
16	2.5	1.6	2.3
17+	-.3	-.4	2.0
NA	-8.8	-9.1	-37.5
Age			
<30	3.2	.6	1.5
30-39	2.0	.3	.9
40-49	1.0	-.2	1.2
50-59	-2.0	-.3	-1.2
60-69	-5.0	.1	-1.8
70-79	-8.6	-1.9	-4.3
80+	-4.0	-1.1	-6.7
Race/Ethnicity			
Black	-1.5	-.5	-1.5
Nonhispanic White	.9	.4	.8
Mexican American	-4.1	-.3	-3.2
Puerto Rican	-10.6	-7.8	-3.1
Marital Status			
Married	-.2	.3	-.7
Separated	1.3	.4	.9
Divorced	.8	-.3	1.0
Widowed	.9	.5	2.1
Never Married	-1.0	-1.2	-.1
Sex			
Male	.2	.0	-.1
Female	-.1	-.0	.1

CONCLUSION

The way in which self-administered questionnaires were used in the National Survey of Families and Households was quite unusual. There were thirteen different sub-parts which the interviewer asked the relevant respondents to complete at different points during the interview. These were referenced by general subject and page number within the questionnaire booklet in "questions" read to the respondent by the interviewer.

We conclude that the use of the self-administered questionnaire in the NSFH was quite successful. The great majority of respondents were able to, and did, complete them without difficulty. In training interviewers, we told them that they should, where necessary, read the questions to the respondent. This was done in about seven percent of the interviews, primarily to respondents with very little education or who were very old. This appeared to have largely solved the problem. There were age and education differences, but only small ones, in the proportion completing all applicable sub-parts of the questionnaire and in the level of item non-response on SE-2 and SE-13. It appears that, apart from those to whom the questions were read by the interviewer, about five to seven percent of respondents had some difficulty with the questionnaire. It is possible, if we had asked interviewers to more closely monitor the respondent while they were completing the questionnaires, that some of these difficulties could have been avoided. However, some of this problem was due to poor

The two places where there was a low level of completion of questionnaire sub-parts was in the way in which we laid out the questionnaire. Respondents could only complete the questionnaire sub-parts that they were instructed to do. In future applications of these procedures, we will try to be more careful in laying out the interview so that it is more difficult for interviewers to miss the instructions to administer the questionnaire sub-parts.

Although we cannot demonstrate it quantitatively, there is every indication that the information obtained in the self-administered questionnaires is of high quality. It appears that we managed to obtain better reports on many of the more sensitive matters using the questionnaires than would have been possible in a verbal form.

APPENDIX

Not in Sample Because "Too Ill to Interview"

We have looked at the screening forms for all non-interviewed cases with a final result code of "too ill to interview." There was a total of 302 such cases. (This analysis is based on 277 of them whose screening forms have been located.)

Note that even this is probably only a subset of all persons who should have been in the sample, but were too ill to interview. These are cases for which a screening form was completed. Contact was made with the household, and after listing all household members on the screening form, it was determined that the person selected as respondent was too ill to interview. Others who are living alone, persons who live with other household members but who wish to be left alone, and persons who are hospitalized at time of initial contact may not be likely to get this final result code - i.e., they were probably given a code of "Refused Screening," "Refused Interview," "R selected, not interviewed."

The next section describes what we know about these people with a final result code of "too ill to interview."

Table A compares the age distribution of these respondents with those with whom we completed an interview. The last column shows the percent of persons who "should have been interviewed" who were coded as too ill to interview. ("Should have been interviewed" is defined as $\text{too ill to interview} / (\text{interviewed} + \text{too ill to interview})$). This is a small proportion - less than one percent up through age 50 and only about 2 percent at ages 50

through 64. It increases to 6 percent for ages 70-79 to 14 percent at ages 80-84, and to 22 percent for ages 85+. As previously noted, these are surely underestimates of the true levels. What is clear from these estimates is that this is not a problem for persons under age 65, but it is probably a serious problem for the representativeness of our sample of persons age 65 and older, and especially for persons over age 75.

Table A

Comparison of Age Distribution of Respondents Who Were "Too Ill to Interview" with Those Who Were Interviewed

	Too Ill to Interview		Interviewed % Distrib	% of Total Respondents Who Were Too Ill to Interview
	N	% Distrib		
<30	18	6.5	26.6	0.5
30-39	12	4.3	26.6	0.3
40-44	7	2.5	9.1	0.6
45-49	2	0.7	6.2	0.2
50-54	10	3.6	5.6	1.3
55-59	16	5.8	5.1	2.4
60-64	11	4.0	5.3	1.6
65-69	26	9.4	5.2	3.7
70-74	32	11.6	4.1	5.6
75-79	27	9.7	3.4	5.8
80-84	37	13.3	1.7	14.1
85+	40	14.4	1.1	22.2
"old"	4	1.4		
NA	35	12.6	0.0	
Total	277	100.0	100.0	2.2

The following is the distribution of the nature of the illness or disability that prevented the interview. In many cases several conditions were mentioned; in those cases we have tried to classify by the most "serious" or the most specific. The younger respondents who were too ill to interview tended to be mentally incompetent or mentally ill. Those who were "ill" without any specification were mostly age 75 or older. The specific diseases seem to be more characteristic of the "younger" elderly persons - 55-69.

	Number of Cases
"Ill"	70
Mentally Ill	16
Senile	38
Mentally deficient	35
Respiratory Disease	2
Heart Disease	15
Parkinson's Disease	2
Cancer	20
Stroke	25
Deaf/Hearing Impaired	17
Alzheimer's Disease	7
Spouse Ill	2
"Hospitalized"	3
Blind	6 (most have other conditions too)
Other Specific	1
Alcoholic	2
Can't Speak	2
Dead	10 (evidently were ill at time of contact and died by the end of the field period)
No explanation	10
Total	272

Center for Demography and Ecology
University of Wisconsin
1180 Observatory Drive, Rm. 4412
Madison, WI 53706-1393
U.S.A.
608/262-2182
FAX 608/262-8400
comments to: sweet@ssc.wisc.edu
requests to: cdepubs@ssc.wisc.edu