

METHODOLOGICAL RESEARCH IN THE CONSUMER
EXPENDITURE SURVEY PROGRAM

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ABSTRACT

This paper reports on two research projects involving the CE Diary Survey. One project, almost completed, examines the attitudes and record-keeping behavior of diary respondents. The other project, still in the data-collection phase, is an experiment to evaluate alternative diary formats. The paper discusses the reasoning which led to these projects and various aspects of their designs.

INTRODUCTION

Survey methods can always be improved. The Consumer Expenditure Survey Program supports ongoing methodological research designed to improve the quality of the CE data. This paper reports on two such research projects involving the CE Diary Survey. One project, almost completed, examines the attitudes and recordkeeping behavior of diary respondents. The other project, still in the data-collection phase, is an experiment to evaluate diary formats.

The CE Diary Survey was designed to collect all of the daily expenditures of sampled consumer units over two consecutive weeks. A consumer unit is defined as one of the following: (1) the collection of all members of a household who are related by blood, marriage, adoption, or other legal arrangement; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in a permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons who live together and pool their income to make joint expenditure decisions. To be considered financially independent, at least two of the three major expense categories (housing, food, and other living expenses) have to be provided by the respondent.

The diary is especially effective for gathering information about small, frequently purchased items which are normally difficult to recall. These expenditures include grocery items, meals eaten out, household supplies, inexpensive articles of clothing, and personal care products and services. In addition to expenditures, data are also collected on the income, work experience and demographic characteristics of consumer unit members.

Each year data are collected from approximately five thousand consumer units in more than one hundred primary sampling units (PSU's) throughout the country. The sample is designed to be

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representative of the national, noninstitutional population. Besides the population residing in regular housing, persons residing in selected group quarters, such as college dormitories, are also represented. Weights are assigned to each consumer unit in the survey in order to provide estimates for the U.S. population.

RESPONSE ERROR IN THE DIARY

The program of research described here is intended to reduce response error, in particular response bias. We believe that most response errors in the diary come in the form of underreports of expenditures. It is difficult to imagine an individual recording more items than were purchased or consistently overreporting the price of items, but the failure to report all items is quite likely given the time and effort required to keep the diary. There is substantial evidence to support this assertion. Sudman and Ferber [3] found that the estimates from consumer diaries recorded by hand were less than those obtained using taps recordings, and estimates of food expenditures from the CE diary were below those from the National Accounts in both the 1972-73 and 1980-81 periods [2,6].

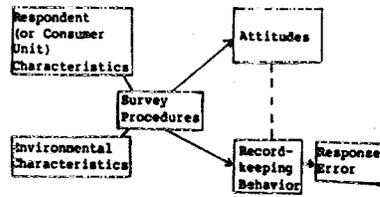
Response errors can contribute either to the bias or variance in estimates. There are other nonsampling errors which also can increase the total error in a survey and are not included in the sampling variance given in published reports.

These errors include sampling bias, clerical errors and processing errors. We have concentrated on response error because we believe this form of nonsampling error represents the greatest threat to the integrity of our expenditure estimates. We are already using supplemental sampling frames, weighting and imputation to correct for sampling bias; and clerical and processing errors are more likely to be random than are response errors.

APPROACH TO THE STUDY OF RESPONSE
ERROR

Response errors occur at the micro level and can be viewed as outcomes of the survey process. Figure 1 provides a picture of this process for the CE diary. The elements found here are similar to those found in other survey processes. One element which is not the same as in the typical survey situation is the respondent's record-keeping behavior. Usually the respondent's behavior is confined to thought processes and verbal responses. In the diary survey, however, the respondent has a more active role.

FIGURE 1. Diagram of the Survey Process Leading to Response Error



We can see from this diagram that respondent (or consumer unit) characteristics, in combination with environmental circumstances and the intervening survey procedures (including interviewer characteristics), influence both the respondent's attitudes toward the survey and his or her record-keeping behavior. The attitudes and record-keeping behavior (both thought processes and physical actions) are collateral in that they occur at approximately the same point in time. Attitudes are thought processes, but they are not a part of record-keeping behavior. To make this point more clearly, attitudes are not responsible for the outcome of the survey process; the record-keeping behavior is. Obviously, in many cases, attitudes and recordkeeping behavior coincide; but there may be a number of instances where this is not true.

As a first step toward the reduction of response error in the diary survey, we have to determine the causes of response errors. Once the causal factors are identified, we can develop new survey methods for overcoming their effects. In order to identify these factors, we have to understand how the antecedent elements in the survey situation interact to affect both attitudes and record-keeping behavior. We then can complete our understanding of the causal sequence leading to response errors by examining the relationships between particular behaviors and response errors. Since response errors occur at the micro level, we would like to carry out our studies at that level. To this end, we are engaged in research to define measures of an individual respondent's response error [5]; but we also are interested in conducting aggregate analyses of the expenditures themselves by the demographic, attitudinal and behavioral variables. The remainder of this paper discusses two research projects which will provide us with our first information about the causal sequence outlined above.

THE SUPPLEMENTAL DIARY SURVEY: UNIVARIATE DISTRIBUTIONS

The causal sequence leading to response error is extremely complicated. We have designed our studies to build on one another until we are able to analyze the survey process in its entirety. I have already mentioned the work we are doing to develop measures of response error. Another study focuses on the role of attitudes and record-keeping behavior. The data for this project came from a supplemental survey administered to the diary respondents and interviewers in the second quarter of 1984 at the conclusion of the second diary week.

This questionnaire, found in the appendix, was designed to measure the feelings and behaviors associated with keeping the diary. Some of the information also can be used to establish the environmental context.

Before proceeding with a discussion of the supplemental survey, let me mention the major drawback to a survey of this kind--social desirability effects. Most of the respondents are aware of the recommended method for keeping the diary. They are also aware of the kinds of attitudes which will be viewed in a favorable light. Therefore, there may be a tendency for respondents to give false answers in the socially desirable direction.

With this in mind, I want to turn to a review of the initial findings from the supplemental survey, some of which are presented in Table 1. One of the most important findings is that almost twenty percent (215) of the respondents completed at least one of the diaries by total recall. This means that no entries had been made in the diary during the week so the interviewer had to record as many of the previous week's expenditures that respondent could recall. The extent of recall poses an obvious threat to the quality of the data received from the diary survey. The fact that so many respondents completed the diary by recall complicates our analysis because they could not be asked most of the questions on the supplemental survey.

A potential problem with this type of survey is that all family members may not report their expenditures to the person keeping the diary. However, roost (848) of the CU's with more than one person indicated expenditures by members other than the record keeper were included; and' ' slightly more than 708 of these respondents said that the expenditures were reported daily.. Another 158 received reports every 2 to 3 days. Unfortunately, we do not know how complete the reports were.

In order to adequately evaluate the respondent's reports, we asked whether the expenditures for the two-week diary period were about what the CU usually spent. Forty percent of the respondents said that these two weeks did not give an accurate indication of their usual expenditures. Almost 758 of these respondents said their reported expenditures were lower than usual while 258 said they were higher. The large portion falling in the "lower" category may indicate an attempt by some respondents to misrepresent underreporting.

When we place a diary, we recommend that the respondent record expenditures on a daily basis to insure that none are forgotten. As a check on how closely respondents follow these instructions, they were asked how often expenditures were usually recorded. About 708 said they recorded expenditures immediately after they occurred or at the end of each day. Two thirds of these respondents said they never entered an expenditure after the day it occurred. As for those respondents reporting a delay in

recording expenditures, the reasons most often given were that they forgot, they were busy, or they were out of town.

When asked how they felt about keeping the diary, a number of respondents thought that the size of the diary was awkward, that the task required too much time and effort, and/or that interest in the diary declined over the two weeks. However, somewhat larger proportions felt that keeping the diary was enjoyable and/or beneficial. A smaller group of respondents found it difficult to obtain expenditures from other members of the CU.

Only about a quarter of the sample had any suggestions for improving the diary. While there was a variety of these suggestions, the most common involved changing the diary format. For instance, several respondents felt that the weight and quantity fields should be eliminated.

We also asked the interviewers to give their opinions of the attitudes and behaviors of the respondents. Almost a third of the time, the interviewer reported the respondent was reluctant to agree to keep the diary. According to the interviewer's opinion, almost a quarter of the respondents did not make a conscientious effort. These findings appear to coincide with the fact that nearly 208 of the diaries required a recall interview. Impressions about the respondents' conscientiousness usually were gained from conscientiousness usually were gained from or from statements made by the respondent.

TABLE 1. Unweighted Frequency Distribution for Selected Variables from the Supplemental Diary

Method of Diary Completion (N=1184)	How Often Expenditures Recorded? (N=961)
By Total Recall 18%	End of Each Day 57%
By Respondent 81	End of Week 6
No Answer 1	Every Few Days 16
	Immediately After 15
	Expenditure Occurred
	Other 6
Other CU Members Reporting (N=661)	Feelings About Diary (N=969)
Yes 84%	Size Awkward 20%
No 15	Too Much Effort 22
Don't Know 1	Enjoyable 29
	Beneficial 27
	Boring 11
	Lost Interest 15
Frequency of Other Members Reports (N=550)	Hard To Get Others' Reports
Daily 71%	Not Enough Space 2
At End of Week 6	Other 14
Never 7	
Other 1	
Were Expenditures Representative? (N=1153)	Interviewer's Impression of Respondent (N=1149)
Yes 50%	Eager (or Cooperative) 50%
No 40	Reluctant 33
Don't Know 4	Don't Know 17
How Expenditures Unrepresentative? (N=399)	Did Respondent See as Conscientious? (N=1151)
Higher 27%	Yes 67%
Lower 73	No 25
	Don't Know 8

*The total N is 1184, but percentages are based on the number of respondents for each question.

between a respondent's attitudes toward the diary and his or her record-keeping behavior. As I pointed out then, behavior is what we must change in order to improve our estimates even though changes in attitudes and behavior will often coincide. I want to focus now on the relationship between attitudes and behavior found in the supplemental survey. This analysis will be potentially very useful for differentiating respondents with respect to the accuracy of their weekly expenditure reports. Complicating this effort is; again, the fact that respondents completing the diary through total recall could be asked only a few of the questions on the survey. I will deal with these respondents both separately and in conjunction with those who did record expenditures in the diary.

Because a number of items on the supplemental questionnaire were used to gather information about attitudes and behavior, a method was needed for summarizing these data so that concise statements about the relationship between attitudes and behavior could be made. Seven questions were chosen for use in forming an attitude scale. These questions are listed in Table 2 along with an explanation of how they were recoiled to create the scale. The five behavioral items used to develop the behavior scale are also listed in Table 2. Both respondent and interviewer reports; but, by and large, they are in agreement. The recorded values for each set of items were added together to produce scale values. The higher the value on either scale, the more likely it is that the respondent gave an accurate expenditure report.

TABLE 2. Items Used in the Formation of the Attitude and Behavior Scales*

Attitude Scale	Behavior Scale
Respondent Q. 10	Respondent Q. 8
Yes = 1	1 or 4 = 2
No = -1	2 = -2
Don't Know or Missing = 0	3 = -1
	5, 6 or Missing = 0
Respondent Q. 11-2	Respondent Q. 11-7
Checked = -1	checked = -1
not checked = 0	not checked = 0
Respondent Q. 11-3	Respondent Q. 11-8
checked = 1	checked = 1
not checked = 0	not checked = 0
Respondent Q. 11-4	Interviewer Q. 2
checked = 1	Yes = 2
not checked = 0	No = -2
Respondent Q. 11-5	Don't Know or Missing = 0
checked = -1	
not checked = 0	Interviewer Q. 4a
Respondent Q. 11-6	Total Recall = -2
checked = -1	Partial Recall = 0
not checked = 0	No Recall = 2
Interviewer Q. 1	
Eager or Cooperative = 2	
Reluctant = -2	
Don't Know or Missing = 0	

* Refer to the supplemental questionnaire in the appendix for the text of the questions.

THE SUPPLEMENTAL DIARY SURVEY: SUMMARY MEASURES

The Attitude and Behavior Scales

Earlier I spoke of the possible inconsistencies

Respondents who completed the diary by total recall were assigned the most negative value on each scale. This seemed entirely appropriate in the case of the behavior scale. As for the

attitude scale. I assumed their behavior indicated extremely negative attitudes toward the diary. We will see later, when these respondents are considered separately, that the assignment of these scale values may not have always been justified.

The Attitude/Behavior Typology

To further simplify the analysis, the scales were combined to form a four-category attitude/behavior typology. Greater weight was given to the behavior scale since, ultimately, the respondents must be judged by their behavior. Small positive values on the scale were considered to be negative as a way of compensating for social desirability effects. The method used for classifying respondents is given below:

- Category 1: Behavior ≤ 2 and Attitude ≤ 1
- Category 2: Behavior ≤ 2 and Attitude > 1
- Category 3: Behavior > 2 and Attitude ≤ 1
- Category 4: Behavior > 2 and Attitude > 1

This typology offers a contrast in respondent styles. The first category is composed of respondents with poor attitudes and poor record-keeping behavior. At the other extreme, in category four, are respondents who have the attitudes and behavior we desire. The middle categories are actually the most interesting. Category two includes respondents who express positive attitudes, but their behaviors do not coincide with these attitudes. In category three are respondents who have poor attitudes but desirable behavior. To emphasize the differences between these groups of respondents, I have given them descriptive names. These names along with the percentage of the sample of respondents falling in each category are found in Table 3.

TABLE 3. The Attitude/Behavior Typology (N = 1184)

Category 1 (Resisters)*	34%
Category 2 (Misleaders)	7%
Category 3 (Complainers)	21%
Category 4 (Accommodaters)	38%

*Over half of the respondents in this category completed the diary through recall.

The members in the first category are labeled "resisters" because their attitudes and behavior clearly show that they resisted keeping the diary. Respondents in category two gave a misleading picture of themselves. They display positive attitudes toward the diary, but their behavior indicates otherwise. Respondents in category three, on the other hand, were quite the opposite. They disliked keeping the diary although they kept it correctly. Category four is made up of what might be called "model" respondents. They seem to be extremely accommodating and often enthusiastic.

This typology was created in the belief that it would differentiate respondents in terms of how well they reported their expenditures. A simple test of this hypothesis using information contained in the supplemental survey is offered in Table 4. Remember that respondents were asked how their expenditures for the diary period compared to their usual expenditures. Clearly, the "accommodaters" were the ones most likely to report their expenditures were about the same as

usual or higher. The fact that the "complainer" said their reports were the same as usual gyre often than did the "resisters" and "misleaders" leads us to believe that, other than the "accommodaters," they provided the most accurate expenditure reports. Again, it is the behavior and not the attitudes which determine the nature of the expenditure report.

TABLE 4. Attitude/Behavior Typology and the Respondent's Comparison of Reported Expenditures to Usual Expenditures

Reported vs. Usual	Resisters (N = 400)	Misleaders (N = 84)	Complainers (N = 245)	Accommodaters (N = 455)
Same	46%	45%	49%	63%
Higher	1%	12%	12%	9%
Lower	7%	32%	31%	25%
DK/NA	46%	11%	7%	3%

*Many of these respondents were asked only if their reported expenditures were the same as usual and not the follow-up question ascertaining the direction of the difference.

Other differences in the table are less dramatic (except for the total-recall "resisters"); but if we combine the "lower" category with the "don't know/not ascertained" category, a pattern does emerge. These categories can be combined if we assume that a respondent gives a "don't know" answer or no answer at all in order to avoid the question and that the probable answer would have been "lower". When the percentages from these two categories are added; we get results which, as expected, are the opposite of those from the "same" category.

I have already stated that the assignment to category one of respondents who completed the diary through total recall may not always have been justified. As it turns out, a number of these respondents were elderly, so they may have been physically unable to keep the diary. We do not know what their attitudes were or whether they would have kept the diary properly if they could have. However, an indication of this possibility is gained by examining the opinions given by the interviewers about the attitudes and behaviors of these respondents. This information is found in Table 5. In almost twenty percent of the cases, the interviewer said the respondent had a positive attitude or made a conscientious effort to report expenditures. While these data should be viewed with some skepticism since the interviewer's perception may be in error, more than forty percent of these respondents did say their expenditure reports reflected their usual expenditure.

TABLE 5. Interviewers' Opinions of Respondents Completing the Diary Through Total Recall (N = 215).

	Opinion of Attitudes	Opinion of Behavior
Eager or Cooperative	18%	Conscientious 17%
Reluctant	65%	Not Conscientious 67%
DK/NA	17%	DK/NA 16%

The typology developed here provides us with a better understanding of our respondents, and we should gain further insights when we examine the expenditures of the four groups. The attitude/behavior typology also can be used in the comprehensive analysis of the survey process

pictured in Figure 1. The most striking finding from the present analysis is that attitudes and behavior are often inconsistent, especially in the case where negative attitudes are associated with positive behavior. Again, it is the respondent's behavior which we must change. However, in the process, we undoubtedly will affect attitudes; and this certainly will be a desirable outcome. According to the earlier description of the survey situation, the same variables influence both attitudes and behavior. We have no control over consumer unit characteristics, but we can change the environmental context and survey procedures. The next section describes one attempt to improve survey procedures.

THE DIARY OPERATIONAL TEST

The Rationale

The supplemental survey was designed to give initial information about the attitudes and record-keeping behavior of diary respondents and also provide some data on environmental characteristics. As indicated above, we can use this information in conjunction with consumer unit characteristics, other environmental characteristics, and expenditure reports to examine the survey process. However, this examination will be incomplete because we have left the survey procedures largely unconsidered. Since each respondent receives the same diary, we cannot know how different survey procedures would affect expenditure reporting. The purpose of another project we have recently undertaken, the Diary Operational Test, is the evaluation of the effectiveness of different survey procedures.

The Design

The effects of two variables will be examined in a design which uses data from both a special research sample and the regular diary sample to make comparisons. One variable measures the effect of the current practice of having the diary and the quarterly interview survey conducted by the same interviewers. Since the quarterly interview involves so much more of the interviewer's time than the diary, it is suspected that less emphasis has been placed on the quality of data gathered from the diary survey. To evaluate the extent to which this is true, two interview conditions have been used. In the regular sample, interviewers have continued to conduct both surveys. In the research sample, interviewers worked only on the diary.

The other variable concerns the physical layout of the diary itself. The diary's format can either hinder or facilitate the reporting of expenditures. Recent research into reporting rates from both the 1972/73 and 1980/81 diaries indicated that explicit references to particular products in the diary increases the likelihood that these items will be reported, especially if the reporting rates are low to begin with [1, 47]. To evaluate diary formats which provide more explicit instructions as to the commodities to be

reported, two experimental diaries were developed. Portions of these two diaries and the diary currently in use can be found in the appendix.

The experimental diaries have fewer expenditure categories than the current diary. They are also smaller and have more attractive covers. Respondents are not required to specify the quantity and weight of items they purchase when completing the two experimental diaries as they must in the current diary. What distinguishes the two experimental diaries from one another is the specificity of the item descriptions within each section. In experimental diary A, only blank lines for recording purchases are provided under each of the section headings just like the current diary; but, in contrast to the latter, the section headings contain more complete descriptions of the items to be reported. Experimental diary H has only category titles; however, the lines beneath each heading have specific items printed on them. Respondents need only check whether an item was purchased and give the price.

These two formats were chosen as the most promising alternatives for increasing the specificity of item descriptions. Diary A still gives the respondent the freedom to describe purchases, but it also requires a significant amount of writing. In the other experimental diary, much less writing is necessary; but the respondent must make classification choices which will take more thought than the blank-line condition and may be prone to error. Respondents must also add expenditures for all items appearing on the same line and record the total.

Table 6 depicts the features of a design employing the variables described above. In addition to the two experimental diaries, the current diary will be used as a control. These three diaries were administered at random to consumer units in the research sample, and the interviewers assigned to this sample did not work on the quarterly interview survey. The fourth cell represents the on-going "production" diary where interviewers conducted both surveys.

TABLE 6. Diary Operational Test Design

	Format	Interview Condition
Diary A	Blank-Line	Diary Only
Diary B	Specified-Line	Diary Only
Control	Current Diary	Diary Only
Production	Current Diary	Both Surveys

Two other features of this experiment are worth mentioning. The first is that an additional section was added to the household characteristics questionnaire which is very similar to the supplemental questionnaire discussed previously. We hope to be able to distinguish between the attitudes and recordkeeping behavior of respondents exposed to the different experimental conditions. The other feature is a new method of collecting recalled expenditures. Currently, the interviewer records these expenditures directly into the diary using unscripted procedures and also asks a series of follow-up questions about specific commodities

APPENDIX

which the respondent may have forgotten to report (See appendix.). The new procedure, used with the two experimental diaries, involves a scripted recall section contained in the household characteristics questionnaire. One part of this recall section can be found in the appendix. The new recall section was designed to improve our ability to collect recall information; and, by keeping this data separate from expenditures recorded by the respondent, we will be able to determine the extent of recall in the diary.

The Sample

The sample cases for the experiment were drawn from 22 of our largest (self-representing) PSU's, and the random assignment of diaries to members of the research sample was carried out within each PSU so that approximately a third of the respondents in every PSU would receive one of the three format conditions. We expect about 1000 consumer units per research cell. These consumer units were interviewed between May and November of 1985. The production sample should have yielded about 1300 interviews during that period in the same 22 PSU's.

The Analytical Model

The simplest statistical model which will be used to estimate the effects of the experimental conditions is the following:

$$Y_{ijk} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij} + \epsilon_{ijk} \quad (1)$$

where Y_{ijk} is the amount of the expenditures reported by a respondent or, alternatively a measure of the response error in that report; α_i ($i = 1, 2$) represents the effect of the interviewer variable, β_j ($j = 1, 2, 3$) represents the effect of the format variable, $(\alpha\beta)_{ij}$ is the interaction term and ϵ_{ijk} is the error. Estimation of the parameters of this model is complicated by the fact that we do not have a complete factorial design. The two new format conditions did not appear in cells where interviewers worked on both surveys. Therefore, the interaction term in (1) cannot be estimated. The two treatment effects can be estimated in a roundabout manner where each is considered individually. The results from the production cell are compared to those from the control cell to determine the effect of the interviewer variable. Results from the three research cells can be used to gauge the effects of the different diary formats. Assuming no interactions, these separate estimates can be added to arrive at the total effects of conditions in each of the experimental diary cells when compared to the production cell. That is,

$$\mu_{RA} - \mu_p = (\mu_{RA} - \mu_{RC}) + (\mu_{RC} - \mu_p) \quad (2)$$

$$\mu_{RB} - \mu_p = (\mu_{RB} - \mu_{RC}) + (\mu_{RC} - \mu_p) \quad (3)$$

Data from the experiment can be used in more complicated analyses than that described in (1) in order to examine the complete survey process pictured in Figure 1. Of particular interest will be the effects of the different diary forms on the attitude/behavior typology.

1. Did the respondent know what or what about recording the diary?

1 Enjoys
2 Resistant
3 Don't know

2a. Do you think the respondent made a conscientious effort to complete the diary every day?

1 Yes
2 No
3 Don't know - Go to item 3b

b. What gave you this impression?

3a. Did you expect the respondent will at any time let you stop the first week if placement was a problem?

1 Yes
2 No - Go to item 4a

b. How was the resident made?

1 By personal visit - WHEN _____
2 By telephone - WHEN _____

6. Was the CU having problems concerning the diary?

1 Yes - Specify _____
2 No

4a. Was any portion of the week 2 diary completed by recall at the time of pickup?

1 Entire diary by recall
2 Part of the diary by recall
3 None completed by recall - STOP

b. Was the respondent able to recall the diary each expenditure occurred?

1 Always - STOP
2 Sometimes
3 Never

c. Where were entries obtained by recall recorded?

1 First diary day
2 Second diary day
3 Third diary day
4 Fourth diary day
5 Fifth diary day
6 Sixth diary day
7 Seventh diary day
8 Additional page

5a. INTERVIEWER CHECK ITEM

1 Diary completed by total recall by interviewer - Complete only items 7a and 12
2 Diary completed by respondent (including partial recall) - Complete items 5b and 6-12, as appropriate

b. Is this a one person CU?

1 Yes - Go to item 7a
2 No

6a. Who was responsible for recording expenditures for this consumer unit (CU)? Enter the number(s) and name(s) of each person(s) mentioned.

ASK IF APPROPRIATE, OTHERWISE GO TO ITEM 7a

b. Besides (person(s) in 6a), were expenditures of other persons in this CU entered in the diary?

1 Yes
2 No
3 Don't know } Go to item 7a

c. How frequently did other CU members report their expenditures to (person(s) in 6a)? Read all categories and mark (X) only one

1 Daily
2 Every 2 to 3 days
3 At the end of the week
4 Never

7a. Were the expenditures recorded for the past two weeks about what this CU usually spends in a 2 week period?

1 Yes - Go to item 8
2 No
3 Don't know - Go to item 8

b. Were the expenditures for these 2 weeks higher or lower than usual?

1 Higher - PROBE Specify any specific reason
2 Lower

8. When were entries usually recorded on the Diary?
Read A' categories and mark (X) all that apply.
- 1 At the end of each day
 - 2 At the end of each week } Go to item 9c
 - 3 Every few days
 - 4 Immediately after an expenditure occurred
 - 5 Other - Specify _____
- 9a. Was it ever necessary to make entries in the Diary for expenditures made earlier during the week?
- 1 Yes
 - 2 No
 - 3 Don't know } Go to item 10
- 9b. Which of the following reasons explain why the Diary was not completed on a daily basis? Mark (X) all that apply.
- 1 Forgot to record expenditures for one or more days
 - 2 Was too busy to record expenditures on the Diary
 - 3 Misplaced the Diary
 - 4 Other - Specify _____
- 9c. Were the expenditures remembered later in the week recorded -
- 1 On the page for the day the expenditure occurred?
 - 2 On the page for the day the expenditure was remembered?
 - 3 On another page?
 - 4 Don't know
10. Were the instructions and examples contained on the Diary form helpful?
- 1 Yes
 - 2 No
 - 3 Don't know
11. Which of the following describe your feeling about keeping the Diary? Read A' categories and mark (X) all that apply.
- 1 Diary size was awkward
 - 2 Keeping the Diary took too much time and effort
 - 3 Keeping the Diary was enjoyable
 - 4 Keeping the Diary was beneficial for my CU
 - 5 Keeping the Diary was boring
 - 6 Interest in keeping the Diary declined
 - 7 It was difficult to obtain expenditures from other CU members
 - 8 Not enough lines on the Diary form to record expenditures
 - 9 Other - Specify _____
 - 10 No opinion

12. Would you like to make any comments about the Diary, or suggestions for improving the way we collect the data?
- 1 Yes - Comments _____
- 2 No

Example of a follow up question currently in use:

INTERVIEWER: Are all expenditures registered in Diary?	* Ask questions a, b, and c if the "NO" box in column (a) is marked. We have found that certain types of expenses are often forgotten. I would like to ask a few questions concerning these items.	
(a)	(b)	(c)
Meals eaten out	1a. Does anyone in the CU eat out - lunches, dinners, snacks, etc. - even occasionally?	1b. Did anyone in the CU eat out at all during the past week?
11 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	11 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	11 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	3 <input type="checkbox"/> No - Go to next "No" box marked in column (a)	3 <input type="checkbox"/> No - Go to next "No" box marked in column (a)
		4. How much was spent for meals eaten out during this past week? \$ _____

Part from the new recall section:

2. Were there any meals and snacks purchased at a restaurant or carry-out which you may have forgotten to enter in the Diary?

1 Yes 2 No - Go to part C 3 Don't know - Go to part C

Line No.	PROCESSING USE	Describe item purchased	Total cost Excluding sales tax		Were alcoholic beverages included in total cost? Mark (X) one		If "Yes," How much?	
			Dollars	Cents	Yes	No	Dollars	Cents
001								
002								
003								
004								
005								

Section from Current Diary:

Item description	L I N E N O.	PROCESSING USE	Describe item purchased	Number of cans, bottles, etc.	Net weight or volume per bottle, can, etc.	Is this item - Mark (X) one			Total cost Excluding sales tax	
						Fresh	Prepared	Other	Dollars	Cents
Part 1 FOOD AND BEVERAGES	001									
Dairy and Bakery Products	002									
Poultry, broilers, broods, milk, cream, eggs, etc.	003									
	004									
	005									
	006									
	007									
	008									
Meat, Poultry, and Poultry	009									
Beef, pork, etc., trout, chicken parts, etc.	010									
	011									

Section from Experimental Diary B:

Line No.	Item purchased	Mark (X) in item purchased	Total cost Excluding sales tax	
			Dollars	Cents
002	Canned fish and seafood			
003	Fresh and frozen fish			
004	Fresh and frozen shell fish			
005	Eggs and Dairy Products			
006	Eggs			
007	Fresh whole milk			
008	Other fresh milk and cream			
009	Butter			
010	Cheese			
011	Ice cream, frozen yogurt, and related products			
012	Non dairy cream substitutes			
013	Margarine			
014	Other dairy products including powdered milk and fresh yogurt			

Section from Experimental Diary A:

Line No.	PROCESSING USE	Describe item purchased	Total cost Excluding sales tax		Is this item - Mark (X) one		
			Dollars	Cents	Fresh	Prepared	Other
001		Part 1 - Food for Home Consumption (Continued)					
002		Eggs and Dairy Products (if eggs, milk, cream, butter, margarine, cheese, ice cream, etc.)					
003							
004							
005							
006							
007							
008							
009							
010							
011							
012							
013							
014							
015							
016							
017							
018							
019							
020							

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