Gathering Complete Responses from Mexican-Americans by Personal Interview.

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Children; Data Collection; Interviews; Item Analysis; Mexican Americans; Migrants; Parents; Quality Control; Reliability; Response Mode; Validity

An important component of high quality data is the completeness of the gathered data. Complete response consists of 3 specific factors: (1) sample mortality (the loss of respondents from the initial sample); (2) item nonresponse; and (3) detail given to open-ended items. Responses to the personal interview among Mexican American migrants were evaluated to determine whether high quality data can be obtained through personal interviews within the migrant culture. Mexican American migrants were interviewed during a migrant educational recruitment program conducted in northeast Indiana during the summer of 1974. Migrants were enumerated and then selectively interviewed at the harvesting site. Respondents included 95 parents and 71 children who completed 2 different interview schedules. The overall amount of nonresponse was considered by the respondent's age and sex and by the item content (whether demographic or perceptual). Among the findings were: (1) sample mortality was less of a problem than expected; (2) item nonresponse varied with the respondent's characteristics and the nature of the item; (3) numerous significant differences in nonresponse occurred for both groups, and were comparatively consistent, when the personal interview was used; and (4) due to lack of heavy probing, detail given to open-ended items was minimal for both groups. (WQ)
Gathering Complete Responses from Mexican-Americans by Personal Interview*

by Marty E. Zusman
Arnold O. Olson
Indiana University, Fort Wayne

and
Santiago Garcia, Jr.
Migrant Education Recruitment Service


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Introduction

In the last ten years there has been a proliferation of what can be referred to as "social action research" projects. As the society has moved toward a resolution of a whole range of problems from those that deal with ethnics to that of aging, an impressive amount of data have been gathered, but the focus has been on the nature of social action programs rather than on the enabling research or on an evaluation of such programs. This emphasis is understandable, since both economic and political considerations operate in support of the program in a way to make a substantive critique of it quite unacceptable, if not impossible.

In reality, however, it is the research aspect of any social action program which is of paramount importance. Informed and realistic research endeavors can improve the quality of the programs and thus upgrade them in their relevance, and capacity to meet the needs of the public they serve. This paper is concerned with an evaluation of the quality of data gathered from Mexican-American migrants during a migrant educational recruitment program conducted in the north-east sector of the State of Indiana during the summer of 1974. These data were gathered by the use of the personal interview in migrant camps located in that region. The question, of course, is whether or not high quality data can be obtained by the use of the personal interview within the migrant culture.
The Personal Interview and High Quality Data

Sociologists have long been concerned about the ability of the personal interview to gather high quality data. One important component of high quality data is whether the gathered data are complete. Failure to gather complete data may seriously affect the reliability of the results, their generalizability, and the effectiveness of ensuing social action programs. While all social research is affected by inadequacies in data gathering, what is most immediately and seriously affected are instances of applied research based upon self-reports of perceptions, problems, and experiences. To the degree that social action research projects attempt to design programs to aid particular subgroups, data inadequacies will result both in the possible failure of the developed program and in the loss of credibility for the sociologist. For these reasons it is important to ask: Does the personal interview result in securing complete response?

Complete response is a multi-faceted construct made up of three specific factors: sample mortality, item nonresponse, and detail given to open-ended items. All three factors contribute to the overall utility of social action research.

Completeness

Sample mortality represents the loss of respondents from the initial sampling frame. Since sampling conditions among the highly mobile migrants differ from general sampling conditions of a stable population,
two factors were considered: First, how to draw a representative sample in a mobile community without knowledge who of the respondents would be arriving or leaving, and when. Second, information was needed on the extent to which sample mortality had occurred and on the mechanisms to attain information on the characteristics of those who refused to respond or who were not located. Previous research has not been addressed to the extent of sample mortality among the general population, much less the extent of sample mortality among a highly mobile subgroup.2

A second component of high quality data is item nonresponse. Even if sample mortality is minimal, and most people do allow the interview to take place, high item nonresponse will seriously affect the conclusions that can be drawn. If respondents refuse to answer or respond with a simple "don't know", valuable information is lost. This paper considered the overall amount of nonresponse by (1) characteristics of the respondent and (2) the content of the item. Differences in nonresponse may occur for different age groups and by the sex of the respondent. Such differences may also depend on whether the question content was demographic or perceptual. Few studies have considered the amount and character of nonresponse, and none have considered it for the migrant population. Such information is needed.

The last component of completeness is the detail given to open-ended items. Almost all survey research includes items which request respondents to answer in their own words questions put to them. Those answers are often just a single response with no detail or explanation.
The more expanded and detailed the response, the more likely it is that the information will be of use to the researcher. Detailed responses will not limit analysis and, therefore, will not reduce measurement reliability and validity. The extent of detail given and the characteristics of the respondents who gave detailed responses are both considered.

Previous research has not evaluated the completeness of responses to the personal interview. It has neither considered all aspects of completeness nor considered its impact upon social action research programs. This paper evaluates difference in responses to the personal interview among Mexican-American migrants.

DATA AND METHODS

In this research, Mexican-American migrants were interviewed as part of a larger educational recruitment program. Unlike most survey research, sampling was of immediate concern. With incomplete lists of camps and no knowledge of the number of migrants who could be expected, it was decided to use a two-pronged approach. First, since educational recruitment was our primary aim, all migrants would be enumerated. After a complete enumeration was attempted a random sample would be selected out for interviewing.

Unfortunately, the weather pattern during the growing and harvesting season of 1974 was so adverse that it had an inhibiting effect on the appearance of migrants at the picking sites. An extended wet spring was followed by a summer drought, which was then climaxed by a killing
frost early in September. Planting, cultivating, and harvesting operations were significantly curtailed. This had an effect on the data gathering process. After listing all camps and sending bilingual interviewers to complete an enumeration, it became apparent that the migrants had not only arrived late but would be leaving early. Migrants were enumerated and then selectively interviewed at the harvesting sites. This final group of respondents includes 95 parents and 71 children who completed two different interview schedules. The parents' schedule included 33 items and the children's schedule included 40 items. Both schedules were completed, on average, in 15 minutes time. From these data information can be determined for each group (parents and children) as to an overall measure of the completeness of the response.

RESULTS

Sample mortality

In general, sample mortality to the personal interview among a stable population is approximately 20%. Most of this nonresponse is attributable to refusals, although some is due to inaccurate lists and respondent mobility. In the case of interviewing Mexican-American migrants, two sources were considered as possible factors in sample mortality: language and mobility. Since all interviewers were bilingual, the factor of mobility became most important.

It was decided that in order to get the most complete response, we would work within the social structure of the migrant experience. To that end we first located all migrant camps. We then waited until the
crewleader appeared. At that time we approached the crewleaders to
determine how many migrant laborers had arrived with them. A great
deal of time was spent developing rapport with the crewleaders and
explaining the importance of the project and of their cooperation to
its success. What we found was that after they had agreed to the
interviewing, and given it their support, everyone cooperated fully.

Unlike studies in the general population, no individual refused
to be interviewed. Before the migrants moved on we had contacted
nearly 90% of them for the recruitment purpose of the project. In
the last week that they were in Indiana, 95 parents and 71 children
were interviewed. None refused to be interviewed.

Item nonresponse

To determine if there were differences in nonresponse among
parents we calculated the overall nonresponse rate. We found that
17.9% of the parents answered all of the items and 14.7% of them
refused to answer only one with a nonresponse of 3.2 items of 33
items per person. Thus, nonresponse to only one item or less occurred
for 32.6% of the sample. While not comparable, we found that among
the children 32.4% answered all of the items and an additional 22.5%
 omitted only one with a nonresponse of 2.1 items, of 40 items,
per person. Nonresponse to only one item or less occurred for 54.9%
of the sample.

It was also felt that nonresponse might differ by the nature of
the item, being greater for attitudinal or perceptual items than for
demographic items. For both parents (p < .001) and children (p < .001) we find that the proportion of nonresponse is significantly greater for attitudinal than for demographic items. Respondents are far less likely to skip or refuse to give demographic responses.

Looking at differences in response by sex among parents and children, we find no significant differences between males and females in their overall proportions of nonresponse. There are also no significant differences for attitudinal items although in both groups females gave slightly more nonresponses. Among parents we find a significant difference, between males and females in their nonresponse to demographic items, which is not found among children. A much larger proportion of females refused to answer the demographic item (p = .004). A separate analysis of item by item differences indicates that significant differences existed for two items, income (p = .016) and educational level of the father (p = .17), with females giving much greater proportions of nonresponse.

Differences by the age of the respondent were also considered. Among parents we found that the average (x) overall nonresponse decreased with age, being lowest (3.2 items) for those who were oldest (46 to 55); 3.4 items for those (36 to 45); and greatest (3.8 items) for those who were youngest (26-35) with no significant differences between age groups. There were also no significant differences by age on attitudinal and demographic items. While overall there were no significant differences for a specific type of item, we found an interesting
relationship. Included in the questionnaire were two open-ended sensitive items. Interviewers who represented the Bureau of Migrant Education asked respondents to explain the "worst thing about the present schooling for my child" and to tell in their own words "what are the weak areas of migrant education".

Considering nonresponse to the question on the "worst thing", we find the following proportions of nonresponse (where 1 = nonresponse): 46-55 years of age, .27; 36-45 years of age, .31; and 26-35 years of age, .57, with significant differences between oldest and youngest (p = .049) and middle and youngest (p = .067) with the greatest nonresponse for the youngest. The same trend occurs for item 2 with proportions showing: oldest, .45; middle, .38; and youngest, .86, with significant differences between oldest and youngest (p = .005) and middle and youngest (p < .001). In both cases the youngest respondents gave significantly greater nonresponse to sensitive open-ended items.12

Looking at the age distribution for children we find that the average nonresponse was: 10-11 year olds, 1.4; 12-13 year olds, 2.3; and 14-17 year olds, 2.4.13 Less nonresponse occurs at the younger ages among children. This same trend is consistent across demographic and attitudinal items. Among items which were demographic and perceptual we included an item which we considered to be a sensitive open-ended item. It said, "The United States is a big country. What are some other very big countries?" We found that the greatest nonresponse occurred for 12 and 13 year olds, significantly different from that of the 10-11 year olds (p < .05).14
Depth or Detail to Open-Ended Items

To investigate differences in the detail given to open-ended items, these were coded in terms of the detail given. We found no significant differences in the detail given to open-ended items among parents. Males and females both gave a low degree of detail (both had proportions of .08). One interesting result was an investigation of the degree of detail given to two similar items asking for the best and worst aspects of the present educational system for their children. We found a significant difference (p = .001) between the detail given to the "best aspect" item (\( \bar{x} = .24 \)) and the "worst aspect" item (\( \bar{x} = .05 \)). We find that parents give far more detailed explanations when they are reporting on a positive rather than on a negative characteristic.

Further investigation among the children indicates that detail is significantly greater (p = .076) among females (\( \bar{x} = .24 \)) than among males (\( \bar{x} = .12 \)). No overall differences exist between age groups in the extent of depth. We find, however, that when responses are viewed to two questions: "Thinking of teachers in general, what are some good things your teachers do?" and "What are some bad things your teachers do?" there are significant differences in the detail given. The proportion of detail was: good characteristics = .13; bad characteristics = .22. A significant difference was found (p = .09) in the extent of information given, with more given for bad, than for good characteristics.
CONCLUSION

What method of data collection would gather the most complete response from the Mexican-American migrant population is an important consideration. We find that the personal interview does not gather complete response. Lack of complete response raises serious issues about the reliability, validity, and utility of the results.

A major finding is that sample mortality turns out to be less of a problem than one would have considered it to be after reviewing the literature. While migrants represent a highly mobile and changing population, their composition and enumeration can be assessed. Within the social structure of the migrant experience, and possibly because of the constancy with which they are asked to give information, sample mortality is largely nonexistent. This suggests that far more basic knowledge of health care, migration patterns, and other factors could be gathered than has been the case thus far.

A second major finding is that item nonresponse varies with the characteristics of the respondent and the nature of the item. More questions were raised than can be answered by this study. For example:

1. Why are there large differences in patterns of nonresponse between parents and children?

2. While it is not surprising that there is significantly greater nonresponse to attitudinal/perceptual items than demographic, why is there a significant difference (parents) between males and females to demographic items?

3. Why is nonresponse significantly different by age, being inverse for parents and direct for children?
While some tentative answers were suggested, the important finding is that numerous significant differences in nonresponse do occur for both groups, and rather consistent, comparatively, when the personal interview is used. For many items that nonresponse is quite high. While for the most part demographic information is complete, attitudinal/perceptual items, and particularly sensitive ones, indicate that upwards of 25% of the respondents failed to respond.

A third major finding indicates that, in the absence of heavy probing, detail given to open-ended items is minimal for both groups. What is interesting and hard to explain is the significant differences given to open-ended sensitive items and open-ended innocuous items which ask the "worst" and "best" of a phenomena. For parents we find a greater explanation given for the "best" item, while for children we find a greater degree of explanation for the "worst" item. While comparability of the two groups does not exist, this is perhaps due to the aspirations of parents in looking at the positive attributes of schools and the realization and reaction of children to the negative aspects in schools. Most important, however, is that significant differences in nonresponse occur when individuals are asked in a personal interview about good versus bad characteristics.

Given the results of this research it seems clear that there are serious inadequacies in the completeness of response. Further research is needed to determine the causes of these inadequacies and mechanisms for reducing their effect. It seems quite clear that social action programs that attempt to generalize among migrant populations within
a given year will be successful if they rely upon demographic factual data. Since most social action research among migrants seeks aid in the form of health care, housing, transportation, and education, the personal interview should provide highly adequate estimates of needs assessments. However, in the event that such programs ask sociologists to evaluate the attitudinal or perceptual domain in terms of migrants' reactions to programs or views of such programs in an attempt to revitalize or alter such programs, serious inadequacies may result. Further research should consider other data gathering techniques, and evaluate comparatively their effects upon the completeness of response, as well as ways of improving the data gathered by personal interviews.
NOTES


3The time length for completion ranged from 10 to 20 minutes with language an important consideration in the length of time it took to complete the interview. Children were slightly faster than parents.


5A total review documents only five refusals, four adults and one child. These were not refusals to cooperate. They occurred because of the time of contact: the migrant was working or it was late at night. They asked us to return, but time did not allow it. Even if included sample mortality does not reach five per cent.

6A final comparison between demographic characteristics of all migrants and the select groups reported in this paper can not be done until April. However, initial reviews show no significant differences. The average age of parents interviewed was 38 while the average age of the population was 36. It appears that our sample is representative.

7To determine nonresponse, all responses were coded as "0" and all items where respondents refused to answer or said "don't know" were coded "1". Difference of proportions tests were then used.
Demographic items for parents include age, sex, and among others income which shows the highest proportion of nonresponse among demographic items.

Three items measuring alienation show significant differences of nonresponse (p = .11). One interesting difference is the perceptual item which says, "To be a good child, children should be obedient to the wishes of their parents." No male refused to respond while 12% of females refused (significant at .03 level).

A two-tailed difference of proportions test with separate variance estimate was used.

Two-tailed difference of proportions tests were used with a separate variance estimate used for income.

There were no differences between the number of children that each age group had, but other differences do exist such as the specific ages of the children.

Since this is an exploratory study consideration was given to the fact that with so few empirical studies one might not want to reject the null hypothesis. In this case significance levels might more appropriately be set at .10 or even .20 reducing the risk of a Type II error. We did not do so since conjectures in the literature expect differences. Significant differences below .20 were numerous. For example, between ages 10-11 and 12-13 (p = .196) and between ages 10-11 and 14-17 (p = .155) significant differences exist.

A separate variance estimate was used.
A "zero" was given for one or more items listed with no explanation. A "one" was given for one or more items listed with explanation. The test determined the proportion of explanation.

This is a composite measure to six items.

The statistical test was a correlation of the proportion of all responses given to each item.

Differences exist between ages 10-11 ($\bar{x} = .25$) and 12-13 ($\bar{x} = .14$) significant at .175 level. Differences at .10 and .20 levels were very numerous.

Responses were coded as "0" = characteristic given with no detail or explanation and "1" = characteristic given with explanation. For example: responses coded "0" were "gives parties", "punishes", "tells me I'm retarded". Responses coded "1" were "gives us too much work to keep us out of trouble" and "punishes other kids who make fun of me for being a dirty Mexican".

One possible source is the interviewer. These interviewers were bilingual, familiar with the migrant experience and received training in interviewing with the schedules. Results of this study are not unlike the results of previous studies which have had well trained interviewers.