PHONEVISION

A RESEARCH REPORT

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES--Continued

LIST OF TABLES--Continued

LIST OF ILLUSTRATIONS

I

INTRODUCTION

This is a research report of public reaction to "Phonevision"--that is, subscription or "pay-as-you-see" television as developed by Zenith Radio Corporation of Chicago. During 1950 and 1951, the National Opinion Research Center was retained by Zenith to assist in the conduct in Chicago of a test of Phonevision or subscription television. That test simulated commercial conditions in providing a subscription service to certain selected families in Chicago and was conducted during the period of January 1 to April 1, 1951, under the authority of the Federal Communications Commission, for the purpose of making available to that Commission evidence and findings pertaining to the interest of the public in Phonevision or subscription television and the willingness of the public to pay for television programs directly on a subscription-fee basis. This report is submitted by the Center as its independent findings and conclusions with respect to public reaction to Phonevision. It is predicated on the test, in combination with an additional survey of some 2,322 Chicago families who did not participate in the test.

The National Opinion Research Center was, of course, in no way concerned with either the basic engineering problems of Phonevision or its practical operational problems. As background to the Center's research problems, however, the form of Phonevision employed during the test must be described. Briefly, the transmitting apparatus was equipped with a coding device to transmit a television program signal, including video, synchronizing and audio components, in coded form, so that receiving apparatus required decoding information related to the coding schedule of the broadcast in order to reproduce the program signal; without such decoding information, the reproduced picture "jittered" and was unintelligible. For the first nineteen days of the test, the video portion alone was coded, while the audio information was not; thereafter, both the video and audio portions of the program were coded.

Each of the families participating in the test was provided with television apparatus equipped with a suitable decoding mechanism and was further provided with a telephone line extending from a private branch exchange which controlled the dissemination of the decoding information. Upon the request of any given family participating in the test, this telephone line was connected at the private branch exchange with a source supplying a signal that corresponded to the coding schedule employed at the transmitter during the requested program interval. The line connection was maintained throughout that program interval, and a decoding signal was delivered to the subscriber's receiver throughout the program to control its decoding mechanism continuously, so that the receiver produced a clear and enjoyable picture and the accompanying sound.

In connection with the test of this form of Phonevision, the Center was responsible for the design and execution of research which would permit the drawing of conclusions for the city as a whole from results based on the relatively few participating families. This report presents fully the design of the research conducted in connection with the test and the substantive findings derived from it. Because of the lengthy and detailed character of the presentation, it is desirable to review here, in the introduction to the full report, the nature of the problem to which the research was addressed, the approach adopted to meet this problem, and the internal organization of the report itself.

SELECTION OF PHONEVISION TEST PARTICIPANTS

Preliminary Considerations

The basic research problem may be put, most simply, as one of determining how the

residents of Chicago would have responded to Phonevision, if this system of subscription television had been commercially available to them. "Response to Phonevision" was regarded as three-pronged: the number of families who would subscribe to Phonevision; the size of expenditures that would be made for Phonevision; and the more subjective evaluations of Phonevision--its desirability, appeal and public support.

Two general approaches to evaluating this response existed: the "experimental" approach, in which families would be exposed to Phonevision under conditions as nearly as possible approximating normal commercial operation conditions and their reactions to Phonevision determined; and the "survey" approach, in which families would be asked to forecast what their behavior and reactions to Phonevision would be, in the hypothetical situation of Phonevision's being commercially available. If the sample of families to be used can be determined in accordance with theoretically-indicated principles, there can be little doubt that the experimental approach will yield more precise and reliable results, but, since it is often impossible to implement the experimental design adequately, the survey approach must be substituted.

In the case of Phonevision, the experimental approach at first seemed wholly feasible, since a test was to be conducted for which families were to be selected. Some consideration of how the families participating in the test were to be selected, or, more especially, of what group the sample of test families should be representative, at once indicated that the experimental approach would be severely limited, however. One theoretical possibility was to make the sample of test families themselves representative of the city as a whole, but it was obvious that the practical difficulties involved in securing the cooperation of families chosen at random for the test would be almost insurmountable. That is, some number of the randomly-selected families could be expected to refuse to participate in the test; to regard these families as among those who would never become subscribers to Phonevision would not necessarily be a correct assumption, and there would be little evidence to indicate exactly what assumption should be made about them; to substitute for them would introduce biases of unknown order. Moreover, among these randomly-selected families, there would be some who, while making expenditures for Phonevision during the test, would never become subscribers under ordinary conditions, so that this experimental design would have to be combined with a survey approach in order to determine what proportion of families would be subscribers and what the expenditures of this subgroup would be like, as well as what the subjective reactions to Phonevision were. Given the limitation of the test sample to three hundred families and the improbability of executing this sample design perfectly, it appeared to be an uneconomic use of research resources.

Another theoretical possibility was to divide the city's families by some method into those who would become subscribers to Phonevision under normal conditions and those who would not. If this division could be made, there would be, at once, an estimate of the number of subscribers, and, if a sample of the subscribing group were selected for the test, their expenditures could be extrapolated to all subscribers without any need for correction. Since all the families in the test sample would be future subscribers, this approach would constitute the most efficient use of the sample size. A sample of this kind would, however, have the same kind of problems of implementation as a random sample of families in the city; that is, not all future subscribers would agree to participate in a test, and the loss of those who would not would bias the sample in ways difficult to estimate.

More important, however, was the fact that no sure method existed by which to make the initial division into future subscribers and non-subscribers. A survey could have been executed in which forecasts of probable response to the hypothetical situation of Phonevision's being available were obtained and used as a basis for making the sampling stratification into future subscribers and non-subscribers, but, since there was, at that time, almost no public familiarity with either Phonevision or subscription television generally, a survey of this kind would have posed a completely unknown hypothetical situation. Given this unfamiliarity, the public would have found it most difficult to grasp fully all the

implications of the situation to which they were being asked to react and could not, therefore, be expected to forecast their responses to Phonevision accurately. Even if the survey could have been carried out in the face of the lack of information which was known to exist, it would have been a most unreliable basis for the selection of the test sample.

The Sample Design

The solution finally adopted attempted to approximate a sample of future subscribers, although it had admitted theoretical deficiencies which were to be met by complementary survey research. Before this sampling scheme is described, however, one further factor, complicating the research design, must be touched on. Since this test of Phonevision involved the use of supplementary telephone lines, the sample design was, in part, dependent on the ability of the Illinois Bell Telephone Company to provide these lines. When it became apparent that telephone lines were not freely available throughout the city but, instead, 250 of the 300 lines would have to be concentrated in one area of the city, the possibility of a city-wide sample, of whatever kind, had to be abandoned. The area of the test was then defined not as the city of Chicago but as the Lakeview-Lincoln community in which the telephone lines were available. While all of the theoretical problems just discussed apply as well to sampling this subarea of Chicago as to sampling the city as a whole, the limitation of the test to the Lakeview-Lincoln area created the further research problem of determining whether, and to what extent, results derived from a Lakeview-Lincoln sample could be extended to the city as a whole.

An examination of 1940 Census data* indicated that the area differed from the city as a whole primarily in being an area of apartment houses to a far greater extent than the rest of the city and, correlatively, being more frequently characterized by small, and childless, households. Beyond this, the area had no Negro population and had slightly higher socio-economic levels than the averages for the city as a whole. The presentation of demographic data of this kind, which were derived from surveys of Chicago and of the Lakeview-Lincoln area, conducted just after the close of the Phonevision test, opens the first main section of this report. Throughout the report, survey results are presented separately for the city as a whole and for the Lakeview-Lincoln area in order to document the conclusion that the Lakeview-Lincoln area corresponds closely with the city as a whole in opinions, tastes and preferences, so that the results of the Phonevision test conducted exclusively in the Lakeview-Lincoln area may be regarded as quite representative of the results that would have been obtained if a city-wide sample were used, especially when allowance is made for the compositional differences that existed.

To return to the actual sample design, the basic decision was to derive the sample of families to participate in the test from among families who <u>volunteered</u> for participation. Since it appeared impossible to define rigorously the universe of those who would become subscribers to Phonevision if it were commercially available, interest in Phonevision was substituted as an approximation, and volunteering for the Phonevision test was taken as a workable index of interest in Phonevision. These successive approximations introduced some inaccuracy, of course; on the one hand, not everyone who was interested in Phonevision could be regarded as a potential subscriber, and, on the other hand, not everyone who was interested in Phonevision and/or a potential subscriber to Phonevision would volunteer to participate in a test. While there was, undoubtedly, a relationship among willingness to subscribe, interest in Phonevision and volunteering for the Phonevision test, it could not be expected that this relationship would be perfect in any case, and, in practice, the relationship was further attenuated by the introduction of other considerations.

Under ordinary market conditions, it was obvious that the minimum essentials a person would need in order to become a subscriber to Phonevision were, first, the desire to do so--an intangible which created the sampling problems thus far

*The detailed Census tabulations necessary to base these comparisons on 1950 data are not available as yet.

discussed; in addition, however, the would-be subscriber must have a television set and, for the form of Phonevision tested, a telephone, in order to make use of Phonevision. Possession of a telephone presented no sampling problems: since the distribution of telephones in Chicago is relatively stable, the universe to be sampled was simply restricted to residential telephone service subscribers. Television ownership, on the other hand, was growing rapidly, so that any sample drawn from among television owners, exclusively, would be unrepresentative of television owners shortly after it was drawn. In order to allow the sample of families participating in the Phonevision test to reflect changes in television ownership, it was, therefore, necessary to allow both owners and non-owners to volunteer for and participate in the Phonevision test. This necessity, in turn, meant that television sets had to be furnished to at least some of the test participants, and, since even television owners might be reluctant to participate in a test which required adaptation of their television sets for test purposes, the Phonevision test was announced to the public as including the free loan of a test television set.

In view of these test conditions, volunteering for the Phonevision test represented interest in the Phonevision test, but it could not be regarded as necessarily interest in the idea of Phonevision, since volunteering could be motivated by the extraneous consideration of free use of a television set. The final sampling scheme adopted, then, aimed at securing a representative sample of those residential telephone subscribers in Lakeview-Lincoln who were interested enough to volunteer for participation in the Phonevision test. Insofar as the process of volunteering for the test might yield families with little intrinsic interest in Phonevision, the volunteering process would probably lead to overestimates of the extent of interest in Phonevision, but the response of a sample of these volunteers to Phonevision would probably be an underestimate of the magnitude of response--for instance, expenditures--among those actually interested in Phonevision. On the other hand, insofar as volunteering for the test required greater effort and even greater interest in Phonevision than actual subscription to Phonevision would have, the number of volunteers would probably underestimate the extent of interest in Phonevision, while a sample of these volunteers could be expected to overestimate the magnitude of expenditures for Phonevision. Because of these ambiguities--the uncertain correspondence of the universe actually sampled to the universe theoretically desired--a program of survey research, which will be described shortly, was designed to compensate for the unavoidable shortcomings of the experimental design. In conjunction with this survey research, the results of the Phonevision test, which cannot themselves be taken as a representative of the city's response to Phonevision as regards either the extent of interest or the magnitude of response of those interested, do permit estimation of this response.

Procedures Used in Selecting Participants

Once these fundamental decisions about sample design had been made, the process of implementing the design was relatively straightforward. For a period of two weeks, the Zenith Radio Corporation advertised the coming Phonevision test in Chicago newspapers in order to acquaint the public with the idea of Phonevision. Immediately after this advertising, a letter inviting participation in the test was sent to each of the 59,560 residential telephone subscribers residing in the Lakeview-Lincoln area. Within the time period allowed, 13,889 (23.3%) returned an enclosed postcard, signifying their desire to participate in the Phonevision test. These "partial volunteers," as they were called, were then sent questionnaires which asked for basic demographic information necessary to stratification in sample selection. About two-thirds of the partial volunteers--9,426--completed the volunteering process by returning usable questionnaires within the time period allowed for this step, so that, of the families originally canvassed, 15.8% became full volunteers, 7.5% remained partial or incomplete volunteers, and 76.7% were never heard from.

Interviews, conducted shortly after the volunteering period closed, with representative samples of the last two groups indicated that the volunteering procedures had yielded only about half of the families who belonged in the universe from which

the test families were to be chosen. That is, it could be estimated from these interviews that 33.0% of the families canvassed had been interested in participating in the test, but that over half these families had eliminated themselves from consideration through carelessness in completing forms, assumptions about the qualifications needed to participate, misunderstandings and misinformation about the conduct of the test, and so forth. Thus, the 15.8% who did complete volunteering and of whom the sample of families to participate in the Phonevision test was made representative must be regarded as a selection from among the 33.0% who made up the true universe into which unknown biases entered. One bias which seems fairly certain, however, is that almost by definition, by virtue of the fact that they did complete volunteering, the families from whom the test participants were selected would appear to have represented the "more-interested" end of the continuum of interest in the Phonevision® test.

Since no information other than this presumed difference in degree of interest was then available to indicate how the complete volunteers might have differed from incomplete volunteers and non-volunteers who were nevertheless interested in participation in the Phonevision test, the sample of families who were actually to participate in the test could not be made representative of all those interested in test participation; instead this sample was so selected as to make it representative of the complete volunteers. The 9,426 complete volunteers were stratified in terms of five variables--television ownership, family income, education of head of household, number of children in household, and number of adults in household--which appeared likely, a priori, to be related to expenditures for Phonevision and which tended to differentiate between television set owners and non-owners. A total of 158 strata were defined, and, from the 79 strata applicable to television set owners, participants were selected randomly from each stratum in proportion to the relative size of the stratum among the television set owner complete volunteers. Participants from among the non-owner complete volunteers were selected in the same way from the 79 strata applicable to them. The sample of test participants were arbitrarily divided equally between television set owners and non-owners, although only 35.7% of the complete volunteers were set owners at the time of application. Because of this over-sampling of television set owners, results deriving from the 300 test families are representative of the universe of complete volunteers only when the set owners and non-owners among them are weighted by their actual proportion in the universe.

The Effect of Substitutions in the Phonevision Test Sample

In the process of qualifying 300 families for participation in the Phonevision test, a total of 630 complete volunteers were considered. The need for substitution came about primarily for one of two reasons: either the telephone company was unable to provide the additional telephone line needed to a particular household, or the household could not secure permission for the installation of a roof antenna, which, because of the desire to eliminate poor reception as a factor in the test, had been made a condition of participation. These two reasons, together, accounted for about four-fifths of the rejections, while moving outside the test area, refusal to participate and failure to respond to the offer of participation accounted for the rest.

When substitutions were necessary, they were made in a systematic way which ensured that the sample maintained its demographic representativeness in terms of the five variables used in the original selection. At the time the original sample was drawn, nine additional, equivalent samples were drawn in exactly the same way. If a family in the original sample did not qualify for participation, the corresponding family from the second sample were substituted; if this family was not available, the corresponding family from the third sample was substituted, and so on, until the sample of 300 participating families were obtained.

Although this procedure maintained representativeness for the controlled variables, it was, of course, possible that the sample of test participants was no longer representative of complete volunteers in uncontrolled respects. A detailed examination of the possible sources, kinds and

extent of bias which might have resulted from the substitutions led to the conclusion that, in terms of the known factors which operated to affect the sample, the net effect on the representativeness of the sample was probably slight. Nevertheless, any possible tendencies toward bias that might have existed were probably consistently in the direction of overrepresenting families who were more inclined to be interested in and spend money for Phonevision, although it appears that such tendencies toward bias could have operated in only a relatively small segment of the sample. It would thus appear wise to regard estimates based on the sample of Phonevision participants as tending toward the upper limit of the distribution of estimates ordinarily obtained from a series of samples. The reader who wishes to examine for himself the evidence leading to these conclusions is referred to the presentation in Section II of the main report.

Characteristics of Test Participants

In terms of the known demographic variables, complete volunteers for the Phonevision test, and the actual participants chosen from among them, differed from other residential telephone subscribers in the Lakeview-Lincoln area in two major respects:

1. Family patterns--Test volunteers and participants tended to be complete family groups: only about 3% were one-person families as compared with about 11% among residential telephone subscribers generally in Lakeview-Lincoln; families were larger--an average of 3.3 persons per volunteering family as compared with 2.9 generally in Lakeview-Lincoln's telephone-subscribing families; and they had more children--an average of 1.1 as against 0.7 children per family.

2. Socio-economic status--On the average, test volunteers and participants tended to come from higher income groups--the difference in median income between them and other Lakeview-Lincoln residential telephone subscribers was in the neighborhood of $900 a year; heads of volunteering families had almost a year's advantage in median educational attainment, and well over a third of them were in the "upper" occupations--professional and managerial--as compared with less than a fourth of the heads of all Lakeview-Lincoln families with telephone service.

In comparison with all families in the Lakeview-Lincoln area, regardless of telephone-subscription status, all of these tendencies among test volunteers and participants were somewhat accentuated.

It is easy to see, simply in terms of these objective differences, why the results of the Phonevision test could not be immediately generalized to the city of Chicago. While the results of the test might have been standardized on the demographic distributions applicable to the city as a whole, in order to indicate that test results would have been like if test participants had been demographically representative of the city, this projection would leave out of account the important factor of possible differences between test families and other families in interests, tastes and preferences, which were already implied in the sheer fact that test families had volunteered for participation in the Phonevision test while other families had not. To put it another way, projection of Phonevision test results to the city as a whole by simple standardization of demographic differences was only justifiable under the assumption that every family in the city would want to subscribe to Phonevision and that only fortuitous circumstances associated with the procedures used in securing volunteers had led to the demographic unrepresentativeness of the test participants.

At the time of selection of test participants, it was not yet clear whether these differences in composition as between test families and Chicago families generally were related to volunteering for the Phonevision test, to interest in the Phonevision test, to interest in Phonevision itself, or to the probability of becoming a subscriber to Phonevision under ordinary circumstances. Generally speaking, if these compositional differences were simply functions of the first two of these possibilities and not of the last two, they should have been discounted in predicting the response of the entire city under ordinary conditions of operation,

but, if they were functions of either of the last two possibilities, they were important considerations to take into account in estimating the size and character of the market for Phonevision. These were the kinds of problems which had to be answered in order to estimate, from the Phonevision test's results, what city-wide response would have been. Since they could not be adequately met in the sample design for the test itself, they became the basic problems of the supplementary survey research.

THE BACKGROUND OF RECREATIONAL HABITS AND INTERESTS

The Survey Design

The original survey plan called for interviews with the sample of families chosen for participation in the Phonevision test, an equivalent sample of complete volunteers who had not been chosen for participation, a sample of partial volunteers and a sample of non-volunteer telephone subscribers; these basic samples were to be supplemented by a general sample of the Lakeview-Lincoln district and a similar sample of Chicago. These samples were to be interviewed before the start of the Phonevision test in order to ascertain to what extent differences existed among these several groups with respect to:

1. Demographic composition.
2. General recreational tastes, interests and preferences, including attitudes toward television and motion pictures.
3. Interest in the Phonevision test.
4. Interest in the idea of Phonevision itself.
5. Probability of becoming subscribers to Phonevision.

From this survey, the interrelations among these five factors could be derived. Once the Phonevision test was concluded, these factors, individually or in combination, were to be related to the actual behavior with respect to Phonevision of the test families. Estimates for groups of wider generality than the test family sample--including estimates for the city as a whole--could then be made by taking account of any differences between test families and the group being estimated with regard to those factors which related to Phonevision behavior. The general scheme was to divide the test families into strata defined by whichever of these factors proved to be related to expenditures for Phonevision; for each of these strata, a mean stratum rate of expenditures for Phonevision would be derived from the actual expenditures of test families in that stratum. The group for which an estimated expenditure rate was desired would be similarly stratified, and the test families' mean strata expenditure rates would be weighted by the frequency of occurrence of the corresponding stratum among the group being estimated. Thus, standardization of expenditure rates for Phonevision among test families on the actual distribution in the general population of those characteristics relevant to Phonevision expenditures was the basic aim of this phase of the research. Refinements of this basic procedure, of course, planned to exclude from the analysis the behavior of those test families who were not interested in Phonevision and who were not likely to become subscribers.

In addition, the survey plan called for reinterviews with the test families after the conclusion of the Phonevision test in order to ascertain their more subjective reactions to Phonevision and the extent to which earlier attitudes, tastes, preferences and interests had been modified by participation in the test. At the same time, samples of the other groups included in the survey preceding the test, were also to be interviewed in order to determine whether estimates needed revision in the light of possible increased public knowledge of and interest in Phonevision, which might result from the publicity attending the conduct of the test.

In practice, it was not possible to proceed with this projected ideal survey design. In the first place, the high rate of substitution and the elaborate process of qualifying a family for participation delayed completion of sample selection to such an extent that the last families in the participating group were not known in time to carry out "before-test" interviewing. In the second place, installation of test television sets was carried out over a period of several months, so that, for many of the families in the half of the test group who had not previously had

television sets, an important "before-test" condition which affected tastes, interests and preferences--the possession or lack of a television set--would have been modified for some period of time before the supposedly "before-test" survey could be carried out.

The only research which seemed feasible, then, was the post-Phonevision test half of the original design, and the interviews obtained in this survey telescoped both the "before-test" and the post-test objectives just described into one interview. The survey included samples of all of the groups which had been projected. The major weakness of this research design is that the only factors which can be regarded as, in some sense, determining test families' response to Phonevision and which, therefore, lend themselves, through an analysis of the distribution of these factors in the group to be estimated, to estimating the response to Phonevision that might be expected of groups which differed from the test family group, are those which existed prior to exposure to Phonevision. Since the data pertaining to test families were obtained only after their participation in the Phonevision test, it can never be entirely certain, when a relationship between their tastes, preferences, and interests and their response to Phonevision is found, that this relationship would have obtained prior to their experience with Phonevision. While the objective is to discover the relationships which determined responses to Phonevision, the research may simply be uncovering relationships which resulted from experiences with Phonevision.

Two safeguards against this possibility were included in the research design: (1) Both the test families and a sample of complete volunteers not chosen for inclusion in the test were interviewed. Since the sample of volunteers and the sample of test families had been comparable to begin with, it seemed reasonable to suppose that the differences between the test families and the sample of volunteers must be attributable to one or another feature of participation in the test. Only when both the test family group and the volunteer sample differed in the same direction from the other groups interviewed, were differences regarded as existing prior to the start of the test. (2) An attempt was made, through retrospective questioning, to learn from the test families the extent to which their attitudes and preferences had altered during the Phonevision test. Because of the unreliability of such retrospective reports, these data are treated cautiously and are regarded primarily as corroborative rather than basic information.

Recreational Patterns and Attitudes

A review of general preferences in the recreational field, preferences for entertainment in the home as against entertainment outside the home, the relative appeals of movies and television programs, actual ownership of and intention to own television--including likes, dislikes and suggestions for improvement of both programming and more general aspects of television, and movie attendance, indicated that there was relatively little difference in these habits and tastes between families who volunteered for the Phonevision test and families who did not. Most of the differences which did occur could be accounted for on the basis of the differences in family composition and socio-economic status that were present and an associated difference in rate of television ownership.

Among the topics covered, the major tendencies which appeared to distinguish Phonevision test volunteers from other families of similar composition and socio-economic status were:

1. A somewhat greater interest in television, as indicated by higher rates of ownership and more frequent intentions to buy sets among those who were not already owners.

2. A greater tendency to value television because it permits of the physical comfort and convenience of staying home, while furnishing entertainment comparable to that obtainable outside the home.

3. A more frequent choice of movies as a recreational preference, combined with no more frequent actual movie attendance and a more frequently expressed desire to have newer movies shown on television.

This confluence of attitudes--a liking for movies, counterbalanced by a preference for the comforts of home and a liking for television, which in turn led, on the one hand, to probably less frequent movie attendance than the degree of preference for movies would otherwise imply and, on the other, to a desire to have these movies shown on television--so completely sums up the basic appeal of Phonevision and the Phonevision test that it is not remarkable that the families who volunteered for the Phonevision test exhibited tendencies toward this pattern. These tendencies were, however, not extreme in magnitude; they do not, for example, describe the majority of Phonevision test volunteers; rather, they simply occurred sufficiently more frequently to be statistically significant tendencies.

On the other hand, when opinions, interests and preferences more directly and specifically bearing on subscription television and Phonevision are examined, larger differences between Phonevision test volunteers and other families are found. All of these differences are in the direction that might have been inferred from the fact that the former group had volunteered for the Phonevision test and will be briefly summarized here:

1. Volunteers were, naturally, far more familiar with Phonevision. Much more frequently than the average family, they had heard of Phonevision and could explain its basic principles correctly.

2. Volunteers, similarly, indicated greater interest in the Phonevision test. They had, on the average, watched the jittered Phonevision programs more frequently and for longer periods of time than had other families. They were also a good deal more likely to indicate willingness to participate in the Phonevision test, if it were just being proposed, than were Chicago families generally.

3. Volunteers were more likely to favor subscription television, generally, and more likely to regard subscription television as a means of improving television programming, of presenting on television types of programs not otherwise available, and of eliminating commercials from television entertainment. In line with these attitudes, volunteers, more often than other families, indicated that they would pay for such programs if they were available.

4. Volunteers more frequently than other families chose seeing a Phonevision movie on television over competing forms of entertainment, when Phonevision movies were compared with seeing the same movie at a motion picture theater, listening to a favorite radio program, watching a favorite television program and watching "run-of-the-mill" television.

5. Volunteers were more likely than other families to indicate that they would become subscribers to Phonevision, if it were commercially available.

Thus, volunteers for (and, presumably, participants in) the Phonevision test differed from families in the city generally in three main ways. There were, first of all, the demographic differences, which may be summed up as a tendency toward larger, complete families, including children, among the volunteers, as well as higher socio-economic status. Secondly, volunteers were, on the average, much more favorably predisposed toward subscription television in general and toward Phonevision and the Phonevision test in particular. Finally, though these differences were of a smaller order, volunteers for the Phonevision test exhibited tendencies toward a pattern of recreational attitudes--a liking for forms of entertainment usually found outside the home combined with a liking for the comfort and convenience of entertainment in the home--which was quite consistent with their interest in and approval of Phonevision. While these three sets of differences were interrelated--that is, even among all families in the city, the larger families and the families of higher socio-economic status were more likely to be favorably oriented toward subscription television and Phonevision and more likely to express the more general recreational attitudes underlying this orientation, the differences in attitudes and interest cannot be accounted for solely in terms of the objective demographic differences.

It can only be concluded that, granted the differences in family composition and socio-economic status that distinguished families who volunteered for the Phonevision test from other families in Chicago, the test-volunteer families were more favorably disposed toward subscription television and Phonevision than was generally true of Chicago families of that demographic background. Test families cannot, therefore, be regarded as representative of either all families in the city or those families in the city of similar background, so far as their response to Phonevision is concerned. It can, nevertheless, be that these test families were representative, in their response to Phonevision, of those families who would have become subscribers to Phonevision if it had been commercially offered. This last consideration--both the number of Chicago families who can be regarded as potential subscribers to Phonevision and the extent to which the test results can be taken as representative of their response to Phonevision--is postponed, for simplicity of presentation, until the results of the Phonevision test and city-wide reactions to Phonevision can be described.

RESULTS OF THE PHONEVISION TEST

Test Expenditures for Phonevision

During the three month period of the Phonevision test, the three hundred participating families spent $6,751.00, or an average of $22.50 per family. The largest single family expenditure for Phonevision programs during the test period was $74.00 while the smallest family expenditure was $2.00. It can be estimated, after a correction for the overrepresentation of television set owners among test families, that the average expenditure for Phonevision among test volunteers, generally, would have been $22.15± $1.38, but, since it has been indicated that estimates based on the test families will probably be near the upper range of chance occurrence, it is probably wiser to regard estimated expenditures for the universe of volunteers as somewhere between $20.77 and $22.15.

Expenditures for Phonevision were not constant throughout the thirteen week test period. Put briefly, the cycle of expenditures may be described as novelty, reaction, recovery and nostalgia. That is to say, during the first week of the test expenditures were at their highest--$3.09 per test family--as curiosity, excitement, publicity and the general novelty of Phonevision dominated. By the second week of the test, expenditures had already fallen by more than a third to $1.90 per family. Expenditures during the third week were about the same as during the second ($1.87 per family), while the fourth week dropped significantly below the preceding week to $1.68 per week per family. This pattern of declining expenditures continued through the eighth week, when the test low of $1.44 per family occurred. In the ninth through twelfth weeks of the test, a slight upturn occurred, with a weekly average, over the four-week period, of $1.57 per family. The final six days of the test were characterized by a sharper rise in expenditures, as people took advantage of their last chance to see Phonevision during the test, so that in the six-day period test families spent an average of $1.69, or an estimated $1.97 if a seven-day week is considered.

The ninth through twelfth weeks of the Phonevision test had been predesignated as the period in which test expenditures would approach "normal," through a prior hypothesization that the cycle, just described, would occur. When expenditures for this period are corrected for the overrepresentation of television owners, it can be estimated that the typical Phonevision test volunteer family would have spent from $1.43 to $1.67 a week, with $1.43 to $1.55 the more probable limits of average weekly expenditure.

The Role of Test Conditions

In any analysis of expenditures for Phonevision during the test, it is well to remember that these were expenditures made at a given period of time, for a given set of programs, in the course of a publicized test of Phonevision. There are, then, problems growing out of the fact that the test was unique, so there was no opportunity to determine how much variation in Phonevision expenditures there might have been under varying seasonal and programming conditions. In addition, there are

problems growing out of the simple fact that it was a test, for it is always possible that people, acting in the knowledge that they were part of a test which was being closely observed, acted differently than they would have acted if Phonevision had simply been a commercially available service to which they chose to subscribe.

The problems growing out of the fact that the test was conducted only once, with consequent unique attendant conditions, could not be thoroughly treated within the limits of this research. It should, however, be borne in mind that the Phonevision test was conducted during the winter months, which are probably the optimum time for home, in-door entertainment; thus, expenditures in this period may well be regarded as an annual high, in the interest of conservatism. Conversely, the fact that Phonevision was tested with programs consisting of relatively old movies makes it reasonable to suppose that the use of new movies would have led to higher rates of expenditure, and the research supported this supposition. While the expenditure data available refer only to expenditures for older movies, the use of older movies in the Phonevision test would tend to make these expenditures a conservative estimate of expenditures under more popular programming conditions.

A number of factors must be considered under the heading of "test effect" -- the question of whether the results observed in the test may be regarded as typical of behavior in a non-test situation. Among the major factors are the motives of the families who volunteered. It has been suggested earlier that these motives were varied enough so that volunteering for the Phonevision test could not be regarded as coterminous with interest in Phonevision. Thus, the inclusion in the Phonevision test of families who volunteered for reasons which had less to do with Phonevision, itself, than with other features of the test--particularly, the free use of a television set--might affect expenditure rates. A second consideration is that those participants who owned television sets of their own found themselves, because of the Phonevision test, in possession of two television sets--a situation which relatively few families would otherwise have encountered. It is easy to speculate that this circumstance could have affected expenditure for Phonevision, also, since family conflicts over which program to view--say, a Phonevision program versus a free television program--might well be resolved in favor of the less expensive program, where only one television set was available, but might lead to a viewing of both programs, where there were two sets to use. Finally, regardless of their initial motives for volunteering, test families found themselves in a spotlight of attention and publicity which would not attend their usual behavior. It is, thus, quite possible that a certain self-consciousness, a sense of their role as test participants, some feeling of identification with the Phonevision test, or feelings of obligation or responsibility to help the test succeed could have influenced families to act differently than they otherwise would have. Each of these aspects of test effect can be examined for, at least, an indication of its extent and the direction in which it influenced test results.

1. Motives for volunteering -- As test families looked back to the time when they decided to volunteer for the Phonevision test, they most frequently referred to having been curious or interested; they recalled having wanted to see for themselves how Phonevision would work and having been eager to try something new. Closely allied to the novelty of Phonevision, though less frequently directly mentioned, were feelings that participation in the test would have high status and social prestige. Some test families recognized that selection for participation made them members of a special and limelighted elite--the lucky and, presumably, envied few to be chosen, and others liked the idea of having something that other people couldn't have, of being "first with the latest." The second leading single motive for volunteering that was reported, however, was the opportunity to secure free use of a television set. While this motive was, of course, far more typical of families who did not have television sets, a few families with small screen television sets or sets that gave unsatisfactory reception also saw the advantage of this detail of the test plan. Finally, there were a number of categories of explanation

which referred to the appeal of intrinsic features of Phonevision: improvement in television programming, increased comfort and economy of seeing movies at home, elimination of television commercials, etc.

It is thus apparent that there were three main lines of motivation in applying for participation in the Phonevision test; intrinsic interest in Phonevision itself, novelty-prestige elements in the Phonevision test, and use of a television set as part of the mechanics of the test. Of these, only the first group of motives can be regarded as relevant to interest in Phonevision, while volunteers with motives concerned with extraneous factors introduced by the conduct of a test simply indicate the extent to which volunteering for a test fails to correspond with intrinsic interest in the subject-matter of the test. On this basis, it can be estimated that slightly over half of those who volunteered for the Phonevision test did so at least in part because of intrinsic interest in Phonevision, while the remainder were motivated primarily by considerations of novelty and prestige or the free television set or both.

The effect of the inclusion in the test of families of the latter kind was to decrease expenditures for Phonevision, since families motivated by prestige or by the use of the television set tended to spend less, on the average, for Phonevision programs than did families who were intrinsically interested. The effect is not large, however; it can be estimated that, if the test results were based only on those participants who had been interested in Phonevision, mean family expenditures would have been about $0.06 a week higher. The use of expenditure rates based on all participating families is, therefore, so far as this factor is concerned, a conservative procedure which somewhat underestimates the expenditures which would be made by families interested in Phonevision.

. The second television set--This factor proved to have little but theoretical importance, since only 39 families used both their own and the test set during the months of the test, and only 18 families reported that they had ever been in the situation where one set was used to view the Phonevision movie while the other set was being used to see a regular program preferred by some members of the family. In terms of actual behavior, the 39 families who used both sets spent $1.67 a week on the average, while those television set owners who used only the test television set spent $1.66. The exclusion of all of the families who tested Phonevision under the atypical condition of using two television sets would, therefore, in no way affect estimates of expenditures.

On the other hand, the smaller group who did use both sets under conditions of viewing the Phonevision program and a competing regular program simultaneously did have a substantially higher rate of expenditure for Phonevision than those who used both sets, but in some other fashion. If it is assumed that the higher expenditure of these 18 families are attributable to the peculiar circumstances of having access to two television sets, the effect of the second television set appears to have been to raise Phonevision test expenditures by not more than $0.03 a week.

3. Compulsions of the test--While the test families could not help being aware that they were part of a test, few of them were conscious of any compulsion, either internal or external, to regulate their purchases of Phonevision programs from the standpoint of the needs of the test rather than of their personal preferences. Only 8.6% reported ever having felt that they had to buy Phonevision programs when they didn't particularly want to, and 8.0% reported having bought more programs than they actually wanted to. Those who felt that they spent more than they wanted to were about equally divided between families who were influenced entirely or in part by conditions pertinent to the Phonevision test rather than to Phonevision itself and families whose increased expenditures appeared to be an inherent

effect of Phonevision. (In the first group were families who explained their excess expenditures in terms of the sense of obligation they felt to participate or the initial novelty of Phonevision, while in the second were families for whom the Phonevision programs proved so attractive that they found themselves spending more than they at first intended.) The former group is the only group whose expenditures might reasonably be regarded as inflated by the compulsions of the test, and its size--only twelve families were in this category--alone indicates that it could have had little effect on average expenditures.

It thus appears that none of the conditions peculiar to tests involving human subjects in general or to this test in particular could have led to any substantial overestimation of the expenditures of the same families under non-test conditions. On the contrary, the participation of families with mixed and questionable motives, on the one hand, and the use of older movies, on the other, probably led to an underestimation of expenditures under ordinary operating conditions.

Attitudes of Participants toward the Phonevision Test

Statements about the amount of money spent for Phonevision do not in themselves demonstrate what the subjective reactions of the participants were, even though one way of judging the success of such a program as Phonevision is to examine expenditures without reference to attitudes. From this standpoint of how the participants felt, the Phonevision test can be judged quite successful. Despite the fact that over half the participating families had approached the Phonevision test with exaggerated hopes and expectations about Phonevision which the test did not fulfill --test families had frequently expected much newer movies, stage plays, and other program types, and many had expected to have their choice of any entertainment program playing in the Chicago area, four-fifths of the families reported that they had found Phonevision at least as good as they had expected it to be. Even among those families who, by objective criteria, had unrealistic expectations of Phonevision, over two-thirds reported that Phonevision was as good as or better than they had expected.

The major appeals which Phonevision, as they saw it in the test, had for these test families were, first, the high value they placed on being able to have such entertainment in the comfortable and convenient surroundings of their homes; second, the pleasure they derived from seeing full television programs with no interruption by commercials; and third, the improvement over regular television in the type of program made available. Thus, what Phonevision offered to these families corresponded fairly well with what they had been seeking, insofar as they had any intrinsic interest in Phonevision, in taking part in the Phonevision test. The major criticisms of Phonevision, on the other hand, centered around the particular programming of the test--the age and quality of the movies, the lack of other entertainment forms, with almost no objection to any intrinsic feature of Phonevision.

In further confirmation of the favorable reception the test families by and large gave Phonevision, it may be noted here that all but 12 of the families were sure that if they had it to do over, they would still decide, in the light of what they had seen of Phonevision, to take part in the test, and 7 of these 12 based their uncertainty or decision not to take part simply on the fact that they weren't satisfied with the use of old movies. In fact, although far fewer families had been intrinsically interested in Phonevision to begin with, all but five of the test families said they would sign up as subscribers to Phonevision immediately, if it were commercially available.

One final subjective result of the Phonevision test was a change in the attitudes of those who participated in the test. While the research was carried out too soon after the close of the test to indicate how permanent these effects may be, at least temporarily all of the complex of attitudes which tended to distinguish test volunteers from other Chicago families in the first place had been further intensified among the actual test participants. Thus, there had been, during the period of the test:

1. An increase of interest in and liking for television, at the expense of interest in radio and movies.
2. A decrease in preference for entertainment outside the home, accompanied by a sharp decline in movie attendance.
3. An increase in criticism of commercials on television programs.
4. An increase in desire to have new movies on television, in general, and to have Phonevision commercially available, in particular. Test families had become almost unanimous in their approval of subscription television and almost unanimous in their intention to become subscribers to Phonevision.

Factors in Phonevision Test Expenditures

Even among the test families themselves, there were differences in the rate at which Phonevision programs were purchased. For the most part, the factors which served to differentiate Phonevision test volunteers from other families in Chicago also differentiated the relatively high from the relatively low spenders among the test families. In summary:

1. Large families spent a good deal more, on the average, for Phonevision than did smaller families, the difference in expenditures between a one-or a two-person family and a five-or-more-person family averaging $0.39 a week. Expenditures were also relatively high for families with children, but only if at least some of the children were five years of age or older.

2. Families with higher incomes spent somewhat more on the average than did families of less means. Differences were not large, however, with families with incomes of $7,500 or more a year spending $0.12 a week more on the average than families with annual incomes of $5,000 or less.

3. Families with the generally-predisposing recreational attitudes described earlier--that is, those who liked both television and movies and wanted newer movies on television--spent somewhat more for Phonevision than did other test families.

4. Families whose attitudes, after their test participation, were favorable toward subscription television, Phonevision, and the Phonevision test had spent a good deal more for Phonevision. Thus, families who found Phonevision better than they had expected it to be spent an average of $0.77 a week more for Phonevision than families who didn't like it as well as they expected to.

These trends tend to indicate that differences between test families and other families in Chicago were not so much a function of the particular selection process used in obtaining test participants as they were an indication of the underlying differences to be expected in a city like Chicago between families who will become subscribers to Phonevision and families who will not. Further substantiation of this observation will be presented after a description of city-wide reactions to Phonevision.

CITY-WIDE REACTIONS TO PHONEVISION

Familiarity with Phonevision

While the test families were participating in the Phonevision test and forming their impressions of Phonevision, a good deal of familiarity with and interest in the Phonevision test was created throughout Chicago. By the Spring of 1951, just after the Phonevision test ended, about three-fourths of the families in Chicago had heard of Phonevision and over three-fifths could offer a reasonably correct explanation of what Phonevision was. In fact, just about one-third of Chicago families had learned about Phonevision prior to the start of the test, either through publicity attending the recruitment of volunteers or through interim publicity about attempts to secure movies for the test.

Much of the knowledge of Phonevision came about through actual viewing of jittered Phonevision programs, which, in itself, attests to the interest the Phonevision test aroused. A survey conducted in the second week of the test, while the picture but not the sound of the Phonevision program was scrambled, indicated that 62% of the households with television sets had already watched some part of a

Phonevision program at least once, and about 1.5% of the television sets in use at the times of Phonevision program showings were tuned to the Phonevision channel. Even at this early point in the test, the majority of those who had watched Phonevision at all had watched it more than once. About a quarter of these jittered-Phonevision viewers had watched the program for at least a half an hour during their last viewing.

By the end of the Phonevision test, about four-fifths of the households with television sets had watched the jittered picture at least once, and over a quarter of the families without television sets had also seen it. Almost two-thirds of the television set owners had watched Phonevision programs more than once. Even if all the families who watched Phonevision only once, no matter how long they viewed it, are regarded as having been only initially curious, and all families who watched Phonevision more than once, but never for more than five minutes, are regarded as mere casual viewers in the course of channel-tuning, there still remained over a quarter of the television owners who watched Phonevision more than once and who, at least once, watched it for more than a casual glance. In fact, one-eighth of the television-owning families had watched at least one complete Phonevision movie.

The Question of Subscription Television

By the close of the Phonevision test, then, the majority of families in Chicago had some familiarity with Phonevision. This familiarity and the interest in Phonevision implied by it might well have been expected in the light of the recreational interests of Chicago families. At the time this research was done, over half the families in Chicago (56.9% of the sample) already owned television sets and another quarter (26.0%) expected or hoped to acquire television sets. Watching television had become the leading recreational preference of Chicago families to the extent that 56.0% of Chicago families mentioned watching television as one of their favorite pastimes, while no other recreational activity was mentioned by as many as 40.0% of all families. This interest in television made it likely that any new development in television would attract public attention, and Phonevision, as a new development, was interesting to the public, especially because much of the criticism of television centered around programming. In particular, while only 10.9% said they disliked television, 20.5% spontaneously referred to their dissatisfaction with the kind of movies shown on television and their desire to see newer movies presented, and 30.3% volunteered criticisms of television commercials.

Because of the widespread familiarity with Phonevision and its saliency to their recreational interests, the reactions of Chicago families to subscription television may be regarded as resting on a base of prior information and consideration rather than being off-hand, unconsidered judgments of a completely hypothetical situation. In the Spring of 1951, a majority of the families in Chicago reacted favorably to the idea of having some television programs on a paid subscription basis. As against 57.9% who favored subscription television in this unqualified fashion, there were 28.8% who opposed it and 13.3% who had not arrived at an opinion on the subject. When the condition was explicitly introduced that the only television programs on a subscription basis would be programs that would not otherwise appear on television, the proportion favoring subscription television under this condition rose to 66.2%, with 16.8% opposed and 17.0% undecided. In other words, among the families who had an opinion, the general idea of subscription television was approved by two to one, while the use of subscription financing to make available programs not ordinarily available was approved by about four to one.*

*The public discussion of subscription television has been primarily in terms of the more limited conception of charging for the viewing of programs which are presented elsewhere for a fee, and many respondents were assuming this restriction when they gave seemingly unqualified support to subscription television. This discussion will, therefore, concentrate on the division of opinion about subscription television in this narrower sense. The data are presented in the main body of this report in a form which allows of either interpretation of the issue.

Subscription television was favored, by those who favored it in its more general form, primarily because people felt that it would result in an improvement in television programming, either generally, or by making feasible the presentation of types of entertainment that were not current on regular television, or by eliminating commercials, and they were willing to help finance improvements such as these. Secondarily, the proponents of subscription television simply assumed that it would bring other forms of commercial entertainment into the home via television and stressed the convenience and economy of obtaining these amusements in the home.

Those who had generally opposed subscription television indicated that television was already a relatively expensive investment, made in order to economize on entertainment, and they were unwilling or financially unable to support any increase in the costs of television entertainment; then, too, some of these opponents feared that any introduction of subscription television would ultimately lead to a discriminatory system--either that all programs would eventually be on a fee basis or that all desirable programs would require payment, thus either eliminating lower-income families from the television audience or restricting them to second-class fare; and, finally, there were those who either were already satisfied with the entertainment commercially-sponsored television provided or felt that the costs of improvement should be borne by the sponsors rather than by the audience.

There was relatively little difference in attitudes toward subscription television owners and non-owners. While 69.2% of the television owners favored subscription television, if it were used simply as a system of financing the televising of programs that could not otherwise be presented, 62.5% of the non-owners did; opponents of limited subscription television were 18.6% and 14.4% of the two groups, respectively. Non-owners, in other words, were somewhat less likely than owners to have an opinion on the issue, but, among those with opinions, the division of opinion was very similar--78.8% of the owners and 81.3% of the non-owners with opinions approved of limited subscription television.

Smaller families tended to give somewhat less support to limited subscription television than did larger families; the proportions giving at least qualified support ran from about 64% of the one- and two-person families to about 67% of the three- and four-person families, 68.1% of the five-person families, and 72.5% of the six-or-more-person families. Opposition to limited subscription television did not follow this systematic pattern, however, the bulk of the difference in attitudes between family size groups being attributable to the tendency on the part of smaller families to have no opinion on the question. Families whose children were in the early years were most likely to look with approval on subscription television as a means of importing outside entertainment into the home: 75.1% of them approved, as compared with 67.3% of those with some of their children in the age group of 5 to 19, and 63.6% of those with no children under 20.

Approval of subscription television also varied with ability to pay, running from 62.2% of Chicago families with incomes under $2,500 a year to 81.7% of families with incomes of $10,000 or more a year. Subscription television was also received least favorably by those families whose heads had education under the high school level; 52.4% of the families whose heads had never completed grammar school and 61.9% of those whose heads had graduated from grammar school, but gone no further, endorsed limited subscription television, while over 70% of families at all the higher educational levels approved.

The factors earlier found to predispose families favorably toward the Phonevision test and/or to be reinforced by participation in the test were all related to attitudes toward subscription television in the expected way. That is to say, families whose recreational preferences leaned toward movies, who liked television because it was convenient and comfortable, who wanted newer movies shown on television and television commercials improved, curtailed or eliminated, were somewhat more favorably disposed toward subscription television than were families who did not have these tendencies. These differences were, however, relatively small, and the data indicate that the families with these positively-predisposing recreational preferences were primarily different from the

families who lacked them in having more frequently arrived at an opinion about subscription television, perhaps as a result of their preferences in the recreational field.

It is outstanding that, despite these differences in opinions regarding subscription television among families of differing composition, socio-economic status, or recreational preferences, an absolute majority in every segment of the population that was examined supported subscription television as a means of televising commercial entertainment. Even when the more extreme position of supporting subscription television without any explicit qualification on its application is examined, an absolute majority of every sub-group--except for the group with heads of less than grammar school education, where a quarter had no opinion--endorsed the idea. Opposition to limited subscription television never exceeded a fifth of any population segment, and opposition to subscription television defined more broadly did not rise above about 35% of any sub-group.

Responses to Phonevision Programs

While the majority of Chicago families favored subscription television in principle, this finding indicates relatively little about what the response of Chicago families might be to concrete program offerings via subscription television. To carry this analysis one step further, Chicago families were asked, in a series of four questions, what types of programs they would purchase if they were already in possession of a television set equipped to receive Phonevision programs. Close to two-thirds of the families in the city (64.9%) indicated that they would be willing to pay for new movies on television at the rate of $1.00 per movie, while slightly under half (46.0%) said they would pay for older movies of about the vintage used in the Phonevision test. Sports events that would not otherwise be televised appealed to 45.1% of Chicago families as a Phonevision feature, and 37.1% named other types of programs -- Broadway plays, concerts, operas, lectures, etc.--that they would be willing to pay to have on television. Three-fourths of the families in Chicago (75.6%) said they would purchase programs of at least one of the kinds just mentioned.

Another measure of interest in Phonevision programs in Chicago may be derived from comparisons of the relative appeal of a Phonevision program over competing forms of entertainment. The Phonevision program selected was a movie, and a substantial majority of Chicago families (60.8%) said they would rather watch a movie they wanted to see on Phonevision than see a similar movie at a regular theater. Similarly, 53.1% felt that they would rather pay to see a movie they wanted to see on Phonevision than listen to their favorite radio program. A minority, but the plurality, of families (44.6%) would pay to watch a Phonevision movie, if it merely sounded "all right," in preference to watching regular television, when there was nothing on that they particularly wanted to see. Only a quarter (23.5%), however, would pay for even a Phonevision movie they wanted to see, if it were presented in conflict with their favorite television program. About a quarter of Chicago families (26.1%) consistently rejected Phonevision movies throughout these four comparisons, while 14.7% chose Phonevision movies only once out of the four. At the other extreme, 12.4% consistently chose Phonevision movies, and 23.9% chose them three out of four times.

It is thus apparent that the types of programs subscription television might offer had a wide appeal in Chicago, although not everyone who acknowledged interest in these programs was ready or able to implement this interest. When families were asked how they would respond if Phonevision were on the marked at that moment (and assuming that they already had a television set), a smaller majority--55.7% --said they would have their television sets connected up to Phonevision, while 15.8% weren't sure they would want to, and 28.5% said they would not.

In terms of the various data, a set of consistent types with reference to the purchase of Phonevision may be described. At the one extreme are those families who said they would subscribe immediately if Phonevision were available and who had also indicated that they would pay for at least one program type, if they had a

television set equipped to receive Phonevision; at the other extreme are those families who consistently indicated no interest in Phonevision--they were either uncertain about or definitely against both purchasing any types of programs and subscribing to Phonevision; somewhere in the middle are those families who had expressed willingness to pay for one or another type of Phonevision program, but were not sure of or not in favor of subscribing at this point. In terms of subjective outlook, at least, these three types may be regarded as probable subscribers, probable non-subscribers and "doubtfuls," and families in the city were divided, in this respect, into:

Probable subscribers. . . .	54.4%
Doubtfuls	22.5
Probable non-subscribers. .	23.1

These types, of course, refer only to the interest-desire dimension and it cannot be inferred that all families who were subjectively probable subscribers to Phonevision would become subscribers in actuality. The data do describe the potential receptivity to and support of subscription television in Chicago at the time of this research, but some account must be taken of objective factors--the means to implement these preferences and the possession of or ability to acquire television sets and, if necessary, telephones--in order to estimate actual subscription. The posing of the problems implicit in this statement is a return to the basic research problem to which the entire research report is addressed--that of determining how the residents of Chicago would have responded to Phonevision, if this system of subscription television had been commercially available to them. Now that the pieces of evidence necessary to a solution of this problem have been briefly presented, they may be combined into a tentative answer.

IMPLICATIONS OF THE PHONEVISION TEST FOR THE COMMERCIAL OPERATION OF PHONEVISION

Establishment of the Universe of Potential Subscribers

It may be recalled that the research design finally adopted called for the establishment of a number of population strata defined in terms of those variables which distinguished the test families from other families in Chicago and which related to the test families' expenditures for Phonevision. By determination of the number of families in Chicago which could be assigned to each stratum and with the assumption that these families would make expenditures for Phonevision at the same rate as the test families who were in the same stratum, both the number of Chicago families who would respond to Phonevision and their probable expenditures were to be estimated. These estimates were then to be corrected, if necessary, in the light of actual television ownership and possession of telephone service.

Three general classes of variables emerged as related to volunteering for the Phonevision test and to expenditures for Phonevision during the test. In the order in which they have been presented here, these were:

1. The demographic characteristics relating to family composition and socio-economic status.
2. The general recreational tendencies which predisposed families toward Phonevision.
3. The specific attitudes toward and opinions of subscription television and Phonevision.

Of these three, the last class mentioned distinguished most sharply between test families and other families in Chicago at the conclusion of the Phonevision test, but this variable yielded essentially only one stratum, the stratum of families strongly in favor of and likely to become subscribers to Phonevision, because over 95% of the test families were assignable to the same category of approval whichever question was used as a criterion. Thus, among test families, 95.5% favored subscription television, 95.7% would take part in the Phonevision test again, 97.0% chose Phonevision movies over competing entertainment types at least half the time, 98.5% would subscribe to Phonevision immediately if it were available and they had television sets, and 100.0% would pay for Phonevision programs of at least one type if they had a television set equipped to receive them. In essence, then, the test families appeared to form one stratum

along a continuum of interest in Phonevision, with a few exceptions attributable to the imperfect correspondence between volunteering for the Phonevision test and interest in Phonevision, while Chicago families could be assigned to a number of strata along this continuum.

In practice, then, one stratum of Chicago families had to be selected from the Phonevision-interest continuum, and the stratum selected was that previously defined as probable subscribers. Analysis indicated that the group of variables centering around approval of and interest in subscription television distinguished even more sharply between probable subscribers and probable non-subscribers than they did between Phonevision test families and Chicago families generally. More important, so far as attitudes toward Phonevision and subscription television were concerned, these probable subscribers in many respects approximated the views of Phonevision test volunteers.

By the nature of the way in which they were defined, the probable subscribers were unanimous in saying that they would subscribe to Phonevision if it were available and would pay for Phonevision programs of at least one type, while Phonevision test volunteers held these views significantly less frequently. Probable subscribers were also slightly more favorable to subscription television in the abstract and about as likely to choose Phonevision movies over other forms of entertainment as were the test volunteers. On the other hand, these probable subscribers were significantly less interested in participating in a Phonevision test and less familiar with the Phonevision test than were the volunteers. When the group of probable subscribers is restricted to those among them who were both residential telephone subscribers and willing to participate in a test of Phonevision (two conditions which were fulfilled by Phonevision test volunteers), this sub-group of potential subscribers either equalled or exceeded the test volunteers in the proportions favorably oriented toward subscription television and toward Phonevision on each of the criteria just referred to.

So far as this set of factors is concerned, then, a stratum of probable subscribers could be defined in such a way that the families within it held attitudes which either equalled or exceeded the favorableness toward Phonevision of Phonevision test volunteers. Everything else being equal, it is reasonable to suppose that the response of these families to Phonevision would also have equalled or exceeded that of the Phonevision test volunteers who, in turn, would have responded in about the same way as the sample of test participants actually did, since the volunteers were an equivalent sample.

The selection of this one stratum to represent the potential subscribers to Phonevision in Chicago largely eliminated the need to introduce substrata defined in terms of the other two classes of variables which differentiated test families from other families and influenced their rates of expenditure for Phonevision. On the one hand, these same variables--both the demographic factors and the factors of general recreational predispositions--tended to distinguish between the probable subscribers and the probable non-subscribers in much the same way as they differentiated between Phonevision test volunteers and families in Chicago generally. On the other hand, although the differences between probable subscribers and test volunteers were much smaller than those between Chicago families generally and test volunteers, some significant differences remained: probable subscribers and test volunteers had about the same family composition, but the test volunteers remained significantly higher in both socio-economic status and in their recreational leaning toward new movies on television in the comfort of home. These latter differences of socio-economic status and of recreational preferences, however, either vanished or became insignificant, when Phonevision test volunteers are compared only with the sub-group of probable subscribers who lived in Lakeview-Lincoln, were telephone subscribers and were also willing to participate in a test of Phonevision.

Thus, it was possible, through survey analysis, to carve out a group of families who closely resembled the volunteers for and participants in the Phonevision test and of whom it was reasonable to assume that the expenditures made by test families for Phonevision during the test would be typical. Estimates of the market for

Phonevision were not limited to this sub-group, however, because of the implications of the differences between these groups. Differences in either demographic composition or opinions and attitudes were attributable to one of three main factors, each of which represented an artificial limitation on the public for Phonevision:

1. Restriction of the test to the Lakeview-Lincoln area--Since Phonevision test volunteers can be shown to compare in composition and attitudes with the sub-group of probable subscribers in Lakeview-Lincoln who corresponded with them in having telephone service and in being willing to participate in a Phonevision test, it seems likely that their failure to correspond with a similarly defined group in the city as a whole is attributable to underlying differences in composition of the population as between Lakeview-Lincoln and the entire city. Thus, if test volunteering had been permitted on a city-wide basis, it seems logical to conclude that the volunteers, themselves, would have had a somewhat different composition.

2. Restriction of the test to volunteers --It has just been indicated that some of the differences in attitude and composition between the entire group of probable subscribers and Phonevision test volunteers is attributable to the inclusion within the group of probable subscribers of families who would not volunteer for participation in a test of Phonevision. Since probable subscribers were defined in terms of their interest in Phonevision, without special attention to whether they were interested in Phonevision movies or not, while families who indicated that they would be willing to participate in a Phonevision test were largely aware that it was a test of older movies by Phonevision, it is not surprising that the former outnumber the latter. In addition, other factors like avoidance of publicity, dislike of obligations, unwillingness to participate in experiments, etc., serve to make the two groups somewhat different. Since those probable subscribers in Lakeview-Lincoln who would volunteer for a Phonevision test closely resembled the actual Lakeview-Lincoln volunteers, it seems likely that some of the differences between all so-called probable subscribers and actual test volunteers are attributable to the imperfect correspondence between volunteering for the test, on the one hand, and interest in and subscribing to Phonevision, on the other.

3. Restriction of the test to telephone subscribers--This was the third main factor making for differences between all probable subscribers and the actual test volunteers, largely in socio-economic status and in associated recreational preferences. While this test of Phonevision required the use of phones, the existence of other forms of Phonevision which do not require phones as well as of other subscription television systems not dependent upon telephones made it appear to be an undesirable restriction to impose.

Beyond these factors, differences between probable subscribers and Phonevision test volunteers can be accounted for on the basis of sampling fluctuations and of minor inaccuracies of classification.

Since, on the one hand, estimates of expenditures based wholly on the Phonevision expenditures of test participants would apply only to the situation in which the Phonevision programming consisted entirely of older movies--a condition not likely to obtain under ordinary circumstances, and, on the other hand, the subgroup of the Chicago population to which test family expenditure rates were directly applicable was defined in terms of the imposition of the preceding three unrealistic restrictions on the potential market for Phonevision, this direct projection was never made. Instead, slightly different methods of estimation were adopted.

Estimates of the Number of Subscribers

In view of the fact that all of the data show such striking consistency, there would appear to be little doubt that the number of potential subscribers -- apart from considerations of feasibility-- to Phonevision can be reasonably estimated from the group that has been defined here as "probable subscribers." While these probable subscribers were defined in terms

of a quite varied program offering on Phonevision, and one which may exceed what any actual operating program can supply, there were only 1.2% of the families in the city who would subscribe to Phonevision only if the programming included something other than movies and/or sports events. This possible slight exaggeration of the market for Phonevision is probably far overbalanced by the total exclusion from the group of families regarded as subscribers of those families who were already somewhat drawn to Phonevision, as evidenced by their interest in paying for some program types even though they also indicated that they wouldn't subscribe to Phonevision immediately.

This estimate of probable subscribers, in fact, gives no weight to the effectiveness of either an advertising campaign or an opportunity to see Phonevision at the homes of friends and neighbors in converting many of those here classified as "Doubtfuls" and even some of those now classified as "Probable Non-subscribers" whose attitudes were otherwise favorable to subscription television. In view of the fact that Phonevision test participants were a good deal more favorable toward Phonevision than were Phonevision test volunteers who did not actually participate, and that this difference in attitudes can only be attributed to the test families' experiences in the Phonevision test, it is clear that actual experience with Phonevision did serve to make proponents of Phonevision of most of those test families who initially entered the test with little interest in Phonevision and that the operation of similar experiential factors will actually enlarge the group of probable subscribers if subscription television becomes commercially available. There is, then, every reason to believe that the number of potential subscribers to Phonevision is, if anything, underestimated here.

All of the procedures followed here were aimed at conservatism, however--to underestimate rather than overestimate. For example, it may be estimated that there were about 1,149,000 dwelling units in Chicago in 1951, in terms of the definition of dwelling units used in this research. Nevertheless, because interviews were obtained in only 85.9% of the occupied dwelling units in the sample assigned for this research, the rates of interest in and desire for Phonevision observed in the survey are projected only to the 987,000 households represented by the sample. The 162,000 "missing" households are thus treated as if they would yield not one subscriber to Phonevision. While it is probably true that the kinds of households lost from the sample would have a lower subscription rate than the households interviewed, it is almost certain that this assumption of no subscribers and no expenditures in the group of "missing" households is too extreme and leads again to underestimation of the market.

In order to estimate the number of subscribers to Phonevision, the 987,000 households were distributed according to their joint possession of telephones, television sets and interest in subscribing to Phonevision. If an allowance is made for sampling error, it can be estimated that there were in Chicago in the Spring of 1951 a minimum of 246,000 to 304,000 families who would subscribe to a system of subscription television requiring the use of a telephone (that is, 27.9% of the families interviewed had both a television set and a telephone and were also classified as probable subscribers), and a minimum of 283,000 to 343,000 who would participate in subscription television if a telephone were not needed.

Since television ownership is growing steadily, a conservative estimate of purchase of television sets by Spring of 1952 was also made. From this estimate, it can be estimated that by Spring, 1952, there would be a minimum of 282,000 to 342,000 subscribers to a system of subscription television requiring use of a telephone (that is, 31.7% of the families interviewed had telephones, either had or planned to have a television set by this date, and were classified as probable subscribers to Phonevision), and a minimum of 345,000 to 407,000, if the subscription television system in use should not require a telephone.

As a final indication of the scope of the market, estimates may be made for that hypothetical time in the future when everyone who has even the vaguest plans to do so acquires a television set; under this condition of saturation of the market for television sets, there would be an

estimated minimum of 341,000 to 403,000 subscribers, if telephones were needed and telephone ownership did not alter, and a minimum of 449,000 to 513,000 subscribers to a system not requiring telephones.

Estimates of Expenditures

In an attempt to estimate how much these potential subscribers to Phonevision were likely to spend, the survey asked respondents to estimate their expenditures for Phonevision under five different conditions: if only older movies like those used in the test were available, if only new movies were available, if only sports events were available, if only program types other than those already enumerated (which the respondent had indicated he wanted on Phonevision) were available, and, finally, if all the different kinds of programs which the respondent wanted were available. The object of this approach was, of course, to permit estimates of expenditures under programming conditions different than those used in the Phonevision test. Since self-estimates are not always accurate measures, however, some evaluation of these estimates must be made.

The Phonevision test families estimated that their expenditures for older movies on Phonevision would be $1.60 per family per week, a figure which was only $0.05 a week higher than test families actually spent on the average. Test families' actual and estimated expenditures for older movies approached as closely as they did, however, only because there was a group of 34 families who estimated that they would spend nothing for older movies, even though most of them had actually bought the older test movies. This group, whose estimates were lower than their actual expenditures, tended to counterbalance the tendency of those who said they would buy older movies to make estimates of their expenditures which exceeded their actual expenditures by an average of $0.21 a week. Thus, while the over-all group estimate closely approached the true situation, there was a good deal of counterbalancing error, so that for individual families or for sub-groups estimates of expenditures may seriously deviate from actual behavior.

Since it appears that the self-estimates of Phonevision expenditures of even the test families, who had prior experience with Phonevision to base their extimates on, were not completely reliable, what can be said of the self-estimates made by groups who did not have any experience with Phonevision? First of all, the estimates of Phonevision expenditures made by Phonevision test volunteers who did not actually participate in the test may be considered. These estimates were substantially below the estimates made by actual test participants. In fact, the volunteers' estimated rate of expenditure for older movies was just about half what was actually spent by test families, and, even when the rate of expenditure is increased by limiting it to the average estimated expenditures of volunteers who indicated that they would buy older movies on Phonevision, it was still $0.41 a week below the actual average weekly test expenditures for older movies.

When this result is juxtaposed with the fact that Phonevision test volunteers were, except for such minor biases as might have resulted from substitution in completing the roster of test participants, a counterpart of the sample of test families in everything but actual test participation, it is obvious that test volunteers were substantially underestimating what their actual expenditures would have been, at least as regards older movies, where an objective standard of evaluation exists. To put it another way, test families came much closer to actuality in estimating their expenditures for older movies, while families with no actual experience with Phonevision appeared to have seriously underestimated the attraction Phonevision programs would have for them. While it is only with respect to older movies that this conclusion can be completely demonstrated, it appears likely that the tendency of volunteers to underestimate their expenditures operated consistently, regardless of the type of program under consideration, since even their estimated expenditures for new movies were substantially below actual test expenditures for older movies.

In comparison with the families defined as probable Phonevision subscribers, on the other hand, Phonevision test volunteers estimated their expenditures for Phonevision

programs of each type at about the same levels. From the fact that probable subscribers and Phonevision test volunteers made about the same estimates of expenditures for Phonevision programs, while Phonevision test volunteers appeared to have been substantially underestimating their expenditures, it seems likely that probable subscribers, who, like the Phonevision test volunteers, lacked actual experience with Phonevision on which to base their estimates, were also underestimating their expenditures to about the same degree as the volunteers. This conclusion is based, in large part, on the close resemblance in characteristics and attitudes between the Phonevision test volunteers and the probable Phonevision subscribers, which has already led to the equation that probable subscribers would respond to Phonevision in about the same way as Phonevision test volunteers would, and Phonevision test volunteers would respond to Phonevision in about the same way as Phonevision test participants did.

In fact, if Phonevision expenditure rates are estimated for the group of probable Phonevision subscribers by the originally-planned procedure of setting up equivalent strata of Phonevision test participants and of probable subscribers and then using standardization procedures to eliminate the effect of the residual demographic differences remaining between probable subscribers and Phonevision test volunteers and participants, the result is that expenditures for the three groups--test participants, test volunteers and probable subscribers -- are estimated at exactly the same rate, the actual mean weekly expenditure of $1.55 observed during the test. Even if those Phonevision test volunteers and Phonevision probable subscribers who said they would not pay for older movies are taken at their word and assumed to spend nothing for older movies (and it is probable that this assumption results in an underestimation of expenditures), it would be estimated, from the actual expenditures of Phonevision test participants during the test, that each of these groups, including the zero expenders, would average $1.06 weekly, an estimate which is $0.28-0.31 a week higher than the two groups' self-estimates.

While these data are, in themselves, rather conclusive, the fact that serious underestimation of Phonevision expenditures occurred can be further demonstrated by examining the self-estimates of the sub-group of probable subscribers who were defined by the same restrictions as the Phonevision test participants and between whom and the participants there were no residual differences in attitude, interests or characteristics except such as tended to make this sub-group of probable subscribers even more favorably predisposed toward Phonevision than the actual participants. This sub-group -- viz., those probable subscribers in Lakeview-Lincoln who were residential telephone subscribers and who signified willingness to participate in a test of Phonevision--also estimated their expenditures for older movies at a much lower rate than the actual expenditures of test families, even when the estimate rate is limited to those who said they would buy older movies. In fact, it was not until this sub-group estimated their expenditures for new movies at an average of $1.43 weekly that their estimates approached the sampling range of actual expenditures to be expected for older movies ($1.43-$1.55) from groups like that of the test families.

Thus, the use of self-estimates of expenditures for Phonevision to arrive at estimates of response to Phonevision continues the conservative procedure begun in estimating the number of subscribers to Phonevision, in order to ensure that such estimates will, if anything, underestimate rather than overestimate the market for Phonevision. By combining these self-estimates with the estimates presented previously of the number of families who would be Phonevision subscribers at different points of time under differing market conditions, a number of estimates of the dollar volume of Phonevision in Chicago may be arrived at, each of which should be regarded as a kind of minimum estimate under the conditions stated.

First, then, assuming Phonevision offered diversified programming, Chicago families would, in the Spring of 1951, have spent at least $492,000 to $668,000 weekly, under a system of subscription television requiring a telephone, and $547,000 to $733,000, if telephones were not needed. With the same assumptions about the growth in ownership of television sets that were made earlier, weekly expenditures by

Spring, 1952 can be estimated at $534,000 to $714,000, with telephones needed; and $669,000 to $857,000, without the assumption of possession of a telephone. With saturation of the television market, telephone systems of subscription television offering diversified programming have an estimated potential of $625,000 to $811,000 weekly, while non-telephone systems can be estimated at $849,000 to $1,037,000 weekly.

If subscription television offerings were limited to the presentation of new movies, the volume, in the Spring of 1951, would probably not have been less than $310,000 to $426,000 weekly, with the telephone restriction, and $371,000 to $497,000, without it. By Spring, 1952, these figures rise to $351,000 to $467,000 and $445,000 to $571,000 respectively. With expansion of television ownership, they would probably rise to not less than $407,000 to $523,000 and $554,000 to $678,000 respectively.

Finally, an absolute lower limit, which is probably far below what any actual operating figure would be, may be set. On the basis of this absolute minimum estimate, receipts from a telephone system of subscription television in early 1951 would still have been $186,000 to $254,000 a week, and, from non-telephone subscription television, $214,000 to $286,000 a week. By 1952, these minimums would be $214,000 to $286,000 and $263,000 to $339,000 respectively. After saturation of the television market, these minimums would rise to $259,000 to $325,000 and $346,000 to $424,000 respectively.

In conclusion it should be pointed out that all of the estimates which have been presented can be made only under the assumption that all conditions which are not explicitly specified in making the estimates remain the same as they were at the time the research was done. Obviously, any marked change in economic conditions or, perhaps, even in regular television programming--to mention only two of the many uncontrolled variables subject to change--would radically affect the magnitude of these estimates. Moreover, for simplicity, estimates have been made only for the corporate city of Chicago and with no allowance for any changes in population size or character. Any marked change in city population, either in size or in shifts of certain family types to the suburbs, would also modify these estimates.

ORGANIZATION OF THE REPORT

In this Introduction, which constitutes Section I of this report, the primary concern has been to outline the main conclusions deriving from the social research conducted in connection with the Phonevision test in such a way that the reader can follow, in summary form at least, the logic of the research design, the analytic procedures, and the empirical data which warrant the conclusions drawn. The main sections of the report follow about the same order of presentation as this Introduction, but they attempt to present the research data in the detailed form necessary for their critical examination. The reader may, if he wishes, easily refer back and forth from the summary statements made here to the section of the report which offers fuller substantiation.

Section II presents in detail the procedures followed in selecting a sample of Phonevision test participants, together with all the data that were available for evaluation of the sample at the time the sample was designed and implemented, and up to the time the post-Phonevision test research was carried out. Thus, in this section are presented an analysis of the implications of restricting the Phonevision test to the Lakeview-Lincoln area, the sample design adopted, a full description of the procedures followed in securing volunteers and in drawing a sample of participants from them, an analysis of the effects of the substitutions made in implementing the sample of participants, and a description of the composition and characteristics of Phonevision test volunteers and participants insofar as they were known, at the start of the test.

Data used in Section II largely derive from the factual information about test volunteers that was collected as part of the volunteering process and which were obtained initially in order to guide the selection of test participants. These data were supplemented, where necessary, by factual data actually obtained after the close of the Phonevision test, in order, for example, to compare the

Lakeview-Lincoln area with the city. A supplementary study, conducted just after the volunteering process closed, in which samples of incomplete volunteers and non-volunteers were interviewed in order to determine the kinds of reasons which deterred families from volunteering for the Phonevision test, is also drawn on as offering some illumination of the implications of using a universe of volunteers for the Phonevision test. Finally, the records kept by the Zenith Radio Corporation in the course of attempting to secure 300 actual participants furnish the additional data needed for the analysis of the substitution problem.

Section III continues into the subjective realm the examination of the differences between test families and Chicago families generally, begun in the preceding section with reference to objective characteristics. These differences either of demography or of predisposing recreational preferences are examined in the light of how they might contribute to the unrepresentativeness of Phonevision test results or, put more generally, what adjustments need to be made in generalizing from the test results to the city of Chicago. In Section III, only those recreational tastes, preferences and interests which may be regarded as logically prior to and possibly influencing either opinions directly relating to Phonevision or the results of the Phonevision test are dealt with. The topics covered include ownership of television sets, general recreational preferences, preferences as between home and outside the home entertainment and as between movies and television, attitudes toward television, and habits and practices with respect to movie attendance and television viewing.

Opinions of and interest in subscription television and Phonevision are examined in much the same way as these more general recreational inclinations for their possible part in differentiating Phonevision test participants from Chicago families generally, but the presentation of these data is reserved until Section V, where they bear on a somewhat different objective. As an artifact of the research design used, there also appear, in both Sections III and V, some data which bear on the influence of the Phonevision test on participants' outlook on subscription television and on their recreational preferences.

The data in Section III derive entirely from the survey conducted just after the close of the Phonevision test, in which all the Phonevision test families, an equivalent sample of Phonevision test volunteers who had not actually participated in the test, a representative sample of incomplete volunteers for the Phonevision test, a representative sample of families in the Lakeview-Lincoln area and a representative sample of Chicago families were interviewed. The latter four samples were all interviewed with the same questionnaire, while test family interviews contained both sections comparable to the general inquiry and special sections applicable only to test families.

In Section IV, the results of the Phonevision test are presented and analyzed, so far as the test families, themselves, are concerned. An exact description of patterns of expenditure for Phonevision during the test, based on itemized statements furnished by the Zenith Radio Corporation, is presented. In conjunction with survey data, these expenditure figures are analyzed in terms of the extent to which Phonevision test expenditures were influenced by test conditions and may not be typical of the behavior of even the test families under ordinary circumstances and in terms of the objective and subjective factors which influenced expenditures for Phonevision. An appraisal of the success of the Phonevision test in terms of the subjective opinions, reactions and evaluations of the participants, derived from the survey research, concludes this section.

Section V is concerned with a depiction of prevailing attitudes and opinions in Chicago with respect to subscription television and Phonevision. The extent of familiarity with Phonevision is first examined both as an indication of the degree to which these opinions were grounded in experience and as one index of the interest manifested in the Phonevision test. Opinions of the desirability of subscription television, as well as the reasoning on which these opinions were based, are presented, and differences between key population groups in these respects are examined. Finally, the

specific appeals of Phonevision are described--the kind of programs people would pay for, their relative attraction as compared with other forms of recreation, and the extent of interest in becoming subscribers to Phonevision. Data used in this section derive almost entirely from the post-test research, but some supplementary information pertaining to familiarity with and interest in the Phonevision test is drawn from a survey of a representative sample of Chicago residential telephone subscribers, conducted in the second week of the Phonevision test.

Section VI forms a conclusion to the report in which the several threads of evidence developed in earlier sections are brought together to yield estimates of what the response of the families of Chicago--measured in terms of the number of subscribers and the amount of expenditures--would be to Phonevision, if its commercial operation were authorized. The method used, which is fully explained in Section VI, carries the results of the Phonevision test, presented in Section IV, to the population of Chicago, with attitudes like those depicted in Section V, by means of an analysis of the significance and implications of the kinds of differences between Phonevision test volunteers and Chicago families generally, found to exist in Sections II, III and V.

Two Appendices conclude the report. In the first, the quality of the samples used in the post-test survey, which is crucial to the conclusions drawn in the report, is evaluated. In the second, the basic research materials used in collection of data throughout the Phonevision research are exhibited.

II

SELECTION OF PHONEVISION TEST PARTICIPANTS

THE AREA OF THE TEST

When the Federal Communications Commission authorized the Zenith Radio Corporation to conduct a test of Phonevision in the city of Chicago, it was originally planned to secure participants on a city-wide basis. Preliminary exploration revealed, however, that the telephone facilities necessary to the form of Phonevision to be tested could not be supplied by the Illinois Bell Telephone Company randomly throughout the city. Instead, 250 of the 300 Phonevision participants had to be selected from the Lakeview-Lincoln telephone exchange area, which would have left only 50 participants to be selected from the rest of the city.

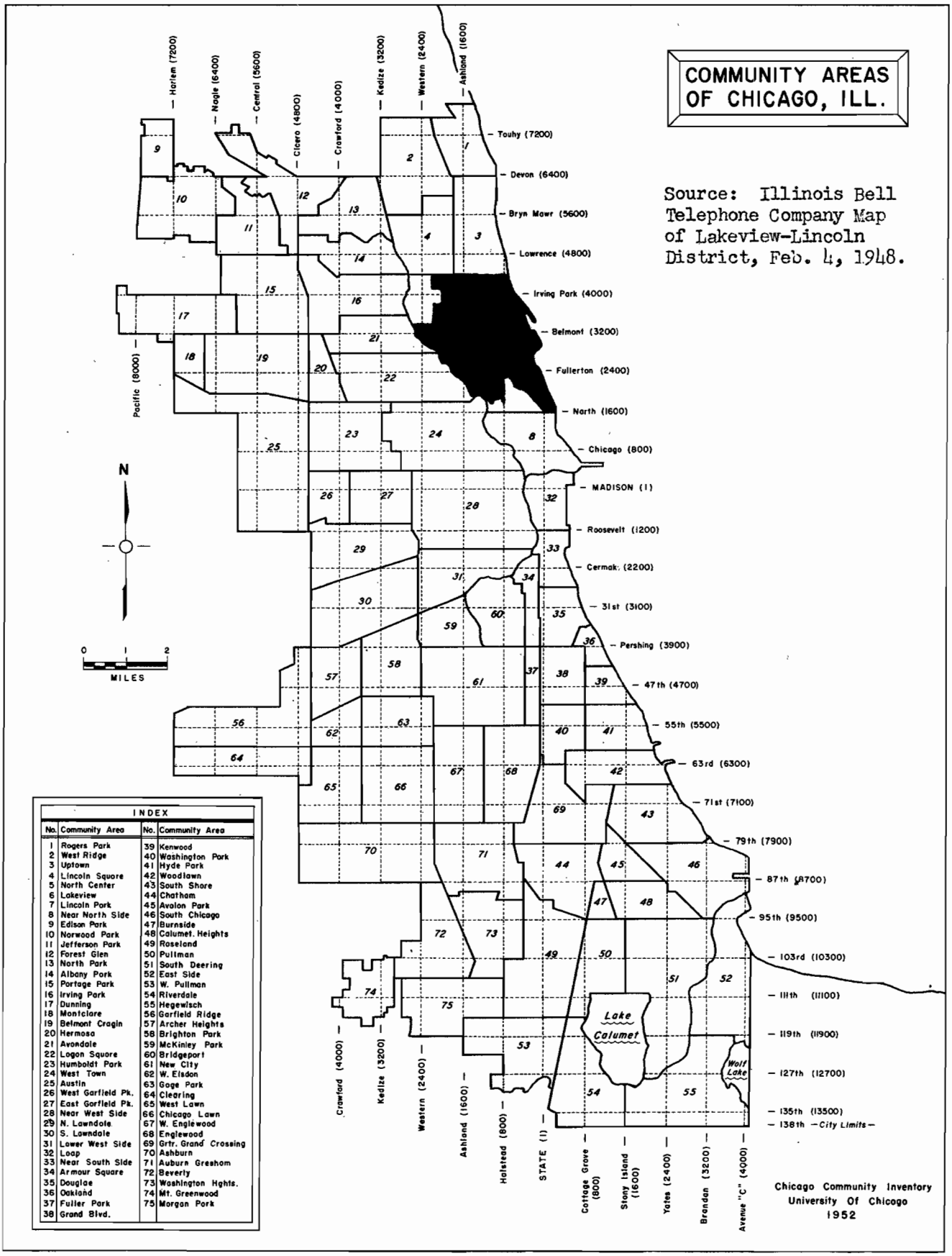
In view of these conditions, and in the light of the limited power available to the Zenith experimental television station, it was decided to restrict the Phonevision test to the Lakeview-Lincoln area, where telephone lines were available. The Lakeview-Lincoln district is an area of about seven and one-half square miles, located on the north side of the city. (See Figure 1.) It contains about 8% of the occupied dwelling units in Chicago, and has a population of about 250,000--approximately 7% of the population of Chicago.

In comparison with the city as a whole, the Lakeview-Lincoln area is characterized by relatively small families living in apartment houses. For example, 52.8% of the households in Lakeview-Lincoln contained only one or two persons, as compared with 40.6% of the households in the city. And, 63.5% of the households in Lakeview-Lincoln had no persons under 20 years of age in them, while in the city this proportion was 53.6%. While 41.0% of the dwelling units in the city were located in one- and two-family structures, only 23.5% of the units in Lakeview-Lincoln were. Similarly, 32.7% of the dwelling units in Chicago were owner-occupied, while only 16.0% of the dwelling units in Lakeview-Lincoln were.* (See Table 1.)

The population of Lakeview-Lincoln is largely white, only about 1% of the population in this area was non-white as compared with 12% in the city as a whole. Among the white population, 23% were foreign-born, about the same percentage as in the rest of the city. The national origin of the foreign-born in Lakeview-Lincoln was predominantly German (24.1%), Russian (11.8%) and Swedish (8.6%), while in the city as a whole, persons of Polish birth were the largest single foreign-born group.

The socio-economic position of the residents of Lakeview-Lincoln was substantially the same as or, perhaps, somewhat higher than the city as a whole. While the occupational classification of heads of households was about the same in Lakeview-Lincoln as in Chicago as a whole, the Lakeview-Lincoln heads tended to be

*These figures, like all the data presented in Table 1, are derived from sample surveys of the Lakeview-Lincoln area and the rest of the city, since 1950 Census data were not yet available. Lake all sample survey data, the figures are, therefore, subject to sampling error and to possible bias because of non-response. While these results cannot be regarded as absolute values, either for the city or for Lakeview-Lincoln, the relative differences are dependable. A fuller discussion and evaluation of these survey results can be found in Section III.



INDEX

No.	Community Area	No.	Community Area
1	Rogers Park	39	Kenwood
2	West Ridge	40	Washington Park
3	Uptown	41	Hyde Park
4	Lincoln Square	42	Woodlawn
5	North Center	43	South Shore
6	Lakeview	44	Chatham
7	Lincoln Park	45	Avalon Park
8	Near North Side	46	South Chicago
9	Edison Park	47	Burnside
10	Norwood Park	48	Calumet Heights
11	Jefferson Park	49	Roseland
12	Forest Glen	50	Pullman
13	North Park	51	South Deering
14	Albany Park	52	East Side
15	Portage Park	53	W. Pullman
16	Irving Park	54	Riverdale
17	Dunning	55	Hegewisch
18	Montclare	56	Garfield Ridge
19	Belmont Cragin	57	Archer Heights
20	Hermosa	58	Brighton Park
21	Avondale	59	McKinley Park
22	Logan Square	60	Bridgeport
23	Humboldt Park	61	New City
24	West Town	62	W. Elsdon
25	Austin	63	Gage Park
26	West Garfield Pk.	64	Clearing
27	East Garfield Pk.	65	West Lawn
28	Near West Side	66	Chicago Lawn
29	N. Lawndale	67	W. Englewood
30	S. Lawndale	68	Englewood
31	Lower West Side	69	Grtr. Grand Crossing
32	Loop	70	Ashburn
33	Near South Side	71	Auburn Gresham
34	Armour Square	72	Beverly
35	Douglas	73	Washington Hghts.
36	Oakland	74	Mt. Greenwood
37	Fuller Park	75	Morgan Park
38	Grand Blvd.		

Figure 1.
Map of Chicago, Showing the Area in which the Phonevision Test was Conducted.

TABLE I

SELECTED CHARACTERISTICS OF CHICAGO AND OF THE LAKEVIEW-LINCOLN AREA
April-May, 1951

Characteristic	Chicago	Lakeview-Lincoln
Number of cases	1,526	735
Total population (in thousands)	3,743	252
Number of occupied dwelling units (in thousands)	1,173	95
Proportion of occupied dwelling units:		
Located in one- and two-family structures	41.0	23.5
Owner-occupied	32.7	16.0
Possessing telephone	73.6	69.5
Number of persons per household (per cent):		
One	13.6	18.4
Two	27.0	34.4
Three	21.3	23.5
Four	19.9	14.7
Five	9.2	6.3
Six and over	9.0	2.7
Mean number: adults (20 and over)	2.28	2.05
children (19 and under)	0.91	0.61
Median age of population	32.2	35.6
Proportion of population - non-white	12.4	1.0
Proportion of white population - foreign-born	23.1	22.6
Country of birth of foreign-born whites (per cent):		
Poland	19.2	2.5
Russia	11.0	11.8
Germany	10.2	24.1
Italy	9.4	4.3
Lithuania	5.8	1.9
Sweden	5.4	8.6
Czechoslovakia	4.4	0.6
Canada	4.1	4.9
Austria	3.7	4.3
All other	26.8	37.0
Occupation of head of household (per cent):		
Professional and semi-professional	9.2	9.4
Proprietors, managers and officials	9.6	11.2
Clerical, sales and kindred workers	18.1	17.5
Craftsmen, foremen and kindred workers	18.9	20.8
Operatives and kindred workers	18.1	17.5
Service workers	8.2	7.9
Laborers	4.3	2.2
Not gainfully employed	11.4	12.0
Not reported	2.2	1.5
Median years of education of heads of households	11.0	11.7
Median annual family income	$3,969	$4,135

better educated than household heads in the rest of the city, and median family incomes were slightly higher in Lakeview-Lincoln, despite the fact that families were smaller. Yet, in two indices of socio-economic status--ownership of television sets and telephones, the Lakeview-Lincoln district was somewhat lower than the city as a whole.

In summary then, the Lakeview-Lincoln district differs from the rest of the city of Chicago primarily in the absence of Negroes among its residents and in a tendency toward small family units living in apartment houses.

PROCEDURES USED IN SELECTING PARTICIPANTS

White participants selected for the Phonevision test were limited to residents of the Lakeview-Lincoln area in Chicago, the sample of participants chosen for the test cannot, however, be regarded as in any sense a random or representative sample of the whole community, because two restrictions were imposed. First, only residential telephone subscribers living within the Lakeview-Lincoln district were considered eligible, and, second, only those who volunteered to take part in the test were considered.

The reasons for these limitations are rather apparent. The intent of the sample design was to approach as closely as possible the conditions which would exist if the form of Phonevision tested were made generally available. Obviously, if this form of Phonevision were a service being offered commercially today, only people with television sets and telephones would be in a position to make use of it and only those who thought they wanted it would buy it. Two of these three conditions are approached in this sample design by considering only telephone subscribers* who wanted to try Phonevision. The third condition, ownership of a television set, was not imposed because this is a factor which is altering so rapidly that a sample of television set owners might not be representative of television set owners a few months later.

Procedures Used in Securing Volunteers

Over a two-week period, the Zenith Radio Corporation inserted advertising in all the Chicago papers, describing the nature of the Phonevision test and inviting people to volunteer for participation by returning a coupon. This offer was made on a city-wide basis without restrictions by the Zenith Radio Corporation because of their interest in ascertaining city-wide response to Phonevision, and a letter of explanation was later sent to all those outside the sample area who sent in coupons.**

Immediately after this period of advertising, a copy of the advertisement together with a covering letter was sent to each of the residential telephone subscribers in the Lakeview-Lincoln district. Enclosed in the letter was a prepaid postcard, containing the subscriber's name and address, which was to be signed and returned to the Zenith Radio Corporation if the subscriber wished to be considered for participation in the Phonevision test.***

These postcard returns, as well as names of volunteers secured from other sources, were turned over to the National Opinion Research Center who sent to each of the applicants a questionnaire to be filled out and returned. The questionnaire, shown in Appendix B, asked only for a

*It was always intended to limit the sample of Phonevision participants to telephone subscribers, and main efforts to secure volunteers were limited to telephone subscribers, as is described later. This fact was not publicly announced, and non-telephone subscribers could volunteer. The fact is, however, that the public came to feel that possession of a telephone was necessary, as only two applications were received from persons without telephones. In practice then, the restriction of the sample to telephone subscribers was accomplished primarily by the volunteers, themselves, rather than by exclusions made by the National Opinion Research Center.

**Volunteers by means of newspaper coupons who lived within the test area were considered for participation on the same basis as anyone else, as is described below.

***These materials are shown as Exhibit I in Appendix B.

minimum of factual information about each applicant in order to have data to ensure impartial selection of participants and to compare the people interested in Phonevision with other residents of the community.

The original mailing list contained 59,663 names.* A check of volunteers from other sources--responses to the newspaper advertisement, letters of inquiry, and cards furnished by Zenith dealers--resulted in the addition of 91 unduplicated names in the list. A number of duplicates and incorrect listings were discovered which reduced the net list to 59,560, as shown in Table 2.

TABLE 2

NET NUMBER OF POTENTIAL PHONEVISION TEST PARTICIPANTS

Source		Number
Original mailing list of telephone subscribers. . .	59,663	
Unduplicated names from other sources.	91	59,754
Eliminations		
Duplications.	134	
Ineligible listings[a]. . . .	55	
Non-residential listings. .	5	194
Net total. . . .		59,560

[a]Includes persons living outside test area or about to move outside test area and two persons without residential telephone service.

Of these, 13,889 or 23.3% volunteered to participate in the Phonevision test. Except for an original 1,922 who volunteered by other means--primarily, newspaper coupons--before the letter of invitation was sent out and to whom the letter was, therefore, not sent, almost all of these volunteers responded to the letter sent them, as shown in Table 3.

TABLE 3

SOURCE OF ELIGIBLE PHONEVISION TEST VOLUNTEERS

Source	Number
Pre-mailing	1,922
Return postcards.	11,876
Dealer cards.	43
Newspaper coupons	33
Letters	9
Other	6
Total	13,889

Letters to potential participants were mailed on May 16, 1950 and questionnaires were sent to them beginning May 22, 1950. By June 5, 1950, 13,570 requests for participation had been received and questionnaires sent, while 7,613 questionnaires had been returned. In order to make certain that would-be participants were not excluded from consideration because of mere negligence or procrastination on their part, a second mailing of the questionnaire was made to volunteers who had yet returned questionnaires, together with the explanatory note shown in Appendix B. This second mailing was made during June 5-7, 1950, and original requests for participation continued to come in and were sent questionnaires up to June 9. No requests received after this date and no questionnaires received after June 19, 1950 were considered in selecting participants and are not included in the figures reported here.** In all, slightly more than two-thirds returned usuable questionnaires, as shown in Table 4.

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*The Reuben H. Donnelly Corporation, which processed the first mailing, reported 59,846 rather than this figure. But a complete canvas of the listings turned over to the National Opinion Research Center resulted in the figure given above. Since the difference in the two figures (183) is less than half of one per cent, it is not a serious source of error.

**After these deadlines, 119 volunteering postcards and 109 usable questionnaires were returned.

TABLE 4

NUMBER AND PER CENT RETURNING USABLE QUESTIONNAIRES, CLASSIFIED BY DATE OF REQUEST

	Total Sent Questionnaire (Number)	Total Returning Usable Questionnaire	
		Number	Per Cent
Requests up to June 5.	13,570	7,613	56.1
Requests after June 5.	319	131	41.1
Second mailing to non-respondents as of June 5. . . .	(5,957)	1,682	28.2
Total	13,889	9,426	67.9

Reasons for Not Volunteering

The fact that 76.7% of those sent the original letter offering participation in the Phonevision test did not respond, while an additional 7.5% volunteered in the first instance but failed to return the questionnaire needed to make them eligible, led to an attempt to determine whether the 15.8% who did volunteer represented the limit of interest in Phonevision at that time, and what the factors making for non-participation were. Accordingly, in late June and early July, 1950, brief interviews were conducted, by telephone wherever possible, with samples drawn systematically from the alphabetical lists of the two groups--those who had never volunteered and those who had volunteered but failed to return a usable questionnaire.* In the course of the interview, these people were asked to explain why they had not volunteered for the test, or why, having volunteered, they did not complete the questionnaire. These answers were then classified in terms of the most serious objection to participation they contained.**

This survey indicated that, in addition to the 15.8% who volunteered for the test, there were an estimated 8% whose failure to volunteer came solely because of mechanical errors: they let the deadline for returning questionnaires slip by; they thought they had returned the proper materials, but no record of their being received could be found, and so forth. These people may be regarded as definitely interested in taking part in the test and their failure to qualify as "accidental." In more detail, their reasons were:

*The sample sizes were 1,267 and 1,274 respectively. Interviews were obtained with 98.5 and 97.7% of the two samples. Materials used in this survey are shown as Exhibit II in Appendix B.

**Since the interview was brief, most people offered only one line of explanation. In 5.1% of the interviews with incomplete volunteers and 4.0% of those with non-volunteers more than one reason was given, but even among these there were cases in which all of the reasons given were assignable to the same general category. In all only 3.8% and 2.8% of the incomplete volunteers and non-volunteers, respectively, might have been assigned to more than one of the main dimensions of interest in the Phonevision test hereafter shown, and these cases are always assigned to the category of less, rather than more, interest in the test.

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Dilatory, delayed making return, careless, "forgot," etc.	19.6%	5.0%	6.3%	5.3%
Wanted to volunteer but never received questionnaire (postcard)*	3.4	1.7	1.9	1.6
Believed they had returned questionnaire (postcard) properly*	9.0	0.7	1.5	1.2
Received Zenith letter mistakenly informing them of ineligibility	0.4	-	**	**
Total classified as "definitely interested"	32.4%	7.4%	9.7%	8.1%

Another group who appeared genuinely interested in participating in the Phonevision test, although they did not complete their applications, were some 6% who decided for themselves that they were ineligible and had no chance to be selected. In all cases, people classified here wanted to participate, but felt, rightly or wrongly, that they were not acceptable. These people apparently listened to rumors and, from the questions in the questionnaire, made inferences regarding the rules that would be applied in selecting participants. Often, their inferences were right, as, for example, the people who decided that their moving out of the Lakeview-Lincoln district or their inability to have outside antennae would disqualify them. The reasons which led people to consider themselves ineligible were:

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Didn't own television set (believed only television owners were eligible)	0.3%	2.6%	2.4%	2.0%
Couldn't have outside antennae	12.2	0.6	1.7	1.4
Were moving outside of test area	0.4	1.1	1.0	0.9
Didn't own Zenith television set (believed Zenith set was necessary)	0.2	0.9	0.8	0.7

(Continued on next page)

*These categories apparently represent processing errors and mail misdeliveries, but their size is so high that it is difficult to accept them at their face value. It seems more likely that the persons involved mislaid or forgot about the questionnaire or postcard and came to believe that they had mailed it or had not received it as the case may be. The records show that 0.7% of the incomplete volunteers actually did return questionnaires which were unusable because they lacked any means of identifying the return, but this is a small fraction of those who claimed to have returned questionnaires. Whatever the facts of the case, however, these people do appear to have been sincerely interested in participating in the Phonevision test, and are, therefore, so classified here.

**Less than 0.05%.

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Were not a "representative" family: single person, small family, low economic status, little education, etc.	3.9%	0.2%	0.5%	0.4%
Already owned television set (believed only non-owners were eligible)	0.5	0.3	0.3	0.3
Were living in areas with television reception difficulties.	0.2	0.2	0.2	0.2
Employed by Zenith or other television company	-	0.3	0.3	0.2
Were having phone disconnected	0.1	0.2	0.2	0.1
Just unlucky, never win anything	0.2	0.2	0.2	0.2
Total classified as "probably interested" .	18.0%	6.6%	7.6%	6.4%

A final group which may be regarded as interested in the Phonevision test were about 3% who were originally interested, but lost interest as they came to believe false rumors about the conduct of the test. These people decided from newspaper and other publicity that the test had been cancelled, that no good movies would be available for the test, that Phonevision would not work anyway, and abandoned their intentions of participating. In detail:

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Believed test was in summer, not interest in summer participation.	1.1%	2.2%	2.1%	1.8%
Believed Phonevision wouldn't work, would interfere with telephone service, etc . . .	0.2	0.6	0.6	0.5
Believed test was cancelled, banned by government, etc. .	1.4	0.1	0.2	0.2
Believed friends would have Phonevision, so no need to apply.	0.3	0.1	0.1	0.1
Believed costs of Phonevision would far exceed intended charges, would have to spend $1 a day, etc.	0.2	0.1	0.1	0.1
Believed no good movies would be made available.	0.3	-	*	*
Total classified as "possibly interested" .	3.5%	3.1%	3.1%	2.7%

*Less than .05%.

The people who were not interested in participation in the Phonevision test may be classified into four major groups: the indifferent, the otherwise preoccupied, those who objected to the way in which the test was being conducted, and those who objected to some extent, at least, to the basic idea of Phonevision.

The "indifferent" were people who paid little attention to the publicity given the Phonevision plan. One large group, as shown below, threw away the mailed announcement unread and had never heard of Phonevision when approached by this survey. The remainder of this group had given either cynical or indifferent attention to the test so that they had equated it in their own minds either with a free trial offer of a television set, in which they were not interested, or with a scheme to force people to buy sets after they accepted a seemingly-free offer. It is clear that these people did not have enough understanding about the test to judge it realistically, and it is possible that a different, more intensive promotional campaign might have succeeded in reaching these indifferent people and that some proportion of them might then have been interested in the Phonevision test.* Still, they are all classified as not interested in the test here because their reactions to the test as it was actually publicized were not favorable:

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Never heard of Phonevision test, threw announcement away unread as ad, etc . . .	-%	15.1%	13.7%	11.6%
Believed it was simply a free trial offer of a television set, not interested, already have set, planning to buy, etc.	2.6	8.7	8.2	6.9
Believed it was a sales promotion stunt, would have to buy set eventually	1.2	6.2	5.7	4.8
Total classified as "indifferent"	3.8%	30.0%	27.6%	23.3%

The "otherwise preoccupied" had no positive objections to the Phonevision test or to Phonevision itself but simply were not interested because other matters engaged their attention. To a large extent they were people whose business or social life kept them away from home a large part of the time; they were "busy" and seldom home, and had no need, therefore, of home entertainment. Also in this group were people confronted with personal emergencies--deaths in the family, divorces, unsettled plans about where they would be living, etc.--which left them unable to give serious thought to proposals such as the Phonevision test. In more detail:

*By way of experiment, the Phonevision test was explained to 31 out of the 191 people who said they had never heard of the Phonevision test. Thirteen of these 31 people reacted with interest, and expressed a desire for an opportunity to take part in the test.

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Busy, don't have time, seldom home, etc.	2.8%	11.4%	10.6%	8.9%
Personal plans unsettled, didn't know where would be living	4.8	3.0	3.2	2.7
Personal emergencies, deaths, divorces, illness, etc . . .	0.9	2.8	2.6	2.2
Live alone, family is small, not adapted to test.	0.8	1.6	1.5	1.3
Apartment too small	0.7	0.8	0.8	0.7
Just not interested	1.5	3.2	3.1	2.6
Total classified as "otherwise preoccupied"	11.5%	22.8%	21.8%	18.4%

Objections to the way in which the Phonevision test was being conducted centered primarily around objections to filling out the NORC questionnaire which called for personal data in order to ensure objectivity and representativeness in selection of participants. Other objections included rather vague general feelings that participation in a test would mean a good deal of fuss, bother and inconvenience as well as more specific objections to details of the test plans:

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Objected to answering questionnaire, filling out forms, etc	21.8%	0.2%	2.2%	1.8%
Didn't want responsibility for Zenith's property. . . .	1.0	0.6	0.6	0.5
Didn't want to become accustomed to having television set when can't afford it	0.6	0.6	0.6	0.5
Didn't want inconvenience of second television set in home	0.2	0.4	0.4	0.3
Didn't want inconvenience of set installation just for test purposes.	0.5	0.3	0.3	0.3
Objected to the sponsors of the test	0.3	0.2	0.2	0.2
Didn't want fuss, bother, inconvenience of a test, general.	0.1	1.5	1.4	1.1
Total classified as "opposed to conduct of test".	24.5%	3.8%	5.7%	4.7%

Finally, there were those people opposed to Phonevision itself. Chief among these were opponents of television, people whose dislike of television apparently extended even to a plan for changing the basis of television entertainment in part. Paradoxically, the next largest group opposed to Phonevision were supporters of television, people who found current television programs so satisfactory that they saw no need for any new ideas. Others opposed to Phonevision were people who objected to paying or couldn't afford to pay for television entertainment at the proposed rate of $1.00 per movie, people who didn't care for movies anyway, and those who didn't want their recreation further concentrated in the home:

	Incomplete Volunteers	Non-volunteers	All Non-participants	All Residential Telephone Subscribers
Disliked, not interested in television entertainment . .	2.1%	14.5%	13.4%	11.3%
Satisfied with current television programming without Phonevision.	0.1	4.5	4.1	3.4
Can't afford, objected to paying for television programs, regarded costs as too high, etc.	2.0	2.5	2.5	2.1
Disliked, not interested in movie entertainment.	0.5	1.3	1.2	1.0
Preferred to go outside home for movies, entertainment. .	0.1	0.6	0.5	0.5
Total classified as "opposed to idea of Phonevision".	4.8%	23.4%	21.7%	18.3%

As can be seen in summarized form in Table 5, the proportion of people interested in participation in the Phonevision test as it was originally announced and publicized was about double the proportion who finally completed volunteering for participation. About a third of the residential telephone subscribers in Lakeview-Lincoln--33.0%*--were interested, but many were subsequently deterred from volunteering. While this figure represents a rather large community response to a new proposal, it should be remembered, of course, that interest in the Phonevision test cannot be equated with interest in Phonevision itself. For example, people classified as no longer interested in the test because they objected to one or another feature of the conduct of the test might nevertheless have been and still be genuinely interested in the principle of Phonevision. Conversely, however, many people classified as interested in the test might not have been interested in Phonevision at all. Since two elements--the opportunity to try Phonevision and the opportunity to obtain free use of a television set for ninety days--were inextricably mingled in the Phonevision test as it was offered to the public, it is very difficult to separate them in people's motivations. Certainly, it would have required far more intensive interviewing than was possible in this survey.**

*This estimate checks quite closely with the results of the post-test survey. After the Phonevision test, 37.1% of the residential telephone subscribers in Lakeview-Lincoln (36.9% of all families) said they would want to participate if the Phonevision test were just beginning then. Lakeview-Lincoln was actually less interested in the Phonevision test than the city as a whole, where 43.2% expressed interest in participation.

**On the basis of the later research it can be said that interest in subscribing to Phonevision on a commercial basis was greater than interest in participating in a test of Phonevision (see Section VI), even though it can also be shown that those interested in the test did include a sizeable proportion of families with little intrinsic interest in Phonevision (see Section IV).

TABLE 5

INTEREST IN THE PHONEVISION TEST IN THE LAKEVIEW-LINCOLN DISTRICT[a]

Degree of Interest in Phonevision Test	Proportion with Given Degree of Interest in Each Group				
	Phonevision Test Volunteers	Incomplete Volunteers	Non-volunteers	All Non-participants[b]	All Residential Telephone Subscribers[b]
Volunteered for participation	100.0	-	-	-	15.8
Definitely interested: failure to volunteer attributable solely to forgetfulness, carelessness, mailing mistakes, etc	-	32.4	7.4	9.7	8.1
Probably interested: wanted to participate but did not volunteer because of belief that they would not be eligible	-	18.0	6.6	7.6	6.4
Possibly interested: incorrect beliefs about the conduct of the test discouraged application	-	3.5	3.1	3.1	2.7
Indifferent: never heard of Phonevision test, regarded it as sales stunt, mere free trial offer of television set, etc	-	3.8	30.0	27.6	23.3
Otherwise preoccupied: busy, seldom home, involved in personal emergencies, etc	-	11.5	22.8	21.8	18.4
Opposed to conduct of test: objected to questionnaire, etc.	-	24.5	3.8	5.7	4.7
Opposed to idea of Phonevision: didn't want paid movies by television, etc	-	4.8	23.4	21.7	18.3
Not ascertained	-	1.5	2.9	2.8	2.3
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	9,426	1,274	1,267		

[a]This table is based on a classification of the primary reasons given for non-participation.
[b]These figures are weighted averages.

Procedures Used in Selecting the Sample of Participants

It has just been shown that the proportion of people interested in participation in the Phonevision test as it was originally announced and publicized was about double the proportion who finally completed volunteering. Since no information existed about the families who were interested but didn't volunteer, however, and there was reason to believe that they differed from those who didn't volunteer, the sample of participants could not be made representative of all the interested. Instead, selection of participants proceeded along lines designed to ensure that they would be representative of the 9,426 volunteering households.

First, the volunteers were divided into television and non-television households. Television owners made up only 35.7% of the volunteers and thus would constitute only 107 of the 300 participants to be chosen, if selections were made proportionally. Instead, the sample of participants were divided equally between owners and non-owners. This procedure made certain that there would be a large enough number of cases to deal with television owners' response to Phonevision separately from that of non-owners.* With the application of weights of .357 and .643 to the results obtained for television owners and non-owners, respectively, the data for these two groups can be combined to representative of the entire group of volunteers.

Beyond this division on the basis of television ownership, four variables were selected which appeared likely, a priori, to be related to expenditures for Phonevision and which tended to differentiate between television owners and non-owners.** These variables were: family income, education of head of household, number of children in household, and number of adults in household. On the basis of these variables, 79 strata were set up within each television ownership group, for a total of 158 strata. The proportion of television owner volunteers in each stratum was determined, and this proportion of the 150 television owner participants was selected randomly from among the volunteers in this stratum. The same procedure was followed in selecting the participant non-owners.

As shown in Figure 2, 96 strata were originally designated, but combinations were made as indicated wherever the number of households in a stratum was so small that less than one household was to be chosen for the sample of participants. Table 6 shows the number of households in each stratum and the number of participants selected from each. It should be noted that the non-television-owner participants differ from the television owners in the four factors used in selecting participants, as appears in later tables. For this reason, a set of weights has been derived, which, when applied to the households without television, makes this group comparable to the television owners. These weights are also shown in the table.

One further modification in sample design should be mentioned. Because of reception difficulties, the Zenith Radio Corporation decided that roof antennae would be necessary. Volunteers who reported that they would not be able to secure permission to install a roof antennae were, therefore, eliminated from consideration. This decision eliminated 17.5% of the volunteers--18.1% of the television owners and 17.2% of the non-owners. The sample of participants was so selected that the number of participants in each stratum was proportional to the total number of volunteers in that stratum, but these participants were selected only from among those who indicated that they were able to have roof antennae.

Technical Note on the Stratification of Television Owners and Non-owners

Theoretically, there were three ways in which the sample might have been chosen: participants might have been selected (1) randomly without reference to television ownership, or within television and non-television strata, (2) proportionately to

*The considerations entering into this decision are discussed in the next section.

**Comparisons of the characteristics of these two groups are presented in a later section.

FIGURE 2

SAMPLING STRATIFICATION OF PHONEVISION TEST VOLUNTEERS[a]

Number of Children and Adults		Annual Family Income and Education of Head of Household											
		Under $5,000				$5,000 - $7,499				$7,500 and Above			
Children	Adults	Less than 4 Years High School	Four Years High School	Some College but Less than 4 Years	Four Years College or More	Less than 4 Years High School	Four Years High School	Some College but Less than 4 Years	Four Years College or More	Less than 4 Years High School	Four Years High School	Some College but Less than 4 Years	Four Years College or More
3 or more	2 or less	1[b]	9	17	24	27	35	42	49	54	60	66	72
	3 or more	2	10			28			50	55	61	67	73
2	2 or less	3	11	18		29	36	43	49	54	60	66	74
	3 or more	4	12	19		30	37	44	50	55	61	67	75
1	2 or less	5	13	20	25	31	38	45	51	56	62	68	76
	3 or more	6	14	21		32	39	46	52	57	63	69	77
0	2 or less	7	15	22	26	33	40	47	53	58	64	70	78
	3 or more	8	16	23		34	41	48		59	65	71	79

[a]Shown here are the 79 strata used with television owners. The same set of 79 strata were used with non-owners, the only difference being that the strata numbers 80-158 were assigned to non-owners.

[b]These numbers are the strata numbers. Wherever two cells have the same number, it indicates that the two cells were combined to form the stratum.

TABLE 6

DISTRIBUTION OF PHONEVISION TEST VOLUNTEERS AND SELECTED PARTICIPANTS AMONG THE STRATA

Stratum Number[a]	All Volunteers		Participants Selected		Weights to be Applied to Non-owners to Secure Comparability With Television Owner Participants
	Television Owners	Non-owners	Television Owners	Non-owners	
1.	68	100	3	2	.020196
2.	54	69	2	2	.016038
3.	129	198	6	5	.038314
4.	35	48	2	1	.010395
5.	110	192	5	5	.032670
6.	50	75	2	2	.014850
7.	104	327	5	8	.030888
8.	55	153	2	4	.016335
9.	28	46	1	1	.006534
10.	22	29	1	1	.008316
11.	84	153	4	4	.024948
12.	25	28	1	1	.007425
13.	92	233	4	6	.027324
14.	22	39	1	1	.006534
15.	52	230	2	6	.015444
16.	25	55	1	1	.007425
17.	25	41	1	1	.007425
18.	58	143	3	4	.017226
19.	16	21	1	1	.004752
20.	79	189	4	5	.023463
21.	14	31	1	1	.004158
22.	68	299	3	7	.020196
23.	14	58	1	1	.004158
24.	27	55	1	1	.008019
25.	32	135	1	3	.009504
26.	50	182	2	4	.014850
27.	24	25	1	1[b]	.018117
28.	37	25	2		
29.	75	48	3	1	.029997
30.	26	13	1		
31.	56	83	2	2	.016632
32.	30	64	1	1	.008910
33.	71	157	3	4	.021087
34.	54	122	2	3	.016038
35.	35	35	2	1	.010395
36.	45	43	2	1	.013365
37.	16	22	1	1	.004752
38.	37	60	2	1	.010989
39.	20	25	1	1	.005940
40.	71	120	3	3	.021087

[a]For non-owners, these strata numbers are actually 79 plus the number shown here.

[b]The strata were set up so that there would be enough cases in each stratum to call for the selection of at least one household from each stratum among the television owners. When participants were selected among non-owners, it became necessary to make the further combinations indicated because households in the smaller strata would otherwise not have had any opportunity to be selected.

TABLE 6--Continued

Stratum Number[a]	All Volunteers		Participants Selected		Weights to be Applied to Non-owners to Secure Comparability With Television Owner Participants
	Television Owners	Non-owners	Television Owners	Non-owners	
41.	35	68	1	2	.010395
42.	27	27	1	1	.008019
43.	54	48	2	2	.021087
44.	17	15	1		
45.	75	101	3	2	.022275
46.	13	43	1	1	.003861
47.	73	239	3	6	.021681
48.	36	88	2	2	.010692
49.	25	33	1	1	.007425
50.	14	35	1	1	.004158
51.	24	79	1	2	.007128
52.	12	29	1	1	.003564
53.	38	224	2	5	.011286
54.	21	9	1	1	.018117
55.	40	21	2		
56.	17	13	1	1	.015741
57.	36	31	2		
58.	26	65	1	1	.007722
59.	56	72	3	2	.016632
60.	15	6	1	1	.027918
61.	31	9	1		
62.	23	16	1		
63.	25	22	1		
64.	39	51	2	1	.011583
65.	27	45	1	1	.008019
66.	37	19	2	1	.027027
67.	54	25	2		
68.	53	30	2	1	.015741
69.	30	34	1	1	.008910
70.	68	110	3	3	.020196
71.	39	78	2	2	.011583
72.	15	9	1	1	.009801
73.	18	17	1		
74.	54	30	2	1	.016038
75.	67	35	3	1	.019899
76.	46	46	2	1	.013662
77.	47	33	2	1	.013959
78.	53	147	2	3	.015741
79.	52	86	2	2	.015444
Total. . . .	3,367	6,059	150	150	1.000000

[a]For non-owners, these strata numbers are actually 79 plus the number shown here.

the size of each stratum, or (3) disproportionately to the size of the stratum.

In the case of random sampling, the standard error of a mean may be represented by:

$$\sigma_{M_R} = \sqrt{\frac{\sigma_u^2}{n}} = \sqrt{\frac{1}{nN}\left[\Sigma X^2 - \frac{(\Sigma X)^2}{N}\right]}$$

In stratified sampling, the standard error of a mean may be represented by:

$$\sigma_{M_s} = \sqrt{\left(\frac{N_1}{N}\right)^2 \frac{\sigma_1^2}{n_1} + \left(\frac{N_2}{N}\right)^2 \frac{\sigma_2^2}{n_2}}$$

In stratified proportional sampling, since

$$\frac{N_1}{n_1} = \frac{N_2}{n_2} = \frac{N}{n}$$

the standard error of a mean is given by:

$$\sigma_{M_p} = \sqrt{\frac{1}{n}\left(\frac{N_1 \sigma_1^2 + N_2 \sigma_2^2}{N}\right)} = \sqrt{\frac{1}{nN}\left[\Sigma X^2 - \frac{(\Sigma X_1)^2}{N_1} - \frac{(\Sigma X_2)^2}{N_2}\right]}$$

where N = total universe size
n = total sample size
N_i = size of i th stratum in universe
n_i = size of i th stratum in sample
σ_u = standard deviation in universe
σ_i = standard deviation in i th stratum of universe
X = an observation in the universe
X_i = an observation in the i th stratum of the universe

From these formulae, it follows that the sampling error in a random sample can only be equal to or greater than the error in a stratified proportional sample, for

$$\sigma_{M_R}^2 - \sigma_{M_p}^2 = \frac{1}{nN}\left[-\frac{(\Sigma X_1)^2}{N} + \frac{(\Sigma X_1)^2}{N_1} + \frac{(\Sigma X_2)^2}{N_2}\right]$$

$$= \frac{1}{nN}\left[-\frac{(\Sigma X_1 + \Sigma X_2)2}{N} + \frac{(\Sigma X_1)2}{N_1} + \frac{(\Sigma X_2)2}{N_2}\right]$$

$$= \frac{1}{nN}\left[\frac{N_2 (\Sigma X_1)^2}{NN_1} + \frac{N_1 (\Sigma X_2)^2}{NN_2} + \frac{2\Sigma X_1 \Sigma X_2}{N}\right]$$

$$= \frac{N_1 N_2}{n N^2}\left[\frac{(\Sigma X_1)^2}{N_1^2} + \frac{(\Sigma X_2)^2}{N_2^2} - \frac{2\Sigma X_1 \Sigma X_2}{N_1 N_2}\right]$$

$$= \frac{N_1 N_2}{nN^2}\left(M_1^2 + M_2^2 - 2M_1 M_2\right)$$

$$= \frac{N_1 N_2}{nN^2}(M_1 - M_2)^2$$

Where M_i = mean of i th stratum

When the means of the variable being estimated are the same in both strata, $(M - M_2)^2 = 0$, and random sampling yields the same sampling error as stratified proportional sampling, but where the means are not equal, $(M_1 - M_2)^2 > 0$, and random sampling results in larger sampling error than the proportional scheme. Random sampling, thus, has no advantage over proportional stratified sampling.

When a sample is drawn from two or more strata, the optimum allocation of the sample among the strata is a function of the distribution of cases among the strata and variation of the variable to be estimated within strata. That is, minimum sampling error is obtained when

$$\frac{n_1}{N_1\sigma_1} = \frac{n_2}{N_2\sigma_2} = \ldots = \frac{n_i}{N_i\sigma_i}$$

or, for two strata,

$$\frac{n_1}{n_2} = \frac{N_1\sigma_1}{N_2\sigma_2}$$

It follows, then, that sampling proportionate to strata size gives optimum results only when the standard deviation of the variable to be estimated is the same in each stratum. In all other cases, minimum sampling error is obtained by over-representing the stratum with the greater variability, the extent of the over-representation being determined by the ratio of the larger to the smaller standard deviation.

In the sampling of Phonevision test volunteers, there was little prior knowledge to indicate the extent to which over-representation of one stratum would minimize sampling error. The parameter to be estimated--expenditures for Phonevision--was completely undetermined, so that the decision could be made only on the basis of possible correlates of expenditures. Since it was known that television owners had greater variability in income, family size and movie attendance than did the non-owners, it seemed reasonable to assume that their expenditures for Phonevision would also exhibit greater variability. On the basis of this assumption, it was decided to over-represent the television owners, especially in view of the fact that this over-representation would reduce the size of the standard error of the difference between the two groups.

In sampling Phonevision test volunteers, the 150-150 division between the two strata would have yielded optimum results if the standard deviation of Phonevision expenditures among television owners had been 1.8 times that among non-owners. As will be shown later, the assumption that television owners would have greater variability in expenditures for Phonevision proved to be correct, although the difference in variability between the two strata was not as extreme as anticipated. On the basis of ex posteriori knowledge of the expenditures for Phonevision over the three month period, optimal results in estimating Phonevision expenditures for all volunteers would have been achieved if television owners had made up 37.4% of the sample instead of the 50.0% arbitrarily assigned to them.

CHANGES IN THE COMPOSITION OF TEST PARTICIPANTS THROUGH SUBSTITUTIONS*

After a sample of Phonevision test participants had been selected by the National Opinion Research Center, the Zenith Radio Corporation began the process of translating these designated participants into a set of 300 actually-participating families. A brief review of the steps which had to be taken before a family could be included in the test will serve to clarify the problems which were encountered and the extent to which substitutions had to be made.

Procedures Followed in Qualifying a Participant

In general, there were three stages to the process of qualifying each family selected for participation, and, at any one of these stages, a family might prove to be unusable. These stages were:

1. The entire sample of 300 families was turned over to the Illinois Bell Telephone Company in order to determine whether telephone facilities could be provided for them. Because of the limited nature of the test in both number of participants and duration, it was decided between the Zenith Radio Corporation and the Illinois Bell Telephone Company to supply separate Phonevision telephone lines to each participant rather than to adapt the participant's regular telephone line to Phonevision reception. It was this decision, in combination with shortages of telephone facilities elsewhere in the city, which necessitated the limitation of participants

*This analysis was prepared just after the Phonevision test began in January 1, 1951, and, thus, deals only with the changes which occurred up to the start of the test. During the three month test period, four additional substitutions had to be made when families moved out of the test area. Since these substitutions would in no way affect the conclusions here arrived at, they have been omitted from consideration. It should be mentioned, however, that these late substitutions did not always follow the procedures outlined here. In the first two of these four instances, the Phonevision test set was left in the dwelling unit vacated by the test family, with the new residents becoming the substitute test family. This procedure had the advantage of avoiding the lengthy process of qualifying a substitute family and permitting the substitute family maximum participation in the test. When it was found that holding the dwelling unit constant did not sufficiently constrain the variables used in stratifying the test family sample, this procedure was abandoned, and in the two later instances, substitutions followed the original procedure.

to the Lakeview-Lincoln District, in the first place; and, even within the Lakeview-Lincoln District, the telephone company did not always have sufficient facilities available to service particular addresses.

2. Those families who were cleared for facilities by the telephone company were then sent two copies of a contract, covering the terms of their participation in the test, by the Zenith Radio Corporation. When the would-be participant returned one signed copy of the contract, processing moved into the next stage. At this point, however, candidates for participation might disqualify themselves by informing the Zenith Radio Corporation that they had moved out of the test area, were no longer able to participate because of personal emergencies, or were no longer interested in taking part. They might, also, simply fail to reply to the contract. At first, when there was more time available for processing, the Zenith Radio Corporation mailed the contracts without specifying a time period within which they must be returned. After some lapse of time, a "cut-off" letter was sent which did set a time limit on reply, after the expiration of which the offer of participation was automatically withdrawn. (In some of the earlier cases of non-response, telephone calls were also made.) Later, a time limit was usually sent with the contract, and the period of time allowed for reply before the withdrawal of the offer of participation tended to decrease as the expected starting dates of the test approached.*

3. Once a family had returned a signed contract, the Zenith Service Department proceeded to the installation of the set. At this point, it might be discovered that the family had to be dropped because they could not have a roof antenna installed or, in a very few cases, because television reception was found to be poor even with a roof antenna. The condition of ability to have a roof antenna had been placed on participation in the Phonevision test by the Zenith Radio Corporation because of the low power of their transmitter, in order to ensure that generally poor television reception would not color people's reactions to Phonevision. An attempt had been made to eliminate families who could not have roof antennae from consideration in selecting the sample, but, even so, the antenna difficulty often turned up at this stage.

If a family was dropped along the way for any of the reasons just described, a new family was substituted in accordance with the procedures outlined in the next section, and the entire process of qualifying the family began again, starting with the telephone company.

In view of this complex procedure, it may be well to point out that the difficulties which could and did arise all grew out of the peculiar conditions of the test. The point of this discussion is not that these problems in any way affect the commercial possibilities of Phonevision, but that they imposed difficult conditions on the Phonevision test, and, in so doing, created the possibility of bias in the sample employed.

Method of Substitution Used

In anticipation of the need for substitution, ten equivalent samples were set up at the time the original sample was drawn. Each sample was selected by drawing the appropriate number of cases in a random fashion from each of 158 predefined strata. Then, the 300 families in each sample were numbered from 1-300, in order, through the strata, and, within a stratum, in the systematic order in which the cases were selected. Thus, the six cases in the third stratum were always numbered 006-011 in every sample, and number 006 was always the first family selected in the third stratum; number 007, the second family; and so on.

*It will be recalled that there were several postponements of the test, so that the apparent deadline for implementing the sample was earlier than the actual, final deadline and created pressure to complete the sample earlier than might appear from the final starting date.

Whenever substitutions were necessary, they were always made by substituting the family with the equivalent number from the next sample. For example, if family 207 from the original sample (1-207) could not participate in the test, family 207 from the second sample (2-207) was then considered; and, if this family had to be dropped, family 3-207 was considered next; and so on. This substitution procedure was followed rigorously,* so that, when the Phonevision test began on January 1, 1951, there were 300 families participating who were still drawn in the proper proportions from the 158 strata.

These systematic substitution procedures ensured that the composition of the sample could not change with respect to the major subdivisions of those variables which had been used in defining the strata--family size, number of children, annual family income, education of head of household and television ownership. There could, of course, be variation with respect to variables which were not controlled by the stratification and within the rather broad categories of variables used in stratification. More important, if the reasons for dropping certain families and substituting others tended to occur in a random fashion throughout the sample, there was nothing about the sbustitution procedure itself that would introduce bias into the sample. It follows, then, that the question of how the sample was altered by substitutions is entirely a function of the extent of substitution and the possibly differential effect of the various reasons for dropping families of particular characteristics.

The Problem of Substitution

In any sample study, substitutions in the sample create the possibility that the sample is no longer representative of the universe it is supposed to represent, so that generalizing from sample results to the probable behavior of the universe would lead to erroneous conclusions. On the other hand, when a single item, like expenditures for Phonevision, is the major subject of investigation, only those changes in the representativeness of the sample which are related to expenditures for Phonevision can in any way affect generalizations from the sample to the universe. So, in the instance of the sample of families for the Phonevision test, the main concern is not whether the final sample became unrepresentative of the universe from which it was drawn--residential telephone subscribers in Lakeview-Lincoln who volunteered for the test--in various discrete aspects, but whether it was unrepresentative in terms of its expenditures for Phonevision.

Unfortunately, it is never possible to give an absolute and final answer to the question of whether substitutions changed the representative character of a sample with respect to the item under study except by comparing the behavior of the families eliminated with that of the families substituted for them. More concretely, if it could be shown that the families eliminated from the original sample either would or would not have made the same expenditures for Phonevision as their substitutes did, then it could be definitely said whether substitution did or did not alter the representativeness of the sample. In practice, however, this procedure would mean that the families dropped would also have had to be taking part in the test, in which case there would have been no need for substitution.

All that can practically be done to answer the question of the probable effect of substitutions on the representativeness of the Phonevision test sample is to consider the following auxiliary questions:

1. What portion of the sample was affected by substitution? The substitution rate, itself, determines whether the problem of possible unrepresentativeness is of practical or only theoretical importance, for, where substitutions are relatively infrequent,

*One exception occurred when an eleventh and, finally, a twelfth family had to be considered before one of the test positions could be filled. Since they were only ten samples, a somewhat different procedure had to be followed to select an eleventh and twelfth family. In this instance, the next eligible family number in the same stratum as the ineligible family was arbitrarily selected from the fourth sample. More specifically, #4-172 was used as #11-171 and #4-174 was used as #12-171.

even if they tended to make for unrepresentative results, their effect on the results for the total sample would be negligible.

2. What caused the substitutions that might be in any way related to the likelihood of making expenditures for Phonevision? If the reasons for substitution are clearly and obviously fortuitous ones which could not conceivably operate to over- or under-represent varying Phonevision-expenditure groups in the final sample, then it can probably be assumed that the sample is still representative with respect to expenditures for Phonevision.

3. What known characteristics of the sample differ from those of the universe and how might these conceivably relate to expenditures for Phonevision? As pointed out before, if they do not relate to expenditures for Phonevision, even large changes in the characteristics of the sample would not affect its representativeness for the Phonevision test.

In the following sections an attempt is made to answer these questions, but it should be apparent already that the answers depend not entirely on the facts, but on judgments about the significance of the facts as well. Because of this judgment element, any conclusions about the representativeness of the sample must remain likely rather than certain.

Amount and Distribution of Substitutions

In setting up the sample of 300 participating families who began the test, a total of 630 families were considered. In other words, 47.6% of the families considered were accepted, or, on the average, 2.1 families were considered for every one accepted. In the final sample of participating families, only 48.0% came from the original sample; that is, 52.0% of the families who took part in the test were substitutes. The distribution of families considered and accepted among the original and successive substitute samples is presented in Table 7.

With this large rate of substitution, one of the first considerations is whether there is anything in the amount and distribution of substitution to suggest that the substitutions tended to produce unrepresentativeness in the final sample. That is to say, since test positions were defined in terms of five variables used in stratification of the sample because they appeared, a priori, to be likely to be related to rates of expenditure, the composition of the sample in terms of these five variables could not change. But, if the a priori assumption is correct, and the various strata represent different rates of expenditure for Phonevision, then any appreciable difficulties in filling certain test positions might indicate that, though the substitution method ensured that the five characteristics defining the strata did not alter, continued substitution within a given stratum tended to select out for the test families who were not representative of the stratum in expenditure rates for Phonevision. In other words, if, in any given stratum, a differentially-high proportion of the families considered were found to be ineligible, the probability would be high that those who were eligible differed in some important and uncontrolled respect from those who had to be dropped, so that there would be good reason to conclude that the final sample was unrepresentative.

Given the substitution rate required, however, it can be shown that the distribution of families considered and accepted among the various samples could have occurred by chance. For, if certain of the test positions were appreciably more difficult to fill for reasons related to the controlled characteristics of families in these positions, then the distribution would be non-random and there would be unequal rates of acceptance in the various samples, with some piling up of families at the heavy-substitution end of the distribution. If substitutions were distributed randomly over the test positions, however, the distribution of families accepted among the samples would be a geometric function of the substitution rate, so that rates of acceptance among the samples would be equal and a constantly-declining

TABLE 7

DISTRIBUTION OF FAMILIES CONSIDERED AND ACCEPTED AS PHONEVISION TEST PARTICIPANTS AMONG THE ORIGINAL AND SUBSTITUTE SAMPLES

Sample Number	Families Accepted		Families Considered		Per cent Accepted of Families Considered
	Number	Per cent	Number	Per cent	
1 (Original Sample).	144	48.0	300	47.6	48.0
2-12 (All Substitute Samples).	(156)	(52.0)	(300)	(52.4)	(47.3)
2.	65	21.7	156	24.8	41.7
3.	54	18.0	91	14.3	59.3
4.	18	6.0	37	5.9	
5.	7	2.3	19	3.0	
6.	5	1.7	12	1.9	
7.	4	1.3	7	1.1	
8.	1	0.3	3	0.5	44.6
9.	1	0.4	2	0.3	
10.	-	-	1	0.2	
11.	-	-	1	0.2	
12.	1	0.3	1	0.2	
Total.	300	100.0	630	100.0	47.6

distribution would result.* While there appears to be some variation in the acceptance rates among the various samples, as shown in Table 7, a Chi-square test indicates that the actual distribution obtained could have deviated as much as it did from the theoretically-expected distribution, which has been described, by chance alone about 25% of the time.

While it cannot be concluded from these data that substitutions were random in character with respect to the stratifying variables, the data do suggest that any tendency toward non-randomness in substitutions with respect to these variables was within the range of variability to be expected in a sample of this size, in any case.

Kinds of Substitutions

The relatively high substitution rate that has been seen was primarily a function of two of the special conditions of the test: lack of telephone facilities caused over half the substitutions made; and inability to have a roof antenna, a quarter. Moves to locations outside the test area, refusal to participate, non-response to the deadline letter and poor television reception accounted for the remaining substitutions, but no one of these categories approached the size of the first two mentioned, as may be seen in Table 8.

These reasons for substitution must be looked at in much the same way as the overall distribution of substitutions in order to evaluate their effect on the representativeness of the sample. That is, they can only be evaluated in terms of whether they tended to affect various strata within the sample differentially and, what the direction of this possible effect is likely to be.

As a first test, the distribution of reasons for dropping families through the

*The random distribution can be generated from: $E_i = A\,(1-r)\,r^{i-1}$, where
E_i = the expected number of families accepted in a given sample.
A = the total number of families accepted; that is, the sample size.
r = the substitution rate; that is, the ratio of all families dropped to all families considered.
i = the sample number.

TABLE 8

REASONS FOR DROPPING FAMILIES CONSIDERED FOR PARTICIPATION IN THE PHONEVISION TEST

Reason	Proportion Dropped for Given Reason	
	All Families Considered	All Families Dropped
No Telephone facilities	28.1	53.6
Family reasons:		
Moving out of area	2.8	5.5
Unwilling or unable to participate	4.2	7.9
Never responded to deadline	3.3	6.4
No roof antenna permitted	13.5	25.7
Television reception poor	0.5	0.9
Total per cent	52.4	100.0
Number	630	330

successive samples may be considered. Any strong tendency toward successive elimination of families considered for certain of the test positions for the same reason would lead to an increasing proportion of rejections for this reason through the samples. In fact, however, as may be seen in Table 9, only one of the reasons for rejections shows this kind of a patterning through the samples at a statistically-significant level. This reason--failure to respond to the deadline letter--is not likely to be a major source of unrepresentativeness in the sample, however, because (1) it affects a relatively small number of test positions and (2) it is, at least in part, a function of the fact that, in general, briefer time periods for response were given families in later substitution positions than in earlier ones, so that the processing procedure rather than some peculiarity in the types of families that didn't respond might account for this result.

TABLE 9

REASONS FOR DROPPING FAMILIES CONSIDERED AS PHONEVISION TEST PARTICIPANTS AMONG THE ORIGINAL AND SUBSTITUTE SAMPLES

Reason	Proportion Dropped for Given Reason						
	All Families Considered				All Families Dropped		
	Sample 1	Sample 2	Sample 3	Sample 4-12	Sample 1	Sample 2	Sample 3-12
No telephone facilities	26.7	34.0	28.6	21.7	51.2	58.2	53.0
Family reasons:							
Moving out of area	4.0	2.6	-	2.4	7.7	4.4	2.4
Unwilling or unable to participate	4.0	3.2	1.1	9.6	7.7	5.5	10.8
Never responded to deadline letter	1.3	3.8	4.4	8.4[a]	2.6	6.6	13.3[a]
No roof antenna permitted	15.3	14.7	6.6	12.1	29.5	25.3	19.3
Television reception poor	0.7	-	-	1.2	1.3	-	1.2
Total per cent	52.0	58.3	40.7	55.4	100.0	100.0	100.0
Number	300	156	91	83	156	91	83

[a]Difference between extreme groups is significant at .05 level or less.

More directly, the rates of substitution for each reason for rejection within the major strata are shown in Tables 10-14. If a single reason category is followed through the five tables the following tendencies are evident:

1. Lack of telephone facilities. Eliminations by the telephone company tended to hit each major sub-group in the sample about equally. No statistically significant differences in rejection for lack of telephone facilities appeared between either television owners and non-owners, small and large families, families with none and many children, families of relatively low and high income, or families with relatively little or much educational background.* In view of this lack of variability and since the telephone company's eliminations were made before families became aware that they were chosen and without reference to any of the families' characteristics or interest in Phonevision, it is difficult to see how the substitutions necessitated by the telephone company's shortage of facilities were anything but random in character.

2. Moves out of the area. This group of eliminations was relatively small in number and never showed any significant variation in importance among the major categories of the stratifying variables. It is most unlikely that substitutions made for this reason could have been any major source of unrepresentativeness in the final sample.

3. Unwillingness or inability to participate. While the group of families eliminated for reasons of this order was not large, it presents an anomaly among families who all originally volunteered for the test. Since no intensive effort was made to determine their reasons for changing their minds, the interpretation of this alteration in the sample is largely speculative for the majority who simply said they were no longer interested.**

It can be noted, in Tables 11, 12 and 14, that smaller families, families with no children and families of little educational background all tended to be more likely to drop out for this sort of reason. While the proportion of such cases was small and differences do not by themselves approach statistical significance, the pattern of relationship with each of these three variables is consistent. In the case of the family-size and number-of-children variables, when "unwilling" eliminations are combined with eliminations because of non-response (some of whom may well have expressed unwillingness simply by their silence), differences are statistically significant.

These relationships point toward the operation of at least two tendencies: the correlation with education suggests that to some degree the unwilling group contained people who could not understand the contract they were asked to sign and became alarmed, suspicious and unwilling to participate, when asked to sign it. Insofar as reasons of this kind were operating, it is unlikely that they related either to interest in Phonevision or to probable rates of expenditure, and, to this extent, eliminations for this reason would not make for unrepresentativeness. Instead, it would appear that, as new test requirements emerged, a few more families joined the group earlier classified as "opposed to the conditions of the test."

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*The test of significance used was the standard error of the difference between proportions rejected for a given reason in the two extreme categories of the variable being tested. With multinomial distributions of reasons for being rejected, as in this instance, this procedure tends to maximize the significance of differences. It may, therefore, be regarded as a conservative test, in the sense that it reduces the possibility of concluding that no biases were operating and thus protects to some degree against unwarranted confidence in the substitutions.

**In a small number of cases, families withdrawing from the test did indicate that serious illness or other personal emergencies dictated their decision.

TABLE 10

RELATION OF TELEVISION OWNERSHIP STRATA TO OUTCOME ON FAMILIES CONSIDERED FOR PHONEVISION TEST

Outcome	Proportion of Families Considered with Given Outcome	
	Television Owners	Non-Owners
Accepted	51.4	44.4
Dropped:		
No telephone facilities	29.5	26.9
Family reasons:		
Moving out of area	2.4	3.3
Unwilling or unable to participate	3.8	4.4
Never responded to deadline letter	2.4	4.1
No roof antenna permitted	10.2	16.3[a]
Television reception poor	0.3	0.6
Total per cent	100.0	100.0
Number	292	338

[a]Difference between extreme groups is significant at .05 level or less.

TABLE 11

RELATION OF FAMILY SIZE STRATA TO OUTCOME ON FAMILIES CONSIDERED FOR PHONEVISION TEST

Outcome	Proportion of Families Considered in Each Size Group with Given Outcome		
	1 - 2 Persons	3 - 4 Persons	5 Persons and Over
Accepted	41.3	49.5	53.0[a]
Dropped:			
No telephone facilities	25.8	28.1	31.3
Family reasons:			
Moving out of area	2.5	3.1	3.0
Unwilling or unable to participate	5.0	5.1	0.7 } [a]
Never responded to deadline letter	5.0	2.4	3.0 } [a]
No roof antenna permitted	19.4	11.5	9.0[a]
Television reception poor	1.0	0.3	-
Total per cent	100.0	100.0	100.0
Number	201	295	134

[a]Differences between extreme groups is significant at .05 level or less.

TABLE 12

RELATION OF NUMBER OF CHILDREN STRATA TO OUTCOME ON FAMILIES CONSIDERED FOR PHONEVISION TEST

Outcome	Proportion of Families Considered in Each Number-of-Children Category with Given Outcome			
	No Children	One Child	Two Children	3 or More Children
Accepted	43.6	50.3	49.6	54.2
Dropped:				
No telephone facilities	24.6	30.4	31.4	30.5
Family reasons:				
Moving out of area	2.5	3.0	3.0	3.4
Unwilling or unable to participate	5.2	4.2	3.0	1.7 [a]
Never responded to deadline letter	4.8	2.4	2.3	1.7 [a]
No roof antenna permitted	18.2	9.7	10.7	8.5[a]
Television reception poor	1.1	-	-	-
Total per cent	100.0	100.0	100.0	100.0
Number	275	165	131	59

[a]Difference between extreme groups is significant at .05 level or less. Because of the small number of cases, the last two groups are combined in making tests of significance.

TABLE 13

RELATION OF INCOME STRATA TO OUTCOME ON FAMILIES CONSIDERED FOR PHONEVISION TEST

Outcome	Proportion of Families Considered in Each Annual Income Group with Given Outcome		
	Under $5,000	$5,000-$7,499	$7,500 and Over
Accepted	47.0	47.7	47.9
Dropped:			
No telephone facilities	25.8	31.6	29.1
Family reasons:			
Moving out of area	2.8	3.1	2.8
Unwilling or unable to participate	3.5	5.2	4.2
Never responded to deadline letter	3.9	3.1	2.1
No roof antenna permitted	16.3	9.3	13.2
Television reception poor	0.7	-	0.7
Total per cent	100.0	100.0	100.0
Number	283	193	144

On the other hand, the relationship with family size suggests that small families may have tended to drop out because of a feeling that they were not ideal subjects for such a test, a realization that the per capita costs of Phonevision were relatively high for small families, or some feeling that they would not make much use of it. Reasons of this order, if they were operating, would tend to eliminate families with least interest in and, presumably, lower rates of expenditure for Phonevision, so that a minor tendency toward exaggerating rates of Phonevision expenditure in the final sample might be present.

4. Non-response. The non-response group of families considered and dropped must be regarded as a heterogeneous one, since it is possible that, if more time had been allowed or more follow-up had been made, some of these families would have proved willing to participate; the group must also include some families who had moved out of the area or decided not to particiпage, but who did not bother to notify the Zenith Radio Corporation of their changed status. The only clear tendencies with respect to this group of families dropped were already pointed out: like the drop-outs because of unwillingness, non-response drop-outs were highest among small families and families with no children. It is probable that these tendencies resulted from the basically unwilling among the non-response group, so that, if the interpretation of the significance of such drop-outs is correct, the non-response eliminations would also tend to result in some over-estimation of expenditures for Phonevision in the final sample.

5. Inability to have a roof antenna. Eliminations for this reason tended to occur differentially among non-television owners, small families and families with no children. As will be shown later, antenna eliminations occurred most frequently among renters of apartments, and especially, the kind of apartments occupied by small families. Insofar as the decision about the permissability of a roof antenna resided wholly with the landlord or rental agent and could not have been affected by the strength of the tenant's desire to meet this condition for the Phonevision test or his willingness to pay extra rent for permission to have a roof antenna, it is not easy to see how external policies toward roof antenna could have resulted in selecting families who were unrepresentative of typical small, apartment-house families in Phonevision expenditures. Since it is not entirely certain that the tenant could not affect the final decision, however, the possibility does exist that the antenna condition did have some tendency to eliminate families with relatively less interest in Phonevision, and, possibly, lower rates of expenditure.

6. Poor television reception. This category is so small that it could not possibly have any material effect on final results.

In this detailed examination of statistically significant tendencies and their possible influence on the representativeness of the sample, the size of the total combined effect should not be lost sight of. It is also apparent in Tables 10-14 that only as between small and large families was there a statistically significant difference in the total rate of substitutions for all reasons. While number of children showed the same tendency toward higher substitution among smaller family groups, this difference is within the range of normal variation, given the sample size. The differential substitution rate among small families was only about 12 percentage points higher than that among large families, however--58.7% of the small families considered were rejected in comparison with 50.5% of the medium-sized families and 47.0% of the larger families. So, while the effect of the differential substitution rate among small families would appear to have been in the direction of eliminating from this group the least interested families who could be least likely to spend money on Phonevision, the total effect cannot be large.

TABLE 14

RELATION OF EDUCATIONAL STRATA TO OUTCOME ON FAMILIES CONSIDERED FOR PHONEVISION TEST

Outcome	Proportion of Families Considered at Each Educational Attainment Level for Head of Household with Given Outcome			
	Less Than High School Graduation	High School Graduation	Some College, but Not Four Years	College Graduation and Over
Accepted	47.0	47.6	47.9	49.5
Dropped:				
No telephone facilities	31.3	27.4	25.3	27.1
Family reasons:				
Moving out of area	2.0	3.4	3.0	3.6
Unwilling or unable to participate	5.1	4.9	3.6	0.9
Never responded to deadline letter	3.5	3.4	2.4	3.6
No roof antenna permitted	10.6	13.3	17.2	14.4
Television reception poor	0.5	-	0.6	0.9
Total per cent	100.0	100.0	100.0	100.0
Number	198	143	169	111

The problem of unrepresentativeness can be looked at in still another way with much the same sort of conclusion. In Table 15, there is presented the combined reasons for substitution which occurred among the test positions. That is to say, to fill one test position, several families were sometimes considered, with each of the eliminated families dropped for a different reason. If the assumption that drop-outs caused by lack of telephone facilities and moves to outside the area were largely fortuitous in character is sound, test positions where all the substitutions made were simply for one or another of these reasons may be regarded as unbiased by the substitutions. In this event, there were, in addition to the 48.0% of the test positions where no substitutions were made an additional 21.7% where substitutions seem unlikely to have altered the representative character of the sample. It would follow that any tendencies toward unrepresentativeness that there may have been would have operated in less than a third (30.3%--8.3% where substitutions were made for unwillingness with or without substitutions for non-response and/or lack of antenna; 4.3%, for non-response, with or without substitutions for lack of antenna; and 17.7%, for lack of antenna) of the sample only. Since the biasing tendencies so far suggested were far from extreme to begin with, it is again unlikely that over-all sample results are significantly affected by them.

Changes in the Composition of the Sample

Detailed comparisons of characteristics between all volunteers for the Phonevision test, volunteers who were not barred from having roof antenna, the original sample of participants selected and the final sample of participants who took part in the test are shown in Table 16. As may be seen there, there were only two variables, among those measured, with respect to which the final sample differed significantly from the universe. These were the proportion of families who rented rather than owned their dwelling-place and the proportion of families living in apartment buildings, both of which were lower in the final sample than they were in the universe. For convenience, these figures are summarized here:

	Proportion Renting Their Dwelling-place	Proportion Living in Apartment Buildings
All volunteers	81.5	63.7
Original sample	78.0	58.4
Final sample	72.3	54.3

The reason for these changes in the composition of the sample is not difficult to find, for, as the figures above indicate, the factors making for the tendency to underrepresent renters and apartment building residents were already operating to affect the composition of the original sample, although only in the case of the proportion living in apartment buildings did the difference between the universe and the original sample reach the level of statistical significance.

It is already known that there was one step in the process by which the original sample was selected which tended to introduce biases of this kind. In picking the original and substitute samples, families who clearly indicated that they could not have a roof antenna were eliminated from consideration. These eliminated families differed significantly from the families who remained eligible in seven of the variables ascertained about the families. As summarized in Table 17, these ineligibles tended to be smaller families of two or less adults, families with fewer children, and families who rented apartments. They also had somewhat lower incomes and were somewhat less frequent in movie attendance.

TABLE 15

PHONEVISION TEST POSITIONS CLASSIFIED BY COMBINATION OF REASONS FOR SUBSTITUTING WITHIN THEM

Combination of Reasons	Proportion Requiring Substitution for Given Combination of Reasons	
	All Test Positions	Test Positions Requiring Substitutions
Unwillingness, non-response, moving, antenna, telephone	0.3	0.6
Unwillingness, non-response, antenna, telephone	1.0	1.9
Unwillingness, non-response, telephone	0.7	1.3
Unwillingness, moving, telephone	0.3	0.6
Unwillingness, antenna, telephone	1.0	1.9
Unwillingness, antenna	0.7	1.3
Unwillingness, telephone	3.0	5.8
Unwillingness only	1.3 (8.3)	2.6 (16.0)
Non-response, moving, antenna, telephone	0.3	0.6
Non-response, antenna, telephone	1.3	2.6
Non-response, antenna	0.7	1.3
Non-response, telephone	1.7	3.2
Non-response only	0.3 (4.3)	0.6 (8.3)
Moving, antenna	0.7	1.3
Moving, telephone	1.7	3.2
Moving only	2.3 (4.7)	4.5 (9.0)
Antenna, telephone	7.7	14.7
Antenna only	9.3 (17.0)	18.0 (32.7)
Telephone only	17.7	34.0
Total per cent	52.0	100.0
Number	300	156

TABLE 16

CHARACTERISTICS OF ALL PHONEVISION TEST VOLUNTEERS, ELIGIBLE VOLUNTEERS, ORIGINALLY-SELECTED PARTICIPANTS AND FINAL PARTICIPANTS

LAKEVIEW-LINCOLN DISTRICT

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total[a]	T.V. Owners	Non-owners	Total	Weighted Total[a]
Number of households	3,367	6,059	9,426	2,758	5,014	7,772	150	150	300	300	150	150	300	300
Number of persons	12,650	19,595	32,245	10,656	16,575	27,231	565	526	1,091	1,080	560	528	1,088	1,077
Race	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)	(Percent)
White	99.2	99.0	99.1	99.1	99.0	99.1	100.0	97.3	98.7	98.3	99.3	96.6	98.0	97.6
Colored	0.7	0.8	0.8	0.7	0.9	0.8	-	2.7	1.3	1.7	-	2.7	1.3	1.7
Not stated	0.1	0.2	0.1	0.2	0.1	0.1	-	-	-	-	0.7	0.7	0.7	0.7
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex of persons in household:														
Male	49.2	47.6	48.2	49.2	47.5	48.2	47.4	51.5	49.4	50.0	48.4	50.8	49.6	49.9
Female	50.8	52.4	51.8	50.8	52.5	51.8	52.6	48.5	50.6	50.0	51.6	49.2	50.4	50.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age of persons in household:														
Under 5 years	12.1	10.6	11.2	11.8	10.4	10.9	11.9	11.8	11.8	11.8	10.5	11.2	10.8	11.0
5 - 9	9.1	6.4	7.5	9.2	6.5	7.6	9.4	5.1	7.3	6.7	10.5	6.3	8.4	7.8
10 - 19	11.8	10.0	10.7	12.3	10.5	11.2	12.2	10.1	11.2	10.8	12.3	9.1	10.8	10.2
20 - 34	29.1	30.7	30.0	28.6	30.6	29.8	24.5	32.5	28.5	29.6	27.5	32.9	30.1	31.0
35 - 49	25.3	25.0	25.1	25.3	24.8	25.0	30.0	23.6	26.8	25.9	25.6	24.6	25.1	25.0
50 - 64	10.2	13.5	12.2	10.3	13.4	12.2	9.2	13.5	11.3	12.0	10.9	11.9	11.5	11.5
65 and over	2.4	3.8	3.3	2.5	3.8	3.3	2.8	3.4	3.1	3.2	2.7	4.0	3.3	3.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median age	28.8	31.2	30.3	28.8	31.1	30.2	30.2	30.6	30.4	30.5	29.2	30.7	30.0	30.2

[a]These figures represent the estimated composition of the sample, if television owners and non-owners had been represented in the same proportions as they actually occurred among all volunteers. The fact that these two groups were represented equally among test participants makes the unweighted totals arbitrary figures which are not directly comparable with the totals for volunteers.

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total[a]	T.V. Owners	Non-owners	Total	Weighted Total[a]
Size of household:														
One person	1.0	4.1	3.0	0.9	3.8	2.8	2.0	2.7	2.3	2.5	1.3	3.3	2.3	2.6
Two	20.3	31.5	27.6	17.4	30.0	25.5	18.7	31.3	25.0	26.8	20.7	29.9	25.4	26.6
Three	25.3	28.2	27.2	25.1	28.2	27.1	24.0	24.6	24.4	24.3	24.0	25.4	24.7	24.9
Four	27.7	20.8	23.2	28.4	21.3	23.7	28.6	20.7	24.7	23.5	26.7	21.3	24.0	23.2
Five	15.5	9.0	11.3	16.7	9.4	12.2	16.0	8.0	12.0	10.8	15.3	8.7	12.0	11.1
Six	6.3	3.7	4.6	6.9	4.2	5.1	8.0	6.7	7.3	7.2	10.0	4.7	7.3	6.5
Seven and over	3.9	2.7	3.1	4.6	3.1	3.6	2.7	6.0	4.3	4.9	2.0	6.7	4.3	5.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean size	3.76	3.23	3.42	3.85	3.31	3.50	3.77	3.51	3.64	3.60	3.73	3.52	3.63	3.59
Number of adults (20 and over) in household:														
One	2.0	5.8	4.5	1.8	5.6	4.3	3.3	3.3	3.3	3.3	2.7	3.3	3.0	3.1
Two	65.2	66.6	66.1	62.3	64.9	64.0	62.7	68.0	65.3	66.1	64.6	66.7	65.7	66.0
Three	19.5	17.8	18.4	21.1	18.6	19.5	20.7	13.4	17.0	16.0	18.0	13.4	15.7	15.0
Four	8.7	6.8	7.5	9.5	7.5	8.2	7.3	8.0	7.7	7.8	11.3	11.3	11.3	11.3
Five and over	4.6	3.0	3.5	5.3	3.4	4.0	6.0	7.3	6.7	6.8	3.4	5.3	4.3	4.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean number of adults	2.52	2.36	2.42	2.57	2.40	2.46	2.51	2.56	2.53	2.54	2.48	2.59	2.53	2.55
Number of children (under 20) in household:														
None	32.9	49.1	43.3	30.8	47.7	41.8	32.0	47.3	39.7	41.8	32.6	47.3	40.0	42.0
One	28.0	26.5	27.1	28.5	27.2	27.6	28.0	26.7	27.3	27.2	28.0	27.3	27.7	27.6
Two	26.9	16.4	20.1	27.7	16.6	20.5	26.7	16.7	21.7	20.3	26.7	16.7	21.7	20.2
Three	8.5	5.4	6.5	9.1	5.6	6.9	9.3	5.3	7.3	6.7	8.0	4.7	6.3	5.9
Four and over	3.7	2.6	3.0	3.9	2.9	3.2	4.0	4.0	4.0	4.0	4.7	4.0	4.3	4.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean number of children	1.24	0.87	1.00	1.28	0.91	1.04	1.26	0.95	1.11	1.06	1.25	0.93	1.09	1.04
Type of dwelling unit:														
Single-family house	7.1	5.5	6.1	8.3	6.7	7.2	10.0	6.7	8.3	7.9	10.0	6.7	8.3	7.8
Two-family house	22.3	20.2	20.9	24.9	22.4	23.3	24.0	23.3	23.7	23.6	28.0	26.0	27.0	26.7
Apartment building	61.6	64.8	63.7	57.5	60.9	59.7	59.4	58.0	58.7	58.4	51.3	56.0	53.7	54.3
Hotel	1.0	1.0	1.0	1.1	0.9	1.0	1.3	0.7	1.0	0.9	0.7	0.7	0.7	0.8
Other	7.8	8.3	8.1	8.0	8.9	8.6	5.3	10.7	8.0	8.8	9.3	8.6	9.0	8.9
Not stated	0.2	0.2	0.2	0.2	0.2	0.2	-	0.6	0.3	0.4	0.7	2.0	1.3	1.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a]These figures represent the estimated composition of the sample, if television owners and non-owners had been represented in the same proportions as they actually occurred among all volunteers. The fact that these two groups were represented equally among test participants makes the unweighted totals arbitrary figures which are not directly comparable with the totals for volunteers.

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total[a]	T.V. Owners	Non-owners	Total	Weighted Total[a]
Occupancy status:														
Own	20.2	17.2	18.3	24.3	20.4	21.8	22.0	20.7	21.3	21.2	22.7	29.3	26.0	27.0
Rent	79.6	82.6	81.5	75.5	79.4	78.0	78.0	79.3	78.7	78.8	76.6	70.0	73.3	72.3
Not stated	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-	-	0.7	0.7	0.7	0.7
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Annual family income:														
Under $2,500	1.5	3.8	2.9	1.5	3.7	2.9	2.0	6.0	4.0	4.6	-	6.0	3.0	3.9
$2,500 - $4,999	37.2	46.7	43.3	36.9	45.5	42.4	36.7	44.7	40.6	41.8	38.0	44.7	41.3	42.3
$5,000 - $7,499	30.9	30.9	30.9	30.1	31.3	30.9	30.7	30.7	30.7	30.7	31.3	30.0	30.7	30.5
$7,500 - $9,999	10.3	8.8	9.4	10.2	9.3	9.6	8.0	9.3	8.7	8.8	10.0	9.3	9.7	9.5
$10,000 and over	19.0	8.7	12.4	20.3	9.1	13.1	21.3	8.0	14.7	12.8	18.7	8.0	13.3	11.8
Not stated	1.1	1.1	1.1	1.0	1.1	1.1	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median income	$5,873	$4,943	$5,256	$5,922	$5,028	$5,292	$5,870	$4,925	$5,380	$5,293	$5,904	$4,925	$5,394	$5,312
Occupation of head of household:														
Professional and semi-professional	13.6	16.0	15.2	13.5	16.2	15.2	14.7	18.0	16.3	16.9	13.3	18.7	16.0	16.8
Proprietors, managers and officials	26.4	17.6	20.8	26.8	17.9	21.1	29.3	16.6	23.0	21.1	28.0	18.7	23.4	22.0
Clerical, sales and kindred workers (white collar)	21.1	28.8	26.0	20.3	27.9	25.2	20.0	22.0	21.0	21.3	18.0	25.3	21.7	22.7
Craftsmen, foremen and kindred workers (skilled)	17.7	16.2	16.7	18.3	16.8	17.3	13.3	16.0	14.6	15.1	18.7	12.0	15.3	14.4
Operatives and kindred workers (semi-skilled)	14.7	12.5	13.3	14.3	12.5	13.1	16.7	13.3	15.0	14.6	14.7	12.6	13.7	13.3
Laborers (unskilled)	0.8	1.0	0.9	0.9	1.1	1.0	0.7	2.7	1.7	1.9	-	1.3	0.7	0.9
Domestic service workers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective service workers	1.5	1.5	1.5	1.6	1.4	1.5	0.7	2.7	1.7	1.9	2.0	4.7	3.3	3.7
Other service workers	2.7	3.4	3.2	2.7	3.3	3.1	3.3	4.7	4.0	4.2	3.3	3.3	3.3	3.3
No main earner: retired, student, unemployed, etc	1.1	2.4	1.9	1.2	2.5	2.1	1.3	2.7	2.0	2.2	2.0	2.7	2.3	2.4
Not stated	0.4	0.6	0.5	0.4	0.4	0.4	-	1.3	0.7	0.8	-	0.7	0.3	0.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a]These figures represent the estimated composition of the sample, if television owners and non-owners had been represented in the same proportions as they actually occurred among all volunteers. The fact that these two groups were represented equally among test participants makes the unweighted totals arbitrary figures which are not directly comparable with the totals for volunteers.

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total[a]	T.V. Owners	Non-owners	Total	Weighted Total[a]
Education of head of household:														
Some grammar school but didn't finish	2.3	2.6	2.5	2.5	2.7	2.7	2.0	2.0	2.0	2.0	3.3	2.7	3.0	2.9
Completed grammar school	8.4	8.3	8.3	8.3	8.4	8.4	8.0	8.7	8.3	8.5	4.0	8.6	6.3	7.0
Some high school, but less than 4 years	23.5	19.1	20.7	23.7	19.3	20.9	24.0	18.0	21.0	20.1	25.4	18.0	21.7	20.7
Completed 4 years of high school	22.8	22.0	22.3	22.5	21.5	21.8	22.7	22.6	22.7	22.6	22.7	22.7	22.7	22.7
Some college but less than 4 years	25.3	27.2	26.4	24.8	26.8	26.1	26.0	28.0	27.0	27.3	26.0	28.0	27.0	27.2
Completed 4 years of college	9.4	10.4	10.1	9.6	10.5	10.2	11.3	8.0	9.7	9.1	8.0	8.6	8.3	8.3
Postgraduate work in university	7.6	8.9	8.5	7.8	9.4	8.8	5.3	10.7	8.0	8.8	9.3	10.7	10.0	10.2
Not stated	0.7	1.5	1.2	0.8	1.4	1.1	0.7	2.0	1.3	1.6	1.3	0.7	1.0	1.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median years of education	12.7	12.9	12.8	12.7	12.9	12.8	12.7	12.9	12.8	12.8	12.8	12.9	12.9	12.9
Nativity of head of household:														
Native of native parentage	48.1	49.0	48.7	47.0	48.6	48.1	52.6	49.4	51.0	50.5	47.3	48.0	47.7	47.8
Native of foreign-born parentage	39.3	33.5	35.6	40.1	33.5	35.8	38.7	34.0	36.3	35.7	41.3	32.7	37.0	35.7
Foreign-born	12.3	17.1	15.3	12.6	17.5	15.7	8.0	15.3	11.7	12.7	10.7	19.3	15.0	16.2
Not stated	0.3	0.4	0.4	0.3	0.4	0.4	0.7	1.3	1.0	1.1	0.7	-	0.3	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Country of birth of foreign-born heads of household:														
Germany	21.5	26.4	24.9	20.5	26.0	24.5	33.3	26.2	28.6	27.9	12.5	17.2	15.5	16.2
Russia	14.5	8.6	10.3	14.4	8.3	10.0	25.0	8.7	14.3	12.4	12.5	6.9	8.9	8.2
Austria	6.5	7.6	7.3	6.3	7.7	7.3	-	4.3	2.9	3.3	12.5	3.5	6.7	5.6
Canada	6.8	4.7	6.2	6.9	6.2	6.4	-	4.3	2.9	3.3	6.3	6.9	6.7	6.7
Sweden	3.6	6.8	5.9	3.5	6.1	5.4	16.7	8.7	11.4	10.5	12.5	6.9	8.9	8.2
Hungary	6.5	4.2	4.8	6.9	4.4	5.1	8.3	-	2.9	1.9	6.2	6.9	6.7	6.7
Italy	7.0	3.6	4.6	7.5	3.9	4.9	-	4.3	2.9	3.3	-	10.3	6.7	7.9
Ireland	3.6	4.7	4.4	4.0	4.9	4.6	-	-	-	-	-	-	-	-
Poland	4.1	4.5	4.3	4.3	4.5	4.5	-	4.3	2.9	3.3	-	10.3	6.7	7.9
England and Wales	5.1	3.9	4.2	4.6	3.6	3.9	-	8.7	5.7	6.7	-	-	-	-
All other	20.8	25.0	23.1	21.1	24.4	23.4	16.7	30.5	25.5	27.4	37.5	31.1	33.2	32.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a]These figures represent the estimated composition of the sample, if television owners and non-owners had been represented in the same proportions as they actually occurred among all volunteers. The fact that these two groups were represented equally among test participants makes the unweighted totals arbitrary figures which are not directly comparable with the totals for volunteers.

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total[a]	T.V. Owners	Non-owners	Total	Weighted Total[a]
Adults' movie attendance:														
Twice a week or more	16.0	28.1	23.8	16.5	28.6	24.3	20.0	23.3	21.6	22.1	12.7	27.3	20.0	22.2
Once a week	29.2	38.7	35.3	30.4	38.8	35.8	25.3	41.4	33.3	35.7	26.0	40.7	33.3	35.5
Two or three times a month	20.6	17.9	18.9	20.2	17.8	18.7	20.0	23.3	21.7	22.1	27.3	14.7	21.0	19.1
Once a month	12.0	6.9	8.7	11.5	6.7	8.4	10.7	5.3	8.0	7.2	12.0	5.3	8.7	7.7
Less than once a month	21.5	7.9	12.7	20.6	7.6	12.2	22.7	6.7	14.7	12.4	20.7	10.7	15.7	14.2
Not stated	0.7	0.5	0.6	0.8	0.5	0.6	1.3	-	0.7	0.5	1.3	1.3	1.3	1.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Childrens' (5-19) movie attendance:														
Twice a week or more	22.0	34.4	28.8	22.7	35.2	29.6	19.4	37.0	26.0	28.5	18.2	36.3	25.4	27.7
Once a week	40.6	38.6	39.5	41.1	38.0	39.4	40.3	28.3	35.8	34.1	42.0	36.3	40.0	39.0
Two or three times a month	12.8	10.8	11.7	12.7	10.6	11.5	11.7	13.0	12.2	12.4	8.6	6.2	7.7	7.3
Once a month	7.1	3.6	5.2	6.7	3.4	4.9	6.5	4.3	5.7	5.4	10.1	2.4	6.9	6.1
Less than once a month	12.3	5.2	8.4	11.4	5.0	7.9	14.3	6.5	11.4	10.2	10.1	8.2	9.2	9.1
Not stated	5.2	7.4	6.4	5.4	7.8	6.7	7.8	10.9	8.9	9.4	11.0	10.6	10.8	10.8
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Landlord's permission for roof antenna:														
Yes	73.8	75.7	75.0	90.2	91.5	91.0	92.0	88.0	90.0	89.4	92.6	90.6	91.6	91.3
No	18.1	17.2	17.5	-	-	-	-	-	-	-	-	-	-	-
Don't know	5.2	4.8	5.0	6.3	5.8	6.0	6.7	6.0	6.3	6.3	2.7	4.7	3.7	4.0
Not stated	2.9	2.3	2.5	3.5	2.7	3.0	1.3	6.0	3.7	4.3	4.7	4.7	4.7	4.7
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ownership of television set:														
Owns	100.0	-	35.7	100.0	-	35.5	100.0	-	50.0	35.7	100.0	-	50.0	35.7
Does not own	-	100.0	64.3	-	100.0	64.5	-	100.0	50.0	64.3	-	100.0	50.0	64.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a]These figures represent the estimated composition of the sample, if television owners and non-owners had been represented in the same proportions as they actually occurred among all volunteers. The fact that these two groups were represented equally among test participants makes the unweighted totals arbitrary figures which are not directly comparable with the totals for volunteers.

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total	T.V. Owners	Non-owners	Total	Weighted Total
Length of ownership of T.V. set:														
Less than one month	1.8			1.7			2.7				2.0			
One month up to three months	7.0			6.6			6.0				6.7			
Three months up to six months	16.6	Not Applicable		15.2	Not Applicable		16.7	Not Applicable			12.0	Not Applicable		
Six months up to one year	29.6			29.5			28.6				33.3			
One year up to 18 months	20.2			20.6			20.0				21.3			
18 months up to two years	12.7			13.1			10.7				10.0			
Two years or more	11.5			12.7			13.3				14.7			
Not stated	0.6			0.6			2.0				-			
Total percent	100.0			100.0			100.0				100.0			
Width of picture tube of T.V. set:														
7 or 8 inch	10.4			10.4			11.3				10.0			
10 inch	29.9			30.5			24.7				24.6			
12 inch	37.7	Not Applicable		37.1	Not Applicable		36.7	Not Applicable			46.0	Not Applicable		
16 inch	18.5			18.3			21.3				16.0			
Over 16 inch	2.0			2.2			1.3				2.7			
Projection type	0.4			0.4			-				-			
Not stated	2.0			2.1			4.7				2.0			
Total percent	100.9[a]			101.0[a]			100.0				101.3[a]			
Brand of T.V. set:														
Admiral	15.5			15.2			16.6				16.7			
R. C. A.	14.1			14.6			14.7				14.7			
Motorola	12.1			12.1			12.0				13.3			
Zenith	10.8			10.9			10.7				14.7			
Philco	5.3			5.3			6.0				2.7			
G. E	5.2			5.3			4.7				6.0			
Hallicrafter	3.5	Not Applicable		b	Not Applicable		b	Not Applicable			b	Not Applicable		
Muntz	2.7			b			b				b			
Emerson	2.5			2.4			2.0				2.7			
Stromberg-Carlson	2.3			b			b				b			
DuMont	2.0			2.1			0.7				0.7			
Sentinal	1.8			b			b				b			
Capehart	1.5			b			b				b			
Crossley	1.5			1.5			-				-			
Trav-ler	1.4			b			b				b			

[a]The total is more than 100.0% because some families own more than one television set.
[b]Included in "all other".

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total	T.V. Owners	Non-owners	Total	Weighted Total
Brand of T.V. set - Continued														
Magnavox	1.4			1.4			1.3				1.3			
Garod	1.0			b			b				b			
Westinghouse	1.0			b			b				b			
Silvertone	0.9	Not Applicable		b	Not Applicable		b	Not Applicable			b	Not Applicable		
Tele-Tone	0.9			b			b				b			
Raytheon	0.6			b			b				b			
All other	6.3			24.0			24.0				20.0			
Not stated	6.4			6.5			7.3				8.0			
Total percent	100.7[a]			101.3[a]			100.0				100.8[a]			
Effect of television ownership on adults' movie attendance:														
Increased	2.9			3.1			3.3				2.7			
Decreased	66.7	Not Applicable		66.4	Not Applicable		70.7	Not Applicable			70.6	Not Applicable		
No change	29.2			29.2			24.0				24.0			
Not stated	1.2			1.3			2.0				2.7			
Total percent	100.0			100.0			100.0				100.0			
Size of decrease in adults' movie attendance:														
Under 10%	0.3			0.3			0.7				0.7			
10 - 19%	1.0			1.1			1.3				0.7			
20 - 29%	4.2			4.5			4.7				6.0			
30 - 39%	2.2			2.4			0.7				2.0			
40 - 49%	0.9			0.9			1.3				1.3			
50 - 59%	24.4	Not Applicable		24.9	Not Applicable		25.3	Not Applicable			28.0	Not Applicable		
60 - 69%	1.9			1.7			1.3				1.3			
70 - 79%	10.7			10.5			10.7				10.0			
80 - 89%	3.7			3.6			7.3				5.3			
90 - 99%	7.9			7.7			10.7				7.3			
100%	7.0			6.3			6.0				6.0			
Not stated	2.5			2.5			0.7				2.0			
Percent reporting decrease	66.7			66.4			70.7				70.6			
Median change in adults' movie attendance	-53.3			-52.9			-55.0				-54.0			

[a]The total is more than 100.0% because some families own more than one television set.
[b]Included in "all other".

TABLE 16 - Continued

Characteristic	All Phonevision Volunteers Who Completed Questionnaires			Volunteers Who Were Not Barred from Having Outside Antennae			Phonevision Test Participants Selected by the National Opinion Research Center							
							Original Sample				Final Sample			
	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	T.V. Owners	Non-owners	Total	Weighted Total	T.V. Owners	Non-owners	Total	Weighted Total
Effect of television ownership on childrens' (5-19) movie attendance:														
Increased	2.6	Not Applicable		2.7	Not Applicable		-	Not Applicable			1.3	Not Applicable		
Decreased	50.9			50.6			46.8				49.4			
No change	41.5			41.5			46.7				45.4			
Not stated	5.0			5.2			6.5				3.9			
Total percent with children 5-19	100.0			100.0			100.0				100.0			
Size of decrease in childrens' movie attendance:														
Under 10%	0.2			0.2			-				-			
10 - 19%	1.8			1.8			1.3				1.3			
20 - 29%	4.8			5.0			2.6				5.2			
30 - 39%	1.6			1.5			1.3				-			
40 - 49%	0.7			0.6			-				-			
50 - 59%	21.2			21.5			16.9				23.4			
60 - 69%	1.2			1.2			-				-			
70 - 79%	7.1			7.0			3.9				5.2			
80 - 89%	1.2			1.1			2.6				2.6			
90 - 99%	4.6			4.5			11.7				2.6			
100%	4.5			4.2			5.2				5.2			
Not stated	2.0			2.0			1.3				3.9			
Percent reporting decrease	50.9			50.6			46.8				49.4			
Median change in childrens' movie attendance	-22.7			-22.1			0.0				-19.9			

TABLE 17

CHARACTERISTICS ASSOCIATED WITH INABILITY TO HAVE OUTSIDE ANTENNAE

Characteristic	Proportion with Given Characteristic	
	Volunteers Reporting Inability to Have Outside Antennae	Volunteers Not Reporting Inability to Have Outside Antennae
Tenants (non-home owners)	97.8	78.0
Apartment house residents	82.0	59.7
Family size of two or less.	40.8	28.3
Two adults or less in household	81.5	68.3
No children in household.	50.6	41.8
Annual family income under $5,000	50.8	45.3
Adult movie attendance less than once a week	45.3	39.3
Number of cases.	1,654	7,772

The effect of the imposition of strata controls on the selection of the original sample was to prevent the expected variations from the universe on four of these seven factors, while movie attendance was sufficiently correlated with the stratifying variables so that it did not vary significantly from the universe either. The remaining two--tenancy and apartment residence--were not controlled, and the expected tendency appeared.

As the original sample was processed, further eliminations because of inability to have a roof antenna had to be made, and the effect of substitution was to decrease further the proportion of tenants and apartment residents appearing in the sample. This fact may most clearly be seen in the data below, where it is shown that these families who were in the final sample as replacements for original families who had to be dropped closely resembled original families who remained in the final sample in proportions renting and living in apartment houses, while both groups differed in these respects from original families who had to be dropped:

	Proportion Renting Their Dwelling-place	Proportion Living in Apartment Buildings
Families in final sample:		
Families from original sample.	72.2	54.2
Families substituted into original sample. .	74.4	53.2
Families in original sample who were dropped. .	84.6	62.8

It should be noted that this biasing tendency probably began even before the original sample was picked, for some 12% of these families who first volunteered for the test by sending in postcards, but who did not complete their volunteering by filling out the questionnaire, dropped out because they could not have roof antennae and assumed that this requirement would be one of the conditions of the test. It is reasonable to assume that these families would have been more like families who answered the questionnaire but could not have roof antennae than they were like families who could have antennae.

The possible effect of these changes in the composition of the sample because of

substitutions for inability to have roof antennae is in no way different than that stated earlier in discussing the differential rejection rate for antenna among the strata. That is, it is not clear whether it made any difference at all, but, if it did make a difference, it would be that it tended to over-eliminate the least interested and the least likely to spend money on Phonevision.

Is the Sample Unrepresentative Because of Substitutions?

As has been seen, a number of factors affected the sample of Phonevision test participants in the process of translating the original sample into the final sample of participating families. Those which might have biased the sample may be quickly summarized as:

1. Fifty-two per cent of the test positions were filled by substitute families.

2. The requirement of a roof antenna led to the inclusion of a disproportionately high number of home-owners and residents of one- and two-family houses in the sample.

3. There was a disproportionately high substitution rate among one- and two-person families.

4. The requirement of a roof antenna led to a disproportionately high substitution rate for this reason among one- and two-person families, families with no children, and families who did not own television sets.

5. Considerations developing at the time families received contracts led to higher rates of refusal to participate and non-response among one- and two-person families, families with no children, and, probably, families whose heads had least education, with consequent higher rates of substitution for these reasons in these categories.

These represent only the known factors which operated to affect the sample and it is important to realize that the possibility that unknown biasing tendencies were operating always has to be allowed for. In terms of these known factors, however, it can be said that their net effect on the representativeness of the sample was probably slight since:

1. Any biases which may have been operating were probably affecting only about 30% of the sample, the remainder being made up either of originally-selected families or substitutions which were made for reasons which appear to have been fortuitous and unrelated to Phonevision expenditures.

2. Within the substitutions where there may have been bias, the data seem to suggest only moderate tendencies in this direction rather than completely or predominantly biased substitution.

Any possible tendencies toward bias that may have existed were probably consistently in the direction of overrepresenting families more inclined to be interested in and spend money for Phonevision in the relatively small segment of the sample that may be affected. It would thus appear wise to regard estimates of expenditures based on the sample of Phonevision participants as tending toward the upper limit of the distribution of estimates ordinarily obtained from a series of samples.

CHARACTERISTICS OF TEST PARTICIPANTS

The data ascertained about Phonevision test volunteers at the time of their application are shown in Table 16, for all volunteers, those considered eligible to participate in the test, the original participants selected, and the group of families who ultimately took part in the test. As may be seen there, volunteers for the Phonevision test were not typical of the area from which they came in at least two major respects (compare Table 1):

1. Family patterns--Test volunteers tended to be family groups: there were few one-person families; families were larger and, especially, there were more children; and they more frequently lived in their own homes.

2. Socio-economic status--Test volunteers tended to come from higher income

groups; heads of volunteering families had higher median educational attainment, and were more frequently in the occupational groups of professional workers and proprietors, managers and officials.

Test conditions, and the substitutions necessitated by them, operated, as indicated earlier, to increase the disparity between test participants and the population of the area from which they came for those variables which were not controlled in selecting participants--primarily for home ownership and occupancy of one- and two-family houses.

Since the Lakeview-Lincoln district was below the city averages in the family and housing characteristics just described, test volunteers and participants more nearly resembled the city as a whole in these respects than did the Lakeview-Lincoln area. But, since the area was, if anything, of higher socio-economic levels than the city, the socio-economic status of test volunteers and participants diverged more sharply from that of the city population than from the status of the Lakeview-Lincoln area, itself.

These results might well have been expected in view of the fact that test volunteers were restricted to residential telephone subscribers. But, even when the comparisons are limited to residential telephone subscribers in the city and Lakeview-Lincoln, as is done in Table 18, many of the differences remain: The families of test volunteers and participants were still, on the average, wealthier, better-educated and more often in professional and managerial occupations than were the families of other telephone subscribers in Lakeview-Lincoln or in the rest of the city. Families of test volunteers and participants remained larger than the typical family of telephone subscribers in Lakeview-Lincoln, though they were, on the average, about the same size as the average family of telephone subscribers in the city as a whole. Members of volunteering and participating families were younger, on the average, than members of the families of other telephone subscribers either in Lakeview-Lincoln or the city as a whole. The tendency for test conditions to increase the proportion of home-owners and families living in one- and two-family structures among test participants, also remains, with test participant families higher in these respects than other telephone-subscribing families in Lakeview-Lincoln, but lower than those in the city as a whole.

CONCLUSION

Procedures used in selecting Phonevision test participants aimed at a representative sample of the potential market for Phonevision in one section of Chicago--the Lakeview-Lincoln district. Restrictions of the Phonevision test to the Lakeview-Lincoln district was dictated by practical considerations growing out of restrictions on telephone facilities, on telecasting power and on the number of participants. The effect of this restriction was to limit the test to an area that differed from the rest of the city in being characterized by an almost wholly white population, by smaller families and by more apartment houses.

Ideally, the potential market at any given time for the form of Phonevision employed in the test may be defined by three necessary conditions--possession of a telephone, possession of a television set and willingness to subscribe to Phonevision. The procedures used in selecting test participants fully met the first condition by restricting eligible families to those who were residential telephone subscribers; the second condition was waived because of the rapidity with which it was changing; the third condition could only be approximated by choosing participants from among families who signified a desire to take part in the Phonevision test. Thus the universe sampled was defined as those residential telephone subscribers in the Lakeview-Lincoln district who wished to take part in the Phonevision test.

All residential telephone subscribers in the Lakeview-Lincoln district were carefully canvassed to determine the sub-group interested in participation. From the group of families who were sufficiently interested to comply with test conditions--to mail in a volunteering postcard and, subsequently, to fill out a questionnaire--a sample representative of this group was drawn. In the course of qualifying these families for participation, a good many

TABLE 18

SELECTED CHARACTERISTICS OF PHONEVISION TEST PARTICIPANTS AND VOLUNTEERS AND OF RESIDENTIAL TELEPHONE SUBSCRIBERS IN LAKEVIEW-LINCOLN AND CHICAGO
April-May, 1951*

Characteristic	Residential Telephone Subscribers			
	Chicago	Lakeview-Lincoln		
		All Subscribers	Test Volunteers	Test Participants
Number of cases	1123	510	137	300
Proportion of occupied dwelling units:				
One- and two-family structures	47.0	28.5	26.3	34.0
Owner-occupied	39.1	21.5	16.2	26.5
Number of persons per household (per cent):				
One	7.7	10.6	3.6	2.8
Two	26.4	33.5	27.0	27.6
Three	23.9	26.5	31.4	29.7
Four	23.0	18.0	26.3	22.2
Five	9.9	7.9	5.1	9.6
Six and over	9.1	3.5	6.6	8.1
Mean number:				
Adults (20 and over)	2.42	2.21	2.18	2.38
Children (19 and under)	0.94	0.74	1.09	0.99
Median age (in years) of population	33.4	36.0	29.6	30.6
Proportion of population non-white	11.8	0.8	0.7	1.7
Proportion of white population foreign-born	22.0	23.5	10.9	16.2
Proportion of heads of households with occupation of:				
Professional and semi-professional	9.9	10.4	13.1	20.4
Proprietors, managers and officials	11.9	13.4	22.6	22.3
Clerical, sales and kindred workers	18.1	16.2	24.1	18.3
Craftsmen, foremen, and kindred workers	19.7	22.7	21.9	13.1
Operatives and kindred workers	16.1	14.9	9.5	14.0
Median years of education, heads of household	11.3	11.8	12.5	12.8
Median annual family income	$4,263	$4,410	$5,266	$5,324

*These figures are based on interviews conducted after the close of the Phonevision test. They may differ from the data presented in Table 16 for a number of reasons. First, some of these characteristics may have changed in the intervening eleven months; second, the earlier data were collected by means of a mail questionnaire, while the later data were derived from personal interviews, so that some variation in response may be attributable to the difference in methods, as well as to the usual sources of unreliability in reporting. In addition, the data for test volunteers are based on a relatively small systematic sample of volunteers who were not chosen for the test, so that sampling error can affect these results.

Data shown for test families are weighted averages of the two strata--television owners and non-owners, so that, except for substitution bias, they are directly comparable with other groups.

substitutions had to be made, primarily because of the unique conditions of the test--the need for additional telephone facilities and the need for roof antennae. Systematic substitution procedures were followed, which prevented any change in the major variables used initially in controlling sample selection--family size, number of children, annual family income, education of head of household and television ownership. Detailed examination of the extent and kind of substitutions made suggests that they probably introduced little bias into the sample, but that such biases as may have been operating would have tended to change the sample in the direction of somewhat over-representing the families of greatest interest in and, possibly, of highest expenditures for Phonevision.

The universe sampled--residential telephone subscribers in the Lakeview-Lincoln district who wanted to take part in the Phonevision test--was not representative of either telephone subscribers in Lakeview-Lincoln, Lakeview-Lincoln itself, or the city as a whole. Families who volunteered for the test tended to be complete family groups--that is, relatively few one-person households and relatively few childless households applied for the test; and they were, on the average, of substantially higher socio-economic status.

Beyond these objective differences, there was the immediate psychological difference implied by the fact that these families applied for participation while other families did not. Volunteering for the Phonevision test cannot be completely equated with interest in Phonevision and a desire to subscribe to it if it were commercially available because of the possibility that uninterested families volunteered from motives like wanting the use of a television set, on the one hand, or that interested families did not volunteer from carelessness, a conviction that they could not aspire to be chosen, or an unwillingness to be part of an experiment, on the other. In view of the probably imperfect relationship between volunteering and interest in Phonevision, it should not be concluded that those interested in Phonevision--the potential market--would necessarily come from the same high economic and family strata that the volunteers did. But, because there must be a relationship, even though imperfect, it can be anticipated that non-volunteering families, even of the same composition as volunteers, would be less favorably disposed toward Phonevision.

III

THE BACKGROUND OF RECREATIONAL HABITS AND INTERESTS

THE NATURE OF THE PROBLEM

Since Phonevision is only one of a number of possible ways of occupying leisure time, the recreational practices and preferences of the families who took part in the Phonevision test constitute another variable--in addition to the more objective variables just discussed--which might importantly influence the reactions of the test families to the Phonevision test and the extent to which these reactions can be generalized to other segments of the population. That is to say, if Phonevision appealed primarily to a group whose tastes and activities were atypical, it would be highly unlikely that their response to Phonevision could be carried over to groups with other interests, just as it would be foolhardy to assume, with no further information, that families whose composition and socio-economic status differed from those of the test families would behave in much the same way with respect to Phonevision as the test families did.

The problem may actually be regarded as a two-fold one: In the first place, it is possible that a peculiar set of factors existed which led certain families to volunteer for the Phonevision test while others did not; in this case the test families' attitudes and preferences might be expected to differ from those of an unself-selected sample. In the second place, however, whether or not these differences were apparent as between test participants and other segments of the Chicago population, it would still be possible that internal differences in these factors, within the group of test families, nevertheless influenced responses to Phonevision. In the first instance, the central question is the representativeness of test families' reactions; in the second instance, the question of the determinants of these reactions is primary. Both these questions are, of course, relevant to a full evaluation of the results of the Phonevision test and their implications for the city as a whole; this section of the report continues the discussion of the representativeness of the test families, while the latter consideration is dealt with in Section IV, when test results are discussed.

It is, of course, obvious that the attitudes, preferences and habits which have relevance for an evaluation of the Phonevision test are those which existed prior to the Phonevision test. The preexisting tastes and habits with which people approached Phonevision could conceivably have played an important role in conditioning their reactions to Phonevision, in determining their attitudes toward it and the extent to which they made use of it, while the preferences found to exist after the Phonevision test could be as much a result of their experiences with Phonevision as a determinant of them.

Ideally, then, the desirable research design would have ascertained the recreational habits, interests and preferences of test families before the Phonevision test began, while obtaining the same information from a matched group of families who wished to participate but were not selected and from an unselected sample of the city. The question of the representativeness of the test families in these respects on the eve of the Phonevision test could then have been firmly answered, and there could be no question as to which was cause and which effect in considering relationships between attitudes and behavior with respect to Phonevision, since the Phonevision test would have been

later in time than the attitudinal data. A repetition of the same research upon the close of the Phonevision test would have indicated the extent to which Phonevision had modified attitudes among test families, and would, as well, have controlled the possibility that a number of extraneous factors were modifying the attitudes of the general public.

In practice, however, it was not possible to proceed with this projected ideal design. In the first place, the high rate of substitution and the elaborate process of qualifying a family for participation which has been discussed delayed completion of sample selection to such an extent that the last families in the participating group were not known until a very few days before the test. In the second place, installation of test sets was carried out over a period of several months so that, for many of the families in the half of the sample of test families that had not previously owned television sets, one of the experimental conditions which could be expected to affect attitudes--temporary possession of a television set--would have been operating for some period of time before the supposedly pre-test, pre-existing attitudes could have been determined.

The only research which seemed feasible, then, was a post-Phonevision-test survey in which the test families, a sample of volunteers who were not chosen for the test, and random samples of the Lakeview-Lincoln district and the city as a whole were interviewed.* While conclusions cannot be on as sure ground as the more elaborate design would provide, it seems reasonable to suppose that any differences between the volunteers and the test families must be attributable to one or another feature of the test--primarily, to Phonevision itself or to the availability of a television set, since, except for the probably slight changes in test families induced by possible bias in substitution, the test families and the volunteers had been comparable to begin with. It seems likewise probable that differences between volunteers and test families on the one hand and unselected Lakeview-Lincoln and city samples on the other would be roughly similar to those existing before the test.

In view of the recognized weakness of the research design, one further means was used to secure additional evidence: An attempt was made through retrospective questioning, to learn from the test families the extent to which their attitudes and preferences had altered during the Phonevision test. It is well-known that human memory is fallible, however, and people's recall about how they once felt or how they have changed is not always reliable. While these data are presented here, they should be viewed with caution and used primarily as corroborative rather than basic information.

One further preliminary qualification should be noted with regard to these data: All of these results derive from a sample survey and are, therefore, subject to sampling error. Even though all of the test families were interviewed, they are, after all, a sample of the 9,426 families who volunteered, and, to the extent that their reactions are viewed as representative of the entire group, rather than as the unique reactions of the particular 300 families selected, they are subject to sampling error just as any other sample is. For the other population segments included, conventional sampling methods were used, and the results based on these samples are subject not only to sampling error but to possible bias resulting from non-response.**

The basic unit for this survey was viewed as the family or household, since decisions as to which television program to view, generally, or whether to purchase a given Phonevision program must be, in some sense, a group decision into which the preferences of the various household members enter in varying proportions. It would, however, have been highly impracticable to interview every member of every household in the sample. Instead, only one adult in each household was interviewed, and he was asked not only for his own attitudes and preferences but for similar

*Questionnaires and instructions pertaining to this survey are shown in Appendix B, Exhibit IV.

**Approximately 14% of the Lakeview-Lincoln and city samples were not interviewed. For an exact description and evaluation of the samples used, see Appendix A.

information about the other household members. Admittedly, the composite picture of family attitudes built up by asking one family member about all the others does not always correspond with the results obtained by interviewing each family member, and either method of ascertaining family data may depart from reality through the implicit assumption that each member's opinions and preferences are of equal weight in determining family decisions. About all that can be said, then, is that the method of respondent selection used in this study--the male and female heads of the household were systematically alternated, as described in the instructions in Appendix B, Exhibit IV--ensured that (1) the informant was himself a key person in family decisions and (2) whatever bias the use of the single interview method may have, it is constant from sample to sample. That is to say, it may be expected that the respondent's opinions will bear some relation to family decisions and behavior, even though any inaccuracies in the respondent's reports about other members of the family may attenuate these relationships somewhat. More particularly, in terms of the objectives of this section of the report, whatever these biases may be, they can in no way account for differences between various segments of the population.

OWNERSHIP OF TELEVISION SETS

Since television has come to be a major recreational activity and one which importantly influences other recreational habits and attitudes, any discussion of leisure time activities must take account of the extent to which television sets were owned, and what role ownership of television sets might have played in determining any differences in tastes and activities which may have existed.

It has been indicated earlier that, at the time of application for the Phonevision test, 35.7% of the volunteers from the Lakeview-Lincoln district owned television sets. As nearly as it can be estimated, about 32% of the families in Lakeview-Lincoln, and 34% of the families in the city owned television at that time.* While these data appear to suggest that, if anything, volunteers for the Phonevision test were somewhat more likely to be television owners, it should be recalled that the restriction of volunteers to telephone subscribers and further self-selecting processes affecting the decision to volunteer resulted in volunteers coming disproportionately from higher socio-economic levels and from larger families. For telephone owners only, it was reported in the Spring of 1951 that television ownership at the time of application for the Phonevision test was:

City	42.8%
Lakeview-Lincoln	39.8
Phonevision test non-volunteers	43.0
Phonevision test incomplete volunteers	40.0
Phonevision test volunteers	40.8

While all these proportions exceed the 35.7% television ownership reported by volunteers at the time of application, they are all subject to the same inexactness and bias of recall, so that, while they are probably not an accurate statement of the amount of television ownership in each group at the earlier date, they do accurately describe the differences between groups.** On the basis of this comparison, it is apparent that Phonevision

*On the average, about eleven months elapsed between completion of the volunteer questionnaire and the post-phonevision test interview. The television ownership figures are arrived at by assuming that anyone who reported ownership of a television set for less than eleven months would not have owned television at the period when information about volunteers was being collected. The data are, therefore, inexact and subject to recall bias and probably contain some exaggeration of the length of television ownership.

**For example, 31.4% of the sample of volunteers had reported owning television sets on the earlier questionnaire. Thus, the estimate based on the later interview is too high by 9.4%. Since the earlier data are not available for other groups, the comparisons can only be made with the less exact, but comparable, data collected later.

TABLE 19

ESTIMATED TELEVISION OWNERSHIP IN JUNE, 1950 AMONG TELEPHONE SUBSCRIBERS, STANDARDIZED ON SELECTED PHONEVISION TEST FAMILY CHARACTERISTICS

Group	No. of Cases	Proportion of Given Group of Telephone Subscribers Expected to Own Television Sets, When Standardized on Test Families':	
		Family Size	Income
City	1123	42.5	47.3
Lakeview-Lincoln	510	43.5	43.7
Phonevision Test:			
Non-volunteers	292	44.4	45.1
Incomplete volunteers	142	47.5	46.9
Volunteers	137	40.9	40.8

test volunteers were about the same as other telephone subscribers in either Lakeview-Lincoln or the entire city in television ownership at the time of application for the test.*

Since differences in both family income and family composition still remained between test volunteers and other telephone subscribers, and these variables are highly related to ownership of television,** a further correction must be made for these differences, however. When rates of television ownership in the other groups are standardized on the distribution of either income or family size among test families, it becomes apparent that, given their family size and income, the families who volunteered for the Phonevision test were somewhat less likely to own television sets than were comparable families who did not volunteer. (See Table 19 above.)

Apparently, the implication is that there were, among the test volunteers, a disproportionate number of families who were on the verge of buying television sets and who were interested in trying television first. This interpretation is borne out by the fact that, after the Phonevision test, volunteers who had not actually participated in the test had the highest rate of television ownership. Even when compared with groups of similar family and economic composition by standardization procedures, they appear to be at least as high if not higher in television ownership than other telephone subscribers in Lakeview-Lincoln and the city as a whole. (See Table 20, page 73.)

Test families themselves, of course, did not acquire television sets of their own in anything like the same proportion that other volunteers did. Of the 151 test families who did not own television sets at the time they applied, 18 acquired television sets--16 before the test began and 2 between the time the test ended and the post-test interview. In addition to this 11.9% owning television among the original non-owners, however, there were 38.5% who reported that they would have owned sets by the time of interview if it had not been for their participation in the Phonevision test. From the sample of test families, then, it can be estimated that 68.2% of the volunteers would have

*A check of this point for the Lakeview-Lincoln district in July, 1950 led to the same conclusion. At that time, about one month after information about volunteers had been collected, it was estimated that 36.9% of the residential telephone subscribers in Lakeview-Lincoln owned television sets.

**For example, at the time of the survey, 30.2% of families with incomes under $2,500 owned television sets, and the proportion owning television rose steadily with increasing income to 86.1% of families with incomes of $10,000 and over. Similarly, only 16.8% of the one-person families owned television, while 47.3% of the two-person families, 64.3% of the three-person families and 74.0% of the four-or-more-person families did. (See Tables 35 and 36, pages 93 and 94.)

TABLE 20

TELEVISION OWNERSHIP IN APRIL-MAY, 1951

Group	Proportion of Given Group Owning Television Sets			
	All Families	Telephone Subscribers		
		Unweighted	Standardized on Test Families':	
			Family Size	Income
City	56.9 (1526)[a]	66.9 (1123)	68.6	72.1
Lakeview-Lincoln	52.6 (735)	62.5 (510)	67.5	68.3
Phonevision test:				
Non-volunteers	60.6 (292)	60.6 (292)	67.2	66.2
Incomplete volunteers	64.8 (142)	64.8 (142)	70.0	73.1
Volunteers	70.8 (137)	70.8 (137)	71.9	72.3

[a]The number in parentheses is the number of cases on which the percentage is based.

had television by the date of the survey if it had not been for participating in the test.

From the standpoint of the representativeness of the families taking part in the test, it may be said that, given their atypicality in income and some aspects of family composition, they may have tended somewhat in the direction of families who had not had television sets before. This tendency probably did not indicate any less interest in television, however, since other volunteers later did acquire, and test families asserted that they would have acquired, television sets at least as frequently as other telephone subscribers of similar characteristics in Lakeview-Lincoln and the city.

GENERAL PATTERNS OF RECREATIONAL PREFERENCES

For the city as a whole, in the Spring of 1951, watching television was the most frequently reported adult recreational preference and the only activity mentioned by a majority of families.* Reading, entertaining or visiting friends, and going to the movies each appealed to at least one adult in almost two-fifths of the families, while handwork and handicrafts and listening to the radio followed next in order. The remaining activities covered--participation in sports, card playing, attendance at sports events, "going out" to dine, drink or dance, and theater-going --were named in that order. (See Table 21, page 74.)

Families in the Lakeview-Lincoln area did not particularly differ from the rest of the city in their recreational preferences, but families who volunteered for the Phonevision test did show some differences in preferences from the general pattern in Lakeview-Lincoln and the city as a whole:

1. They more frequently mentioned watching television, going to the movies, taking part in sports and playing cards.

2. They less frequently mentioned working on handicrafts and listening to the radio.

Many of these differences were, however, functions of the differential rates of television ownership and the differences in income and family composition associated with them. As may be seen in Table 21, page 74, there were a number of differences in recreational habits between

*It should be remembered that there would probably be seasonal variation in answers to questions about recreational practices and preferences.

TABLE 21

ADULT PREFERENCES IN RECREATIONAL ACTIVITIES[a]
April-May, 1951

Recreational Activity	Proportion of Families with One or More Adult Members Preferring Given Activity														
	All Families					Families with Television Sets					Families without Television Sets				
	City	Lakeview-Lincoln				City	Lakeview-Lincoln				City	Lakeview-Lincoln			
		Total	PV Test Volunteers	PV Test Families[b]			Total	PV Test Volunteers	PV Test Families			Total	PV Test Volunteers	PV Test Families	
				After Test	"Before"[c] Test				After Test	"Before"[c] Test				After Test	"Before"[c] Test
Watching television	56.0	53.6	67.9	86.4	63.4	85.5	88.4	89.7	88.5	79.4	17.0	14.9	15.0	84.7	51.1
Reading	38.9	39.5	34.3	41.4	43.7	28.6	30.5	24.7	40.0	41.8	49.7	49.4	57.5	42.4	45.2
Entertaining, visiting friends	38.6	38.6	43.8	58.5	58.5	38.6	41.3	44.3	50.9	52.1	38.5	35.9	42.5	64.3	63.5
Going to movies	38.5	41.5	48.9	33.5	56.1	34.1	35.9	44.3	29.7	52.1	44.3	47.7	60.0	36.5	59.1
Working on homemaking, handicraft, hobbies	36.0	29.8	18.3	25.6	28.6	37.6	30.8	15.5	24.8	26.1	33.7	28.7	25.0	26.3	30.6
Listening to the radio	33.7	35.4	24.1	11.3	18.6	16.8	17.0	12.4	7.9	11.5	56.2	55.8	52.5	13.9	24.1
Taking part in sports	24.8	23.7	32.1	30.1	31.1	27.0	26.4	33.0	32.1	34.6	21.9	20.7	30.0	28.5	28.4
Playing cards	23.3	22.7	30.0	37.7	38.5	26.9	25.3	32.0	41.2	41.2	18.6	19.8	25.0	35.0	36.5
Going to sports events	19.8	17.6	17.5	24.8	25.0	22.8	19.6	20.6	24.8	26.1	15.8	15.2	10.0	24.8	24.1
"Going out": Dancing, dining, drinking, etc.	13.3	15.0	18.3	20.4	21.5	11.9	16.5	18.6	17.6	18.2	15.0	13.2	17.5	22.6	24.1
Going to a stage play	7.2	9.5	6.6	18.1	19.2	5.6	7.2	5.2	17.0	17.6	9.5	12.1	10.0	19.0	20.5
All other: Music, motoring, travel, etc	26.2	25.2	27.7	22.8	23.1	21.6	23.2	26.8	21.2	21.8	32.2	27.3	30.0	24.1	24.1
Total per cent[d]	356.3	352.1	369.5	410.6	427.3	357.0	362.1	367.1	395.7	422.5	352.4	340.7	375.0	422.1	431.3
Number	1526	735	137	300	300	868	387	97	167	167	658	348	40	133	133

[a]Based on the questions: "What is your favorite way of spending an evening?", "What are some of the other things you enjoy doing when you have the free time? (Any others?)", "What are some of the things (the other adults, 20 and over, in your household) would rather do? (Any others?)". For the test families, two additional questions were asked: "What are some of the things that (they) now enjoy doing, that (they) didn't use to enjoy before the Phonevision test? (Any others)", and "What are some of the things that (they) used to enjoy doing before the Phonevision test that (they) don't enjoy any more? (Any others?)".

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]These data are retrospective and may not be an accurate statement of the pre-test situation.

[d]Percentages total more than 100.0 because most families reported more than one type of recreational activity.

television owners and non-owners. For example, families with television sets less often mentioned as recreational preferences reading, going to the movies, and listening to the radio. In addition to watching television, they more often mentioned playing cards and going to sports events. When volunteers are compared with other families separately within the groups owning and not owning television, only one major difference can be consistently observed within both groups: Phonevision test volunteers more frequently mentioned interest in going to the movies than did families in the city or Lakeview-Lincoln generally, and test participants were like other volunteers in this respect, as judged from their pre-Phonevision-test reports.

A word should perhaps be said about the data presented in Table 21 for test families and their discrepancy from the reported recreational preferences of other Phonevision test volungeers. It is important to bear in mind, when recreational data are discussed, that all of the test families had been exposed to Phonevision for whatever influence it may have had on other recreational activities, and half the test families had, in effect, been converted into television owners, through possession of the test television set for some months prior to interview.

The retrospective reports of test families suggest that their recreational choices before the Phonevision test differed from those of other volunteers. For example, television owners among the test families more often mentioned reading, handwork and handicrafts and theater-going and less often expressed interest in watching television than did television owners among the other test volunteers. Non-owners among the test families appear to have differed, before the Phonevision test, from other volunteer non-owners in having more interest in watching television and entertaining or visiting friends and less interest in listening to the radio. Yet, there is little in the process of selection of test families, even considering the substitutions that were necessary, that could have led to such extreme differences in recreational preferences before the Phonevision test. It seems more likely that most of these differences are attributable to the influence of the Phonevision test on recall.

The retrospective reports of interest in television and radio may be greatly distorted by projection and inaccurate recall. In view of the fact that test families who did not own television sets had about the same interest in getting sets as did other non-owner volunteers, and that non-owners elsewhere reported about the same frequency of television viewing as did non-owners who did not participate in the test, it seems likely that there really had been no difference, but that, in "thinking back", these test families simply exchanged the relative importance that radio and television had had for them before the test.* Similarly, participation in the Phonevision test probably led to increased entertaining by test participants and some exaggeration of the extent of this activity before the test. The emphasis on entertaining and visiting was particularly marked among test families who had not had television before and so were probably not as accustomed to friends dropping in to watch television.

The effect of the Phonevision test on recreational habits can be inferred from a comparison of what the test families reported about their preferences before and after the test, on the one hand, and a comparison of the post-test reports of test families and other volunteers, on the other. An examination of these data indicates that, apart from increased interest in television and concommitant loss of interest in radio among families who had not previously had television sets, the major effect of Phonevision itself was a decline in interest in going to the movies outside the home. Since these data were collected

*Watching television was named by almost every family who reported that their tastes were now different than before the Phonevision test as one of their new recreational interests, while listening to the radio was second only to going to the movies among the old recreational interests that were reported to have been dropped. Apparently, too few families were conscious of these changes, however, so that the estimates of their interests before the test, derived from them, showed the correct tendencies, but not the correct extent.

shortly after the test, it is impossible to say whether this change was a temporary or a lasting alteration in recreational preferences.

Home Versus Outside Entertainment

Underlying many of these recreational choices are some rather more general attitudes which have to do with whether people are "home-centered" or "home-fleeing" in their interests and pursuits. Television, itself, has had the effect of increasing the extent to which leisure time activities are centered in the home, and Phonevision or subscription television in essence contemplates the further importation into the home of forms of entertainment for which people have previously gone outside the home. As shown in Table 22 below, the largest group of families in Chicago were those in which all the adult members in general preferred staying home to going out on a free evening; over two-fifths of the families were so classified as compared with 31% of the families in which the adults all preferred to go out and 25% in which the adults were not in agreement as to which was preferable.

TABLE 22

ADULTS' CHOICE BETWEEN HOME AND OUTSIDE ENTERTAINMENT[a]

Preference	Proportion of Families in Each Group Reporting Given Preference				
	City	Lakeview-Lincoln			
		Total	PV Test Volunteers	PV Test Families	
				After Test	"Before"[b] Test
ALL FAMILIES					
All adults preferred staying home	44.3	46.4	48.9	43.8[c]	42.8[c]
Adults' preference mixed	24.7	20.3	24.8	53.8	23.8
All adults preferred going out	31.0	33.3	26.3	2.4	33.4
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	1526	735	137	300	300
FAMILIES WITH TELEVISION SETS					
All adults preferred staying home	45.0	47.6	47.4	50.7	47.7
Adults' preference mixed	27.8	26.1	28.9	48.0	22.8
All adults preferred going out	27.2	26.3	23.7	1.3	29.5
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	868	387	97	167	167
FAMILIES WITHOUT TELEVISION SETS					
All adults preferred staying home	43.5	45.1	52.5	38.4	39.1
Adults' preference mixed	20.6	13.8	15.0	58.3	24.5
All adults preferred going out	35.9	41.1	32.5	3.3	36.4
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	658	348	40	133	133

[a]Based on the questions, "In general when you have a free evening, would you rather stay home, or would you rather go out somewhere?" and "How about (the other adults, 20 and over, in your household)? Would (they) rather stay home, or would (they) rather go out somewhere?" Test families were also asked: "Did the adults in your family--including yourself--feel the same way about staying home or going out, before the Phonevision test, as they do now, or have any of them changed?"

[b]These data are retrospective and may not be an accurate statement of the pre-test situation.

[c]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

Attitudes of this kind are, of course, complex, and a full analysis of the factors in them would range over the age of the adults, their health, marital and parental status, kind of employment, general social situation and personality, as well as more specific recreational interests. Since the purpose here is not so much to account for basic recreational choices as to relate them to the outcome of the Phonevision test, this detailed analysis is omitted, except to note that adults in families who did not own television sets were somewhat more likely to agree on a preference for going out than were the adults in television-owning families.

Families in Lakeview-Lincoln and test volunteers from among these families did not significantly differ in these preferences from families in the city as a whole. Families participating in the test also reported that before the Phonevision test they were divided in their preferences for staying home or going out in about the same proportions as other families. The main effect of the Phonevision test, itself, on these attitudes was a sharp decline in the number of families in which the adults all favored going out for entertainment.

Movies Versus Television

It has already been indicated that television outranked movies in the recreational interests of Chicago families, just as there were more families who preferred to find entertainment and relaxation at home than families who preferred to go out for entertainment. When families were confronted with making a direct choice between going to the movies and watching a television program, the results were again consistent: In terms of their adult members, about half the families in the city preferred television, a quarter preferred movies, and a quarter were divided in their preferences. (See Table 23, page 78.) Television owners were more sharply divided in their preferences than non-owners; the three-fourths of these families who had consistent preferences chose television in preference to movies by almost 5 to 1, while among non-owners there was a small plurality of families who preferred movies. The preferences of children were somewhat similar in that close to half of the families with children reported a preference for television on the part of their children. Interestingly enough, however, children in families with television sets retained greater preference for movies than did the adults, while children in families without television sets had greater preference for television than did the adults.

Once again, the families in Lakeview-Lincoln, including test volunteers and test participants before the test, did not differ at all in these preferences from Chicago families generally. As judged by attitudes after the test, test families again indicated a decline in preference for movies and an increased choice of television.

ATTITUDES TOWARD TELEVISION

The data so far presented have all pointed toward the popularity of television, so the date in Table 24, page 79, indicating that 84% of the persons interviewed said they liked television should come as no surprise. Television owners were more enthusiastic than non-owners, but, even among non-owners, about half reported that they liked television very much or a good deal while a fifth liked television less enthusiastically and a fifth disliked television. While these data represent individual opinions, the composite views of families would not be markedly different, since, as shown in Table 25, page 80, respondents generally reported that other members of the family either agreed with their opinions or liked television even better than they did.

In this respect, too, test volunteers were not different from others in Lakeview-Lincoln or the city as a whole. The tremendous impact of television and, secondarily, of Phonevision is indicated by the tendency of non-television owners among test families to report greater liking for television before the Phonevision test than other non-owner volunteers did. After the Phonevision test, the attitudes of test families showed a slight but statistically significant excess of favorable attitudes toward television over other television owners in the city.

TABLE 23
CHOICE BETWEEN MOVIES AND TELEVISION[a]

Preference	Proportion of Families in Each Group Reporting Given Preference				
	City	Lakeview-Lincoln			
		Total	PV Test Volunteers	PV Test Families	
				After Test	"Before"[b] Test
ALL FAMILIES					
ADULTS					
All adults preferred going to a movie. . .	25.6	24.3	22.6	3.3[c]	29.2[c]
Adults' preferences mixed.	25.2	25.8	29.2	22.9	24.4
All adults preferred watching television .	49.2	49.9	48.2	73.8	46.4
Total per cent.	100.0	100.0	100.0	100.0	100.0
Number.	1526	735	137	300	300
CHILDREN, 5-19					
All children preferred going to a movie. .	37.3	33.5	35.9	14.9[c]	40.5[c]
Children's preferences mixed	16.1	16.5	5.7	13.0	8.6
All children preferred watching television	46.6	50.0	58.4	72.1	50.9
Total per cent.	100.0	100.0	100.0	100.0	100.0
Number with children, 5-19.	525	181	55	123	123
FAMILIES WITH TELEVISION SETS					
ADULTS					
All adults preferred going to a movie. . .	13.0	12.4	14.4	3.4	14.8
Adults' preferences mixed.	25.5	26.4	28.9	24.2	23.5
All adults preferred watching television .	61.5	61.2	56.7	72.4	61.7
Total per cent.	100.0	100.0	100.0	100.0	100.0
Number.	868	387	97	167	167
CHILDREN, 5-19					
All children preferred going to a movie. .	36.4	31.5	37.2	21.8	39.3
Children's preferences mixed	16.6	16.9	7.0	10.2	10.1
All children preferred watching television	47.0	51.6	55.8	68.0	50.6
Total per cent.	100.0	100.0	100.0	100.0	100.0
Number with children, 5-19.	384	132	44	79	79
FAMILIES WITHOUT TELEVISION SETS					
ADULTS					
All adults preferred going to a movie. . .	42.2	37.4	42.5	3.3	40.2
Adults' preferences mixed.	24.5	25.2	30.0	21.8	25.1
All adults preferred watching television .	33.3	37.4	27.5	74.9	34.7
Total per cent.	100.0	100.0	100.0	100.0	100.0
Number.	658	348	40	133	133
CHILDREN, 5-19					
All children preferred going to a movie. .	39.5	39.1	d	7.0	41.8
Children's preferences mixed	14.7	15.2		16.3	7.0
All children preferred watching television	45.8	45.7		76.7	51.2
Total per cent.	100.0	100.0		100.0	100.0
Number with children, 5-19.	141	49	11	44	44

[a]Based on the questions: "Speaking for yourself, which would you rather do--go to a movie, or watch a television program?", "How about (the other adults, 20 and over, in your household)? Which would they rather do--go to a movie, or watch a television program?", and "(If any children, 5-19) And (the children)? Which would (they) rather do--go to a movie, or watch a television program?" For test families each of these questions was repeated, preceded by "Before you took part in the Phonevision test...."

[b]These data are retrospective and may not be an accurate statement of the pre-test situation.

[c]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[d]Too few cases to report percentages.

TABLE 24

LIKING FOR TELEVISION[a]

Liking for Television	Proportion of Respondents in Each Group Reporting Given Liking for Television				
	City	Lakeview-Lincoln			
		All Families	PV Test Volunteers	PV Test Families	
				After Test	"Before"[b] Test
ALL RESPONDENTS					
Liked very much	44.5	43.4	49.7	67.0[c]	52.9[c]
Liked a good deal	25.6	23.5	27.3	26.8	28.2
Liked only a little	13.9	13.6	9.9	3.7	6.8
Disliked	10.9	13.1	7.3	1.7	5.5
Didn't know	5.1	6.4	5.8	0.8	6.6
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	1526	735	137	300	300
RESPONDENTS IN FAMILIES WITH TELEVISION SETS					
Liked very much	59.6	61.3	65.9	64.5	62.3
Liked a good deal	27.0	23.6	21.2	31.5	33.8
Liked only a little	8.1	8.9	4.7	3.4	2.7
Disliked	3.1	3.6	4.1	0.6	0.6
Didn't know	2.2	2.6	4.1	-	0.6
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	868	387	97	167	167
RESPONDENTS IN FAMILIES WITHOUT TELEVISION SETS					
Liked very much	24.2	22.6	10.0	68.9	45.6
Liked a good deal	24.0	23.7	42.5	23.2	23.9
Liked only a little	21.7	19.2	22.5	4.0	9.9
Disliked	21.1	23.8	15.0	2.6	9.3
Didn't know	9.0	10.7	10.0	1.3	11.3
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	658	348	40	133	133

[a]Based on the questions: "On the whole, do you like or dislike television?" and "Would you say you like (dislike) television very much, or a good deal or only a little?" Test families were asked the same question in terms of "Before the Phonevision test," as well.

[b]These data are retrospective and may not be an accurate statement of the pre-test situation.

[c]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

TABLE 25

OTHER HOUSEHOLD MEMBERS' OPINIONS OF TELEVISION[a]

Opinion of Television	Proportion of Respondents in Each Group Reporting Given Opinion for Other Members of Household			
	City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]
OTHER ADULTS				
Feel same as respondent	66.0	68.1	70.4	70.3
Like television more than respondent	18.3	19.6	15.6	15.9
Like television less than respondent	7.9	6.6	8.6	8.9
Some agree with respondent, some don't	4.0	3.3	2.3	3.9
Don't know their opinion	3.8	2.4	3.1	1.0
Total per cent	100.0	100.0	100.0	100.0
Number with more than one adult in household	1281	586	129	291
CHILDREN, 5-19				
Feel same as respondent	46.0	48.3	47.2	49.8
Like television more than respondent	41.8	41.5	37.7	39.0
Like television less than respondent	4.7	5.1	9.4	3.7
Some agree with respondent, some don't	3.0	2.8	3.8	4.6
Don't know their opinion	4.5	2.3	1.9	2.9
Total per cent	100.0	100.0	100.0	100.0
Number with children, 5-19, in household	525	181	55	123

[a]Based on the questions: "Do (the other adults, 20 and over, in your household) feel the same way you do about television, or do (they) like it more, or less, that you do?", and "(If any children, 5-19) How about (the children)? Do (they) feel the same way you do about television, or do (they) like it more, or less, than you do?"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

Reasons for Liking Television

Aside from the specific programs on television which people liked or disliked, people generally liked television for a variety of reasons.* In order of frequency of mention, the leading reasons were:

1. Television is entertaining, diverting, offers escapes from problems. People who gave such reasons said things like: "It gives you entertainment;" "It's always something to look forward to in the evening;" "It takes my mind off my troubles."

2. Television is a convenient and comfortable form of entertainment, since it obviates the necessity of leaving home. Apparently, for these people television had eliminated a whole series of minor annoyances from finding a baby sitter to getting dressed up, looking for parking space, standing in line, and not being as free to move around, eat, drink or comment on the entertainment.

3. Television is informative, educational, broadening or a source of vicarious

*Since it would have been exceedingly awkward and cumbersome to collect this detailed evaluation of television for each family member, the data in this and following sections on opinions of television are based on the personal opinions of respondents. Since respondents were always household heads, these opinions may not correspond with the opinions of all adults, but, as indicated earlier, the data do afford reliable comparisons between sub-groups of the population.

experience to many people. These people stressed the opportunity to see things for themselves--events, places and people whom they otherwise would not have experienced--and the greater learning influence of seeing and hearing over hearing alone.

4. Television offers sufficient variety and choice of entertainment to satisfy many people.

Less frequently mentioned were the relative economy of television entertainment over outside entertainment and the role of television in family and social life--in keeping the children under control, in keeping the family together in the home and in providing an easy means of entertaining visitors and providing social activities.

The exact frequencies with which these features of television were mentioned by the various population groups are shown in Table 26, page 82. Because of a tendency on the part of respondents from test volunteers and, especially, test participant families to give more detailed answers to such questions, it is difficult to compare these frequencies directly, but, if the order of mention is examined, it is apparent that test volunteers and test families gave relatively more weight to the convenience and physical comfort aspect of television than did the city generally. While reasons of this order were the third most frequently mentioned feature among either television owners or non-owners in the city generally, they were mentioned by test volunteers and participants more frequently than any other feature of television. Since none of the characteristics in which test volunteers differed from other Chicago families was sufficiently related to this emphasis on the comfort and convenience of being able to stay home for entertainment to account for test volunteer families' difference in this respect, it appears that this recreational consideration constitutes one of the real differences between test volunteers and other families of their same general composition and socio-economic background.

Criticisms of Television

The leading criticism of television and one of the five most frequent suggestions for improvement in television centered around the quality and extent of commercials: In the city as a whole, one person in four spontaneously made some criticism of the handling of advertising on television when asked to criticize television, and one out of ten referred to this subject in discussing ways of improving television. Since many people had no criticisms or suggestions to offer, over a third of those who did criticize and close to a fifth of those who made suggestions referred to dissatisfaction with television commercials. (See Tables 27 and 28, pages 83 and 84.) In all, the proportions spontaneously criticizing the handling of advertising on television in answer to one or another of these questions were:

	All Respondents	Television Owners	Non-owners
City	30.3	38.7	19.2
Lakeview-Lincoln	33.6	42.9	23.2
Phonevision test volunteers	37.3	37.2	37.5
Phonevision test families	63.7	66.5	61.6

The next more frequent criticism of television related to specific programs or types of programs which were not liked, a criticism which was similar to the more sweeping, and somewhat less frequent, criticism that television programs in general were of poor quality, with too much repetition and little variety or choice. Correspondingly, suggestions relating to increasing the time given to various sorts of programs and to general improvement in standards of entertainment were among the most frequent made.

The third criticism of television centered around its technical imperfections--frequent and costly repairs, flickering pictures, etc.; and suggestions of various mechanical and technical improvements, and, especially, a desire to see color television introduced were similarly high.

TABLE 26

APPROVED FEATURES OF TELEVISION[a]

Feature of Television	Proportion of Respondents in Each Group Mentioning Given Feature											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Offers specific programs or kinds of programs	47.3	40.4	32.8	23.2	49.8	41.1	33.0	24.1	44.1	39.7	32.5	22.5
Entertaining, diverting, offers escapes	34.0	33.6	37.2	42.4	40.1	42.9	43.3	48.3	25.8	23.3	22.5	37.8
Physically comfortable, convenient source of entertainment	29.8	32.7	51.1	61.6	36.7	38.5	53.6	59.0	20.6	26.2	45.0	63.6
Broadening, educational, gives vicarious experience	19.0	18.0	20.4	32.1	19.9	19.7	20.6	30.9	17.9	16.1	20.0	33.1
Offers variety, choice of entertainment	12.4	13.1	13.2	19.7	16.4	15.0	14.4	25.5	6.9	10.9	10.0	15.2
Helps control children	5.3	2.0	5.1	8.1	6.0	3.4	6.2	7.4	4.4	0.6	2.5	8.6
Economical source of entertainment	5.2	6.7	8.0	11.2	6.1	8.0	7.2	9.4	3.9	5.2	10.0	12.6
Strengthens family bonds	3.6	3.7	5.1	9.1	4.7	5.7	7.2	10.7	2.1	1.4	-	7.9
Eases social relationships	2.1	1.5	3.7	10.2	3.0	1.3	4.1	11.4	1.1	1.7	2.5	9.3
Miscellaneous features	2.0	1.6	2.2	1.6	1.2	2.1	3.1	2.0	3.0	1.2	-	1.3
Nothing, don't like anything about television	3.5	4.1	1.5	0.4	0.7	-	-	-	7.3	8.6	5.0	0.7
Don't know	7.0	6.4	3.7	-	2.0	2.8	1.0	-	13.7	10.3	10.0	-
Total per cent[c]	171.2	163.8	184.0	219.6	186.6	180.5	193.7	228.7	150.8	145.2	160.0	212.6
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a]Based on the question: "What is there about television that you like? (What else?)"
[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.
[c]Percentages total more than 100.0 because most respondents approved of more than one feature of television.

TABLE 27

DISLIKED FEATURES OF TELEVISION[a]

Feature of Television	Proportion of Respondents in Each Group Mentioning Given Feature											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Poor quality, extent of commercials	26.1	29.0	29.2	54.2	33.3	37.2	28.9	55.0	16.8	19.8	30.0	53.6
Specific programs or kinds of programs	23.9	23.1	27.0	25.1	28.2	28.9	29.9	26.9	18.2	16.7	20.0	23.8
Technical imperfections, mechanical failures	17.1	16.4	10.2	7.1	11.3	10.8	5.2	8.7	25.0	22.7	22.5	5.9
Lack of quality, variety, choice in programs	15.6	16.6	20.4	11.1	14.2	12.1	16.5	10.1	17.2	21.6	30.0	11.9
Too engrossing, interferes with other activities	10.6	11.4	13.2	16.4	8.2	8.5	10.3	16.2	13.8	14.6	20.0	16.6
Bad influence on, harmful to, children	8.3	5.4	8.0	8.6	9.7	4.6	5.2	6.0	6.5	6.3	15.0	10.6
Immoral, overemphasizes sex	5.7	4.5	7.3	5.2	6.6	4.6	6.2	6.7	4.5	4.6	10.0	4.0
Destroys social relationships	3.3	3.0	5.8	5.1	1.7	1.6	6.2	4.0	5.2	4.6	5.0	5.9
Programs poorly scheduled	3.0	3.3	2.9	4.4	4.4	4.1	4.1	6.7	1.3	2.3	-	2.6
Lacks educational emphasis	1.2	0.7	0.7	1.0	0.9	0.8	-	0.6	1.6	0.6	2.5	1.3
Miscellaneous features	2.2	0.7	2.9	1.9	1.8	0.8	3.1	3.4	2.6	0.6	2.5	0.7
Nothing, like everything about television	20.4	21.1	20.4	17.2	21.6	23.8	25.8	16.2	19.1	18.1	7.5	17.9
Don't know	8.0	6.4	2.2	0.3	3.7	2.6	2.1	0.6	13.4	10.6	2.5	-
Total per cent[c]	145.4	141.6	150.2	157.6	145.6	140.4	143.5	161.1	145.2	143.1	167.5	154.8
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a]Based on the question: "What is there about television that you dislike? (What else?)"
[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.
[c]Percentages total more than 100.0 because some respondents disliked more than one feature of television.

TABLE 28

SUGGESTIONS FOR IMPROVEMENT OF TELEVISION[a]

Suggestion	Proportion of Respondents in Each Group Mentioning Given Suggestion											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Add, increase, time given to certain programs, or types of programs	20.5	16.2	24.1	21.0	23.4	17.8	20.6	20.8	16.9	14.4	32.5	21.2
Introduce color television	19.6	22.0	19.7	21.5	20.0	25.3	23.7	20.1	19.0	18.4	10.0	22.5
Improve quality, variety of programs	15.2	14.8	19.0	19.5	16.0	17.6	15.5	21.5	14.2	11.8	27.5	17.9
Make technical improvements (other than color or Phonevision)	11.7	15.5	14.6	9.3	8.5	11.1	16.5	9.4	15.9	20.4	10.0	9.3
Improve, put less emphasis on commercials	11.5	11.5	19.0	35.5	15.3	16.3	18.6	36.9	6.6	6.0	20.0	34.4
Improve program scheduling	7.0	5.4	11.0	13.9	10.8	9.0	14.4	15.5	2.0	1.4	2.5	12.6
Encourage educational aspects of television	4.0	4.1	5.8	2.7	3.2	3.6	5.2	2.0	5.0	4.6	10.0	3.3
Improve quality of children's programs, counteract harmful effects	4.0	1.2	3.7	4.1	4.9	2.1	3.1	3.4	2.8	0.3	5.0	4.6
Raise moral standards	2.8	2.4	3.7	2.0	3.4	2.8	2.1	2.0	2.0	2.0	7.5	2.0
Introduce Phonevision	1.5	1.0	2.2	12.7	1.9	1.0	1.0	9.4	0.8	0.9	5.0	15.2
Miscellaneous suggestions	1.3	0.1	1.5	1.0	1.4	0.2	2.1	1.3	1.2	-	-	0.7
No, changes not needed or wouldn't help	18.5	21.6	13.9	14.3	20.1	22.0	16.5	17.5	16.2	21.3	7.5	11.9
Don't know	17.0	13.7	8.0	1.7	10.8	6.7	3.1	0.6	25.3	21.6	20.0	2.0
Total per cent[c]	134.6	129.5	146.2	159.2	139.7	135.5	142.4	160.4	127.9	123.1	157.5	157.6
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a] Based on the question: "Do you think you would like television any better if certain changes were made? (What changes?) (Any others?)"
[b] These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.
[c] Percentages total more than 100.0 because some respondents suggested more than one change.

All of the other criticisms and suggestions for improvement were each made by ten per cent or less of the respondents. Many of these centered around television's social effects: Some respondents felt that television had had harmful effects on children, that many of its programs were suggestive and immoral, that even for adults it proved too engrossing and kept them from other desirable activities, that it had reduced all social life to watching television. Corresponding suggestions dealt largely with program revisions--different types of children's programs, more emphasis on education, etc.--as well as with more general suggestions for raising moral standards.

In general, television owners were more likely than non-owners to have criticisms of and recommendations for improvements in television. Their criticisms and suggestions naturally tended to be more specific than those of non-owners; for example, television owners were more likely to criticize specific programs and commercials and suggest revisions at this level, while criticisms of, on the one hand, the technical imperfections and expensiveness of television and, on the other, the social influence of television were more frequent among non-owners.

Neither Lakeview-Lincoln nor test volunteers and participants were markedly different from the city as a whole in their appraisal of television, with a few exceptions. These may be summed up as:

1. Both test volunteers and test participants were less critical of the technical imperfections and maintenance costs of television.

2. Both test volunteers and test participants relatively more frequently suggested improvements in television's advertising policies.

3. Test participants alone were markedly more likely to suggest the introduction of Phonevision on a regular basis.

To some extent, these differences reflect differences in the composition of Phonevision test volunteers and participants; for example, Phonevision volunteers generally had higher family incomes than the city as a whole, and the fact that they were less concerned with the costs of television simply reflects this difference: In the city as a whole, too, respondents from wealthier families were less often concerned with the economics of television.

Criticisms of commercials, similarly, reflect the higher educational and income levels of the test volunteers. Whether because of greater articulateness or greater concern about the issue, television commercials were more frequently referred to by respondents from the upper socio-economic levels. Thus, in the city as a whole, among television owners, criticisms and suggestions referring to television advertising policies were made by 22.8% of the respondents from families with incomes under $2,500 and by 56.8% of those from families with incomes of $10,000 and more. If the data are adjusted for differences of this kind, then Phonevision test volunteers were not more likely to criticize commercials than were other families of similar socio-economic circumstances.

Test families, however, reflected another effect of participation in the Phonevision test. At the time of interview at least, respondents who had been viewing Phonevision programs were more aware and more critical of the commercials on other television programs, just as they were more likely to think of Phonevision as a way of improving television. The fact that they differed so sharply from other test volunteers in these attitudes indicates that these opinions derived from the test rather than preceded it.

Television Program Preferences

The types of programs that people liked, disliked and wanted more of are shown in Tables 29-31, pages 86, 87 and 88. In terms of broad categories, the favorite types of programs in Chicago were dramatic presentations, covering a wide range of plays and movies; comedy and variety; informationally-oriented programs; sports; and musical programs. Typically, these were also the programs people wanted more of, and, frequently, the types of programs which were criticized. The broadness of these categories should not conceal the

TABLE 29

TELEVISION PROGRAM PREFERENCES[a]

Type of Program	Proportion of Respondents in Each Group Mentioning Given Type of Program											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Plays and movies												
Mystery and crime	13.3	14.1	13.9	20.7	17.0	18.1	17.5	22.8	8.3	9.8	5.0	19.2
Westerns	9.6	6.4	4.4	8.2	10.8	8.8	4.1	6.7	6.1	3.7	5.0	9.3
Family comedy	6.7	6.5	6.6	5.0	8.8	8.8	8.2	4.7	4.0	4.0	2.5	5.3
Serials and soap opera	1.0	0.5	-	1.5	1.4	0.8	-	3.4	0.3	0.3	-	-
Feature movies, other and unspecified	28.3	25.8	30.6	43.9	34.9	31.8	30.9	45.0	19.6	19.2	30.0	43.0
Other drama and plays	27.1	30.0	38.0	53.5	33.4	38.0	40.2	55.0	19.0	21.3	32.5	52.3
Comedy and variety	57.9	59.6	65.7	71.2	69.1	72.1	70.1	69.8	42.8	45.7	55.0	72.2
Informational												
News broadcasts	16.1	15.8	16.8	28.9	19.2	18.9	17.5	32.9	11.8	12.4	15.0	25.8
On-the-spot, special events	12.1	11.1	13.2	16.1	11.7	9.3	9.3	15.5	12.6	13.2	22.5	16.6
Home-making, hobbies, crafts	6.8	4.3	5.1	7.4	8.4	6.2	4.1	9.4	4.6	2.3	7.5	5.9
Talks, round-tables, discussions	3.9	3.4	2.9	7.9	4.0	4.6	4.1	5.4	3.6	2.0	-	9.9
Other educational and informative	10.4	12.4	18.3	19.0	11.4	12.1	14.4	16.2	9.0	12.6	27.5	21.1
Sports	42.9	41.9	44.5	58.2	46.6	44.4	50.5	59.8	36.6	39.1	30.0	56.9
Musical												
"Light" music	24.2	20.0	22.7	33.1	25.8	22.5	25.8	28.9	21.6	17.2	15.0	36.4
"Serious" music	7.6	6.0	3.7	11.4	5.6	5.7	5.2	10.8	9.8	6.3	-	11.9
Quiz and audience participation	13.4	13.9	10.2	27.1	17.0	20.2	13.4	23.5	8.8	6.9	2.5	29.8
Children's	8.7	6.4	8.8	7.9	11.0	7.8	10.3	8.7	5.6	4.9	5.0	7.3
Religious	3.3	1.4	-	1.0	2.9	1.0	-	1.3	4.0	1.7	-	0.7
Human interest and personality	1.4	1.1	0.7	2.3	1.7	1.3	1.0	2.7	0.8	0.9	-	2.0
Miscellaneous	0.6	0.1	-	-	0.8	0.2	-	-	0.4	-	-	-
No programs mentioned	8.4	7.6	3.7	1.0	2.9	1.4	-	1.3	16.0	14.7	12.5	0.7
Total per cent[c]	303.7	288.3	309.8	425.3	344.4	334.0	326.6	423.8	245.3	238.2	267.5	426.3
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a]Based on the question: "What are some of the (other) kinds of television programs you especially like? (Any others?)"
[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.
[c]Percentages total more than 100.0 because most respondents named more than one program type.

TABLE 30

DISLIKED TELEVISION PROGRAMS[a]

Type of Program	Proportion of Respondents in Each Group Mentioning Given Type of Program											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Plays and movies												
Mystery and crime	16.9	14.3	15.3	19.4	18.8	17.0	18.6	15.4	14.4	11.2	7.5	22.5
Westerns	11.3	14.3	13.1	17.6	13.1	15.8	12.4	12.1	8.8	12.1	15.0	21.8
Family comedy	0.9	0.5	0.7	0.4	1.2	1.0	1.0	-	0.4	-	-	0.7
Serials and soap opera	1.2	1.4	1.5	5.0	1.2	1.3	2.1	5.4	1.2	1.4	-	4.6
Feature movies, other and unspecified	17.3	18.1	28.5	25.1	21.4	22.5	32.0	29.5	11.9	13.2	20.0	21.8
Other drama and plays	3.2	2.7	2.9	2.9	3.1	3.4	4.1	4.0	3.4	2.3	-	2.0
Comedy and variety	19.0	19.7	27.0	23.3	21.8	20.4	21.6	26.1	15.1	19.0	40.0	21.2
Informational												
News broadcasts	1.5	1.0	2.2	2.0	1.9	0.5	2.1	2.0	0.8	1.4	2.5	2.0
On-the-spot, special events	0.1	0.3	-	-	-	-	-	-	0.3	0.6	-	-
Homemaking, hobbies, crafts	1.5	2.2	2.2	2.8	1.7	2.3	3.1	4.7	1.1	2.0	-	1.3
Talks, round-tables, discussions	1.3	0.8	0.7	2.3	1.4	0.8	1.0	2.7	1.2	0.9	-	2.0
Other educational and informative	0.3	0.1	0.7	0.3	0.1	-	1.0	0.7	0.5	0.3	-	-
Sports	19.8	21.0	26.3	31.8	21.6	23.0	27.8	33.5	17.2	18.7	22.5	30.5
Musical												
"Light" music	3.8	3.3	0.7	5.0	4.4	4.1	-	4.7	2.9	2.3	2.5	5.3
"Serious" music	2.0	1.6	0.7	1.7	2.6	2.1	1.0	1.3	0.8	1.2	-	2.0
Quiz and audience participation	4.8	3.0	4.4	18.1	6.0	4.1	4.1	15.4	3.2	1.7	5.0	20.5
Children's	8.7	7.2	13.2	14.9	10.7	9.3	13.4	16.1	6.1	5.2	15.0	13.9
Religious	0.1	-	-	0.4	0.1	-	-	-	-	-	-	0.7
Human interest and personality	1.3	1.2	0.7	3.0	1.7	1.6	1.0	3.4	1.0	0.9	-	2.6
Miscellaneous	0.5	0.1	-	0.3	0.6	0.2	-	0.6	0.3	-	-	-
No programs mentioned	32.9	31.6	17.5	15.1	25.0	25.3	14.4	14.1	44.8	38.7	25.0	15.9
Total per cent[c]	148.4	144.4	158.3	191.4	158.4	154.7	160.7	191.7	135.4	133.1	155.0	191.3
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a]Based on the question: "What are some of the (other) kinds of television programs you especially dislike? (Any others?)"
[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.
[c]Percentages total more than 100.0 because some respondents named more than one program type.

TABLE 31

ADDITIONAL TELEVISION PROGRAMS DESIRED[a]

Type of Program Desired	Proportion of Respondents in Each Group Desiring Additional Programs of Given Type											
	All Families				Families with Televesion Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
Plays and movies												
Mystery and crime	2.8	1.5	1.5	5.5	3.7	1.8	1.0	7.4	1.6	1.2	2.5	4.0
Westerns	2.1	0.3	-	0.7	2.5	0.5	-	-	1.5	-	-	1.3
Family comedy	1.9	1.8	1.5	2.6	2.4	2.6	2.1	3.4	1.3	0.9	-	2.0
Serials and soap opera	0.5	0.1	0.7	1.0	0.6	-	-	1.3	0.3	0.3	2.5	0.7
Feature movies, other and unspecified	17.8	19.0	30.6	29.7	22.8	25.8	29.9	35.6	11.0	11.5	32.5	25.1
Other drama and plays	9.6	12.2	16.8	32.8	11.5	14.0	17.5	34.9	7.1	10.3	15.0	31.1
Comedy and variety	14.6	16.9	19.0	10.2	18.0	21.4	19.6	11.4	10.2	11.8	17.5	9.3
Informational												
News broadcasts	2.9	3.0	3.7	3.4	2.7	2.6	3.1	2.7	3.0	3.4	5.0	4.0
On-the-spot, special events	6.9	4.8	9.5	8.5	6.7	5.4	8.2	7.4	7.2	4.0	12.5	9.3
Homemaking, hobbies, crafts	3.5	1.5	2.9	3.9	3.4	1.0	3.1	1.3	3.6	2.0	2.5	5.9
Talks, round-tables, discussions	2.4	2.7	2.9	4.2	2.5	2.1	2.1	5.4	2.4	3.4	5.0	3.3
Other educational and informative	12.2	12.0	19.0	21.4	11.7	10.8	15.5	18.2	12.6	13.2	27.5	23.8
Sports	11.6	9.5	9.5	18.4	13.5	9.0	11.3	24.2	8.9	10.0	5.0	13.9
Musicals												
"Light" music	7.4	8.3	8.0	14.4	8.3	9.3	9.3	14.1	6.3	7.2	5.0	14.6
"Serious" music	7.7	8.2	3.7	17.8	6.6	8.0	3.1	16.8	8.9	8.3	5.0	18.5
Quiz and audience participation	3.4	3.1	2.9	3.5	4.1	5.2	4.1	4.7	2.5	0.9	-	2.6
Children's	4.1	2.0	4.4	6.7	5.0	2.8	4.1	10.1	3.0	1.2	5.0	4.0
Religious	3.1	3.0	1.5	1.7	2.6	2.1	2.1	0.6	3.7	4.0	-	2.6
Human interest and personality	0.4	0.5	0.7	1.1	0.5	0.8	1.0	-	0.3	0.3	-	2.0
Miscellaneous	1.2	0.4	-	1.0	1.3	0.5	-	1.3	1.1	0.3	-	0.7
No programs mentioned	34.7	33.6	21.9	15.0	27.2	26.6	18.5	12.1	45.2	42.0	32.5	17.2
Total per cent[c]	150.8	144.4	160.7	203.5	157.6	152.3	155.6	212.9	141.7	136.2	175.0	195.9
Number	1526	735	137	300	868	387	97	167	658	348	40	133

[a]Based on the question: "Are there any (other) kinds of programs you would like to have more of on television? (What kinds?) (Any others?)"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]Percentages total more than 100.0 because some respondents named more than one program type.

fact that people often answered quite specifically--they liked Sid Caesar and disliked Milton Berle and wished that Bob Hope were on television more often, a set of answers which would be classified as liking, disliking and wanting more of comedy and variety. The data should, therefore, not be interpreted as indicating that the same programs were praised and criticized, but simply as describing very general trends in tastes. It is apparent, for example, where some detail was preserved, that mystery and crime programs, westerns and children's programs were more often disliked than liked, despite a general tendency to mention favored programs more frequently than disliked ones.

Of greater relevance to the central purposes of this study is the similarity of taste in television programs between test volunteers and participants and the city generally. Once allowance is made for the tendency of these two groups to give more detailed answers than the average respondent, the major differences in program preferences were that the Phonevision volunteers more frequently mentioned full-length plays as liked, feature movies as disliked and both as desired additional programs. Beyond this, they tended to be somewhat more interested in educational and informative programs and somewhat more critical of children's programs, both of which variations can be traced to differences in composition, that is, to the fact that Phonevision volunteers more frequently had children and were themselves of a higher educational level than families in the city generally.

Since movies were the central feature of the Phonevision test, differences in this respect require careful attention. Typically speaking, criticism of movies on television revolved around the oldness of the movies shown, foreign movies and repeated showings of the same movies, while those who wanted additional movies frequently added that they meant newer movies or better movies than were then available on television. The proportions who referred spontaneously and explicitly to their dislike of old movies and desire for newer movies on television were:

	All Families	Television Owners	Non-owners
City	20.5	26.6	12.3
Lakeview-Lincoln	21.0	27.4	13.2
Phonevision test volunteers	35.0	35.0	35.0
Phonevision test families	45.0	45.0	45.0

In this summary form it is clear that volunteers for the Phonevision test tended to be more interested than other families in having movies on television, while those who actually participated in the test had this preference still further reinforced by the test. While this preference is again correlated with family income and general socio-economic status, the correlation is not sufficient to account entirely for the differences between groups. That is, expression of a desire for new movies on television in the city population runs from 5.7% in the lowest income group among families without television sets to 35.1% of the highest income group among families with television sets. In other words, it is only in the most extreme group of the city sample that expression of this preference reaches the average rate of Phonevision test volunteers, so that adjustment for income differences between city families and Phonevision test volunteers would not eliminate the differences.* It is thus apparent that the families volunteering for the Phonevision test were somewhat more interested than were otherwise comparable families in having newer movies on television.

*Adjusted rates for the city, based on attributing to the city the same income distribution as existed among test volunteers, were 23.8% of all families--29.8% among television owners and 15.8% among non-owners.

Interest in Getting Television Sets

As is apparent by now, despite a variety of criticisms, suggestions for improvement and objections to specific programs, television was highly popular. This conclusion is supported by wide-spread ownership of television sets, by the high standing of television among recreational preferences, and by directly-expressed opinions of television. As one final index, the desires and plans to own television sets among families who did not have sets serve not only to indicate again the tremendous interest in television but also to describe the potential extent of its influence.

At the time of this research, almost two out of three of the families in Chicago who did not already have television sets would have liked to have one. (See Table 32, below.) Almost as many families hoped ultimately to be able to get sets: Three out of five families without television expected ultimately to have sets. Thus, only about 14% of the families in the city did not want television sets, and about 17% felt that they would not get them. (See Table 33, page 91.).

TABLE 32

DESIRE TO HAVE TELEVISION SETS[a]

Desire to Have Television	Proportion in Each Group Reporting Given Desire				
	City	Lakeview-Lincoln			
		All Families	PV Test Volunteers	PV Test Families After Test	PV Test Families "Before" Test[b]
ALL FAMILIES					
Have television sets	56.9	52.6	70.8	43.5[c]	43.5[c]
Would like	26.4	26.5	21.2	53.9	33.1
Not sure	2.7	4.2	-	1.7	9.8
Would not like	14.0	16.7	8.0	0.9	13.6
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	1526	735	137	300	300
FAMILIES WITHOUT TELEVISION SETS					
Would like	61.2	55.7	72.5	95.5	58.7
Not sure	6.1	8.9	-	3.0	17.3
Would not like	32.7	35.4	27.5	1.5	24.0
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	658	348	40	133	133

[a]Based on the question: "Would you and your family like to have a television set?" Test families were asked the question in terms of "Before the Phonevision test" and "How do you feel about it now?"

[b]These data are retrospective and may not be an accurate statement of the pre-test situation.

[c]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

These expectations of getting television sets ranged, of course, from firm plans to mere wishful thinking, so that the figure of 82.9% of the city's families who ultimately will have television may well be regarded as an outside limit. As an expression of interest in television, it is no doubt meaningful, but, since practical questions of expenditure are involved in addition to interest in and approval of television, there may well be barriers to carrying out these plans. Some indication of the vagueness of these intentions to get television sets may be gleaned from Table 34, page 92, where it appears that 41.3% of those who intended to get

TABLE 33

INTENTION TO BUY TELEVISION SETS[a]

Intention to Buy	Proportion of Families in Each Group with Given Intention to Buy Television			
	City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families
ALL FAMILIES				
Have television sets	56.9	52.6	70.8	43.5[b]
Have decided to buy	15.9	16.6	16.0	46.7
Have thought about it and will probably buy sometime	3.8	4.9	5.1	6.8
Haven't thought about it, but may possibly buy sometime	6.3	7.2	3.7	1.3
Will not buy	17.1	18.7	4.4	1.7
Total per cent	100.0	100.0	100.0	100.0
Number	1526	735	137	300
FAMILIES WITHOUT TELEVISION SETS				
Have decided to buy	36.8	35.0	55.0	82.7
Have thought about it and will probably buy sometime	9.0	10.4	17.5	12.0
Haven't thought about it, but may possibly buy sometime	14.5	14.9	12.5	2.3
Will not buy	39.7	39.7	15.0	3.0
Total per cent	100.0	100.0	100.0	100.0
Number	648	348	40	133

[a]Based on the questions: "Have you and your family thought at all about getting a television set?", "(If 'Yes') Have you made up your minds yet whether you will get a television set or not? (What did you decide?)", "(If 'No, haven't thought,' or 'Will not get,' or 'Not sure yet') Do you think you ever will get a television set?".

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

television sets had no idea of when they would be getting them, while 24.2% placed their purchase as at least one year distant; thus only 34.5% of those who expected to buy television sometime, counted on having a set within a year.

In fact, only among those families whose plans are classified as most definite in Table 33, was there a sizeable group of families with definite and fairly immediate plans: In this group who definitely planned to buy, 28.5% expected to have sets in less than six months; 18.2%, in less than a year; and 12.4%, in one to two years; leaving 36.8% who had no definite plans and 4.1% who did not expect to purchase sets for at least two years. In the group classified as probable and possible buyers, however, only 2.6% expected to get sets within six months; 11.0%, in six months to a year; 14.8%, in one to two years; 21.3%, in two years or longer; 50.3% had no definite time of purchase plans.

As with television ownership, intention to purchase television sets was correlated with economic means, on the one hand, and family composition on the other. As

TABLE 34

ESTIMATES OF LENGTH OF TIME UNTIL PURCHASE OF TELEVISION SET[a]

Length of Time until Purchase	Proportion of Families in Each Group Making Given Estimate			
	City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families
ALL FAMILIES				
Already have	56.9	52.6	70.8	43.5[b]
Less than one month	0.7	0.3	0.7	20.4
One up to six months	4.3	4.6	3.0	13.2
Six months up to one year	4.0	5.3	5.9	6.4
One to two years	3.5	3.0	4.4	0.4
Two years and over	2.7	3.6	5.1	0.8
Don't know when	10.8	11.9	5.7	13.6
Will not buy	17.1	18.7	4.4	1.7
Total per cent	100.0	100.0	100.0	100.0
Number	1526	735	137	300
FAMILIES WITHOUT TELEVISION SETS				
Less than one month	1.6	0.6	2.5	36.1
One up to six months	9.9	9.8	10.0	23.3
Six months up to one year	9.3	11.2	20.0	11.3
One to two years	8.0	6.3	15.0	0.7
Two years and over	6.6	7.4	17.5	1.5
Don't know when	24.9	25.0	20.0	24.1
Will not buy	39.7	39.7	15.0	3.0
Total per cent	100.0	100.0	100.0	100.0
Number	658	348	40	133
FAMILIES WHO MAY BUY TELEVISION SETS				
Less than one month	2.5	0.9	2.9	37.2
One up to six months	16.4	16.2	11.8	24.0
Six months up to one year	15.6	18.6	23.5	11.6
One to two years	13.4	10.5	17.7	0.8
Two years and over	10.8	12.4	20.6	1.6
Don't know when	41.3	41.4	23.5	24.8
Total per cent	100.0	100.0	100.0	100.0
Number	397	210	34	129

[a]Based on the question: "About how long do you think it will be before you get a television set?"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

presented in Table 35, page 93, among those without television sets, definite plans to purchase sets were held by about a quarter of the one-person families, and this proportion rose to about half of the five-and-more-person families. Conversely, the proportion who had no plans to get sets at all was over half of the one-person families and fell to about a quarter of the larger families. Thus, ultimately, over 90% of the larger families hoped to have television sets. Similarly, over 90% of all income groups of $5,000 a year and over expected some day to be television set owners. (See Table 36, page 94.)

TABLE 35

INTENTION TO BUY TELEVISION IN VARIOUS FAMILY SIZE GROUPS IN CHICAGO

Intention to Buy	Proportion of Families with Given Intention in Each Family Size Group					
	One Person	Two Person	Three Person	Four Person	Five Person	Six or More Person
ALL FAMILIES						
Have television sets	16.8	47.3	64.3	76.5	72.0	70.3
Have decided to buy	22.6	18.7	13.2	10.6	14.6	16.3
Have thought about it and will probably buy sometime	4.8	4.6	4.3	3.3	1.4	2.9
Haven't thought about it but may possibly buy sometime	11.1	9.2	4.3	3.6	1.4	5.8
Will not buy	44.7	20.2	13.9	6.0	10.6	4.7
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Number	208	412	325	302	141	138
FAMILIES WITHOUT TELEVISION SETS						
Have decided to buy	27.1	35.5	37.0	45.0	52.5	53.5
Have thought about it and will probably buy sometime	5.8	8.8	12.1	14.1	5.0	9.8
Haven't thought about it but may possibly buy sometime	13.3	17.5	12.1	15.5	5.0	20.8
Will not buy	53.8	38.2	38.8	25.4	37.5	15.9
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Number	173	217	116	71	40	41

Nevertheless, it is apparent that Phonevision test volunteers and test families showed greater interest in acquiring television sets than did families of comparable composition. It has already been shown that test volunteers showed a slight excess of television ownership over comparable families in the city, and it can be seen in this section that the proportion of test volunteer and participant families who never intended to own television (4.4 and 1.7% of all families or 15.0 and 3.0% of families without television sets) was lower than the proportions in even the highest income or largest family size group in the city. It can be concluded that test volunteers and test families were more likely to be interested in television than were comparable families in the city generally. This conclusion is not too surprising in view of the fact that they did volunteer for participation in a test involving television.

A comparison of test volunteers and test participants suggests that one effect of possession of the Phonevision test television set on the families who participated was to increase the number who intended to get television sets among the non-owners and to accelerate and give greater specificity to their plans to purchase.

HABITS AND PRACTICES

Up to this point, attention has centered on opinions and preferences rather than on what people actually did in their leisure time. Because of the difficulty of ascertaining such information accurately, investigation of actual recreational practices was restricted to the two activities centrally related to Phonevision--television viewing and movie attendance.

TABLE 36

INTENTION TO BUY TELEVISION SETS AT VARIOUS INCOME LEVELS IN CHICAGO

Intention to Buy	Proportion of Families with Given Intention in Each Annual Family Income Group				
	Less Than $2,500	$2,500-$4,999	$5,000-$7,499	$7,500-$9,999	$10,000 and Over
ALL FAMILIES					
Have television sets	30.2	58.7	69.6	74.4	86.1
Have decided to buy	18.6	18.9	15.0	12.8	2.3
Have thought about it and will probably buy sometime	5.4	4.8	2.3	1.2	2.3
Haven't thought about it but may possibly buy sometime	10.2	6.0	4.6	2.3	2.3
Will not buy	35.6	11.6	8.5	9.3	7.0
Total per cent	100.0	100.0	100.0	100.0	100.0
Number	275	663	260	86	43
FAMILIES WITHOUT TELEVISION SETS					
Have decided to buy	26.6	45.6	49.4	a	a
Have thought about it and will probably buy sometime	7.8	11.7	7.6		
Haven't thought about it but may possibly buy sometime	14.6	14.6	15.2		
Will not buy	51.0	28.1	27.8		
Total per cent	100.0	100.0	100.0		
Number	192	274	79	22	6

[a]Too few cases to report percentages.

Television Viewing

In the Spring of 1951, families in Chicago who owned television sets reported a median weekday television viewing of five hours. Most of this viewing was in the evening hours, with only 14.9% of the families with television sets using their sets before noon, for an average of an hour daily per set in use; and 62%, in the afternoon, for an average of one and a half hours per set in use. Viewing habits did not differ notably among the relevant groups; Lakeview-Lincoln families, generally, and Phonevision test volunteers and participants reported about the same amount of time devoted to television viewing. Even during the Phonevision test, test families did not differ much in the time they spent watching regular television from the time they recalled having spent before the test, and test families who had not had television before did not particularly differ in amount of viewing from those who had. (See Table 37, page 95.)

In families who did not have television sets, close to half the adults saw television at least once a week, while children tended to watch television more frequently --in the city, over half the families with children reported that the children saw television more than once a week. Only small fractions of adults and children in the city generally had never seen television. For non-owning families, too, the extent of television-viewing was quite similar from group to group--the city generally, Lakeview-Lincoln, test volunteers and test families were all quite comparable. (See Table 38, page 96.)

TABLE 37

AVERAGE WEEKDAY TELEVISION VIEWING OF TELEVISION OWNERS[a]

Use of Set	Proportion of Families with Television Sets in Each Group Reporting Given Set Use					
	City	Lakeview-Lincoln				
		All Families	PV Test Volunteers	PV Test Families		
				"During" Test[b]		"Before" Test[b]
				TV Owners	Non-owners	
TOTAL DAILY USE						
None	0.2	0.3	1.0	-	-	1.2
One hour or less	2.4	3.4	3.1	1.2	2.2	-
Over one to two hours	4.7	6.8	2.1	3.6	6.6	1.8
Over two to three hours	9.2	9.7	12.4	9.1	8.7	7.3
Over three to four hours	12.7	18.4	9.3	12.8	16.0	12.1
Over four to five hours	20.2	15.2	20.6	18.8	16.8	19.4
Over five to six hours	17.5	13.9	23.7	26.0	17.6	21.8
Over six to eight hours	18.1	17.8	15.4	18.8	19.0	23.7
Over eight hours	15.0	14.5	12.4	9.7	13.1	12.7
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Median viewing time (in hours):						
All sets	5.0	4.8	5.1	5.2	5.0	5.4
Sets in use	5.0	4.8	5.1	5.2	5.0	5.4
MORNING USE (UNTIL NOON)						
None	85.1	83.7	85.5	84.2	83.1	83.0
One hour or less	7.6	8.5	7.3	9.1	13.2	9.7
Over one to two hours	5.9	7.0	6.2	6.7	3.7	6.7
Over two hours	1.4	0.8	1.0	-	-	0.6
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Median viewing time (in hours):						
All sets	0.0	0.0	0.0	0.0	0.0	0.0
Sets in use	1.0	0.9	1.0	0.9	0.7	0.9
AFTERNOON USE (NOON TO 6 P.M.)						
None	38.0	47.4	42.2	27.9	35.0	27.2
One hour or less	18.1	16.3	12.4	25.5	18.3	25.6
Over one to two hours	24.6	18.6	28.9	32.1	28.5	30.3
Over two to three hours	12.2	10.1	9.3	10.3	11.7	10.9
Over three to four hours	3.1	3.9	3.1	3.6	5.1	4.2
Over four to five hours	1.2	1.6	3.1	0.6	0.7	1.2
Over five to six hours	2.8	2.1	1.0	-	0.7	0.6
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Median viewing time (in hours):						
All sets	0.6	0.7	0.8	0.9	0.9	0.9
Sets in use	1.5	1.5	1.6	1.3	1.5	1.4
EVENING USE (AFTER 6 P.M.)						
None	0.8	0.2	2.1	0.6	-	1.2
One hour or less	3.2	3.9	3.1	2.4	4.4	1.2
Over one to two hours	7.8	10.1	7.2	5.5	7.3	3.6
Over two to three hours	18.7	16.0	18.6	20.0	21.1	15.2
Over three to four hours	23.7	26.3	27.8	32.7	28.5	27.3
Over four to five hours	24.5	23.2	24.7	25.5	19.8	32.1
Over five to six hours	16.1	16.0	15.5	10.9	16.0	17.6
Over six hours	5.2	4.3	1.0	2.4	2.9	1.8
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0
Median viewing time (in hours):						
All sets	3.9	3.8	3.7	3.7	3.6	4.1
Sets in use	3.9	3.8	3.7	3.7	3.6	4.1
Number of cases	868	387	97	167	133	167

[a]Based on the question, "On an average weekday about how many hours is your television set on: A. In the morning--from 6 A.M. to noon? B. In the afternoon--from noon to 6 P.M.? C. In the evening--after 6 P.M.?" This question was asked of test families in terms of "Before the Phonevision test" and, for regular television programs "during the Phonevision test."

[b]These data are retrospective and may not be an accurate statement of the pretest situation.

TABLE 38

FREQUENCY OF TELEVISION VIEWING OF NON-OWNERS[a]

Frequency of Viewing	Proportion of Respondents without Television Sets in Each Group Reporting Given Frequency of Viewing			
	City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families[b]
RESPONDENTS				
Every day	6.7	5.8	2.5	8.8
Two to six times a week	25.0	22.7	32.5	19.0
Once a week	19.3	22.7	17.5	24.1
Two to three times a month	12.2	11.8	20.0	12.4
Once a month	9.8	9.5	10.0	10.9
Less than once a month	18.9	19.8	12.5	13.1
Never	5.1	6.0	5.0	8.8
Don't know	3.0	1.7	-	2.9
Total per cent	100.0	100.0	100.0	100.0
Number	658	348	40	133
OTHER ADULTS IN HOUSEHOLD				
Every day	8.6	7.3	-	10.7
Two to six times a week	24.0	25.7	33.3	17.6
Once a week	14.9	19.8	19.5	23.7
Two to three times a month	9.9	11.2	16.7	16.0
Once a month	12.5	9.4	13.9	12.2
Less than once a month	17.3	13.7	8.3	12.2
Never	6.5	7.3	5.5	7.6
Don't know	6.3	5.6	2.8	-
Total per cent	100.0	100.0	100.0	100.0
Number with other adults in household	463	233	36	127
CHILDREN, 5-19				
Every day	19.2	14.3	c	22.7
Two to six times a week	38.3	28.6		38.6
Once a week	14.9	20.3		11.4
Two to three times a month	9.9	8.2		6.8
Once a month	5.7	14.3		6.8
Less than once a month	3.5	4.1		4.6
Never	2.1	2.0		6.8
Don't know	6.4	8.2		2.3
Total per cent	100.0	100.0		100.0
Number with children, 5-19	141	49	11	44

[a]Based on the questions: "About how often (do you) (do the other adults, 20 and over in your household) (do the children) see television?" Test families were asked these questions in terms of "Before the Phonevision test."

[b]These data are retrospective and may not be an accurate statement of the pre-test situation.

[c]Too few cases to report percentages.

TABLE 39

USUAL MOVIE ATTENDANCE
April-May, 1951[a]

Movie Attendance	Proportion of Families in Each Group Reporting Given Movie Attendance											
	All Families				Families with Television Sets				Families without Television Sets			
	City	Lakeview-Lincoln			City	Lakeview-Lincoln			City	Lakeview-Lincoln		
		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families		All Families	PV Test Volunteers	PV Test Families
ADULTS												
Twice a week or more	6.9	7.0	6.1	19.6	4.2	5.2	6.5	17.6	10.5	9.2	5.0	21.2
Once a week	17.4	17.7	19.3	28.9	12.9	11.7	14.0	24.8	23.5	24.8	32.5	32.1
Two or three times a month	12.5	13.4	13.1	16.5	12.3	13.0	11.8	17.0	12.6	13.9	15.0	16.1
Once a month	13.9	14.6	15.4	12.5	15.3	15.2	12.9	14.5	12.1	13.7	22.5	10.9
Less than once a month	30.5	31.0	33.0	17.3	35.4	35.6	36.5	18.8	24.0	25.7	25.0	16.1
Never	18.8	16.3	13.1	5.2	19.9	19.3	18.3	7.3	17.3	12.7	-	3.6
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1526	735	137	300	868	387	97	167	658	348	40	133
CHILDREN, 5-19												
Twice a week or more	13.7	13.0	1.8	28.5	12.6	13.3	2.3	20.2	16.6	12.8	c	34.9
Once a week	35.4	38.2	47.3	44.2	31.6	37.5	48.9	53.2	45.7	40.4		37.2
Two or three times a month	14.3	13.9	13.2	5.9	13.8	12.5	9.3	7.6	15.6	17.0		4.6
Once a month	11.9	10.1	11.4	6.2	12.9	9.4	11.6	5.1	10.1	12.8		7.0
Less than once a month	14.0	15.6	18.8	8.3	16.4	15.6	18.6	10.1	7.5	14.9		7.0
Never	10.7	9.2	7.5	6.9	12.7	11.7	9.3	3.8	4.5	2.1		9.3
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
Number	525	181	55	123	384	132	44	79	141	49	11	44

[a]Based on the questions: "About how often do the adults (20 and over) in your family--including yourself--go to the movies?" and "(If any children, 5-19) About how often do the children in your family go to the movies?" For test families, these questions were preceded by comparable questions about movie attendance during the Phonevision test, and were modified by the insertion of the word, "Usually."

[b]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

[c]Too few cases to report percentages.

Movie Attendance

In the Spring of 1951, it was reported that adults in about a quarter of the families in the city went to the movies at least once a week; in about another quarter of the families, one to three times a month; and in about half the families, less than once a month. In families with children five and over, the children in about half the families were reported to attend movies at least once a week, while only a quarter said that the children went to the movies less than once a month. (See Table 39, page 97.) As might be expected, the movie attendance of both adults and children in families who owned television sets was considerably lower than the movie attendance of non-owners, a result which was quite consistent with the general impression of television owners that their movie attendance had declined. (See Table 40 below.) What does stand out, however, is that the test families reported higher rates of movie attendance than other volunteers did--48.5% of the test families reported that adults went to the movies once a week or more, and 72.7% of those with children reported that the children attended this often.

It has been shown earlier (See Table 16, pages 56 to 63) that the families finally selected for participation in the Phonevision test reported essentially the same rate of movie attendance as did all volunteers at the time of application. Moreover, the relatively small sample of volunteers interviewed after the test were not biased in this respect: The rate of movie attendance this group reported in their

TABLE 40

REPORTED EFFECT OF TELEVISION ON MOVIE ATTENDANCE[a]

Change in Movie Attendance Since Getting Television	Proportion of Families Owning Television Sets Reporting Given Change in Movie Attendance		
	City	Lakeview-Lincoln	
		All Families	PV Test Volunteers
ADULTS			
Increased	0.8	0.8	-
Decreased	69.1	70.4	73.2
Stayed the same	29.6	27.8	26.8
Don't know	0.5	1.0	-
Total per cent	100.0	100.0	100.0
Number with television	868	387	97
CHILDREN, 5-19			
Increased	0.2	0.8	2.3
Decreased	50.0	50.4	50.0
Stayed the same	48.6	47.2	47.7
Don't know	1.2	1.6	-
Total per cent	100.0	100.0	100.0
Number with television with children 5-19	384	132	44

[a]Based on the questions: "Has the movie attendance of the adults (20 and over) in your family--including yourself--changed since you got your television set? (How?)", and "(If any children, 5-19) Has the movie attendance of the children in your family changed since you got your television set? (How?)."

pre-test application questionnaires was not significantly different from that of all volunteers. In other words, test families were no different in movie attendance from other volunteers before the Phonevision test, and volunteers were no different from other families in the city at the close of the test. It seems plausible, then, that differences in movie attendance between test participants and test volunteers after the Phonevision test represented a test effect either on actual movie attendance or on the reporting of movie attendance.

Among test volunteers interviewed after the Phonevision test the proportions reporting adult movie attendance of at least once a week at each of the time periods were:

	At Time of Test Application	At Time of Post-Test Interview
Television owners at time of application.	43.7	16.4
Non-owners at time of application:		
Became owners after application.	66.7	23.8
Remained non-owners. . .	57.5	35.0

The fact that recent television owners among these test volunteers exhibited the largest proportionate decline in reported rates of movie attendance, while non-owners showed the least proportionate decline suggests that there may have been a real trend toward less frequent movie attendance during the eleven month period.* On the other hand, it is possible that there was a systematic tendency, at the time of test application, to exaggerate movie attendance in the belief that frequent movie-goers would be more likely to be chosen as participants.

While test families indicated less of a decline in reported movie attendance, and, in fact, the decline was apparent only among families who did not own television sets, their situation was different. In the first place, relatively few of them had been going to the movies at all during the three months of the Phonevision test--only 3.4% said the adults went to the movies as frequently as once a week, while 24.1% reported that the adults went to the movies less than once a month, and 53.4% said that the adults never went out to the movies at all during the Phonevision test.** The necessary consequence is that when test families were asked about their "usual" movie attendance they referred not to the immediate past, as other families did, but to an earlier period preceding the Phonevision test. Whether it is assumed that their recollection was simply more faulty because of a longer time span to recall, or that they tended, through the contrast, to exaggerate their past movie attendance in the light of their recent infrequent attendance, or that they tended to base their estimates of previous movie attendance on the frequency with which they had been seeing movies on Phonevision, or that a real trend of decreased movie attendance had been occurring so that their reports, referring to an earlier time period, would naturally be higher than those of families reporting the more recent past; it is easy to see how the reported differences between test families and other volunteers in movie attendance might have developed, without any reason to believe that test families were initially different, before the Phonevision test, either from other volunteers or from other families in the city.

*Unfortunately, there are no available reliable estimates of movie attendance in Chicago at these two periods against which to check these interpretations.

**Among test families with children, 24.1% reported that the children still went to the movies at least once a week during the Phonevision test, while 12.7% reported children's movie attendance of less than once a month and 33.2% said their children didn't go to the movies during the test.

CONCLUSION

This brief and incomplete survey of the recreational habits and interests of families in Chicago was undertaken to determine whether, given their objective differences in wealth and family composition, the families chosen for participation in the Phonevision test displayed any important differences in predispositions, habits and tastes which might bear on their response to Phonevision and limit the extent to which these responses might be generalized to otherwise comparable families. Practical difficulties surrounding the conduct of the test limited this study to a survey carried out after the close of the Phonevision test, in which conclusions rest primarily on comparisons of the expressed opinions of a sample of test volunteers who did not happen to be selected for participation in the Phonevision test and the actually-participating families, on the one hand, and samples of families in the city, generally, and in the Lakeview-Lincoln district, on the other.

A rapid review of general recreational preferences, preferences for home versus outside entertainment, the relative appeal of movies as over against television programs, opinions of television--including likes, dislikes and suggestions for improvement of both programming and more general aspects of television, actual ownership of and intention to buy television sets, and habits with regard to television viewing and movie attendance, indicated that there was relatively little difference in these habits and tastes between families who volunteered for the Phonevision test and families who did not. Most of the differences that did occur could be accounted for on the basis of differences in rate of television ownership, family income and composition.

Among the topics covered, the major tendencies which appeared to distinguish Phonevision test volunteers from other families of their same general class and background were:

1. A somewhat greater interest in television, as indicated by higher rates of ownership and more frequent intentions to buy sets.
2. A greater tendency to value television because it permits of the physical comfort and convenience of staying home while furnishing comparable entertainment.
3. A greater preference for movies as a recreational choice, combined with no more frequent actual movie attendance and a more frequently expressed desire to have newer movies shown on television.

This confluence of attitudes--a liking for movies counterbalanced by a preference for the comforts of home and a liking for television which in turn led, on the one hand, to probably less frequent movie attendance than the preferences would otherwise imply and, on the other, to a desire to have these movies on television--so completely sums up the basic appeal of Phonevision that it is not remarkable that the families who were interested in Phonevision exhibited tendencies toward this pattern. What is remarkable, and should not be lost sight of, is that these tendencies were not extreme in magnitude, and would not describe the majority of Phoenvision test volunteers; rather, they simply occurred sufficiently more frequently to be statistically significant.

As an artifact of the research design used, the effect of participation in the Phonevision test on the recreational preferences of participating families was also touched on. These effects may be summarized as:

1. An increase of interest in and liking for television, at the expense of interest in radio and movies.
2. A decrease in preference for outside entertainment, accompanied by, during the test, at least, a sharp decline in movie attendance.
3. An increase in criticism of commercials on television programs.
4. An increase in desire to have new movies on television, in general, and to have Phonevision commercially available, in particular.

While it is impossible to say whether these were only temporary effects of participation in the Phonevision test or will have some lasting influence, it can be noted that, to a large extent, these changes represented only intensifications of the complex of attitudes distinguishing test volunteers from others.

IV

RESULTS OF THE PHONEVISION TEST

TEST EXPENDITURES FOR PHONEVISION*

During the three month period of the Phonevision test, the three hundred participating families spent $6,751.00, or an average of $22.50 per family. The largest single family expenditure for Phonevision programs during the test period was $74.00, while the smallest family expenditure was $2.00. From these data, presented in Table 41, pages 102 and 103, it can be estimated that the average expenditure for test volunteers, generally, would have been $22.15 ± $1.38, but, since it has been indicated that estimates based on the test families will probably be near the upper range of chance occurrence, it is probably wiser to regard estimated expenditures for the universe of volunteers as somewhere between $20.77 and $22.15.**

Expenditures for Phonevision were not constant throughout the thirteen week test period. Put briefly, the cycle of expenditures may be described as novelty, reaction, recovery and nostalgia. That is to say, during the first week of the test expenditures were at their highest, as curiosity, excitement, publicity and the general novelty of Phonevision dominated. By the second week of the test, expenditures had already fallen by more than a third. Expenditures during the fourth week were again significantly lower than the preceding week's and the fifth week's were significantly lower than the fourth's. There followed a four week period (the fifth through eighth weeks) where expenditures for Phonevision were at a low point, with no particular week differing significantly from the preceding week. In the ninth week, a slight but statistically significant upturn over the preceding week occurred, and the ninth through twelfth weeks continued at about the same level. The final six days of the test were characterized by a rise in expenditures as people took advantage of their last chance to see Phonevision during the test. (See Tables 42 and 43, page 104.)

Before the Phonevision test, it had been hypothesized that in the first month there would be high expenditures for Phonevision, that the second month would see a sharp reaction as bills for the first month's expenditures were received, and that the third month would see expenditures settling at a "normal" level. Thus, expenditures during the ninth through twelfth weeks of the test had been predesignated as the expenditure rates which would be regarded as typical for Phonevision, given the type of families participating, the season of the year at which the test was conducted, and the type of programs offered. While average expenditures in the fifth through eighth weeks were lower than those in the ninth through twelfth by only about seven cents per family per week, this difference does approach the .05 level of significance. Since the data thus appear to conform to the general hypothesis adopted before the test, further analysis of expenditures will always be in terms of rates during

*This analysis is based on itemized monthly statements furnished to the National Opinion Research Center by the Zenith Radio Corporation.

**Since the meaning of these expenditures would vary greatly if they were not real expenditures, it is well to note here that all but six of the families participating in the test paid all of their bills in full--one family paid none of its three bills, one family did not pay the January bill and four families did not pay the March bill. The total of unpaid bills amounted to $56.00 or 0.8% of total billings.

TABLE 41

DISTRIBUTION OF EXPENDITURES FOR PHONEVISION DURING THE ENTIRE TEST PERIOD

Total Expenditures	Number of Test Families at Given Expenditure Level			
	Television Owners	Non-owners	Total[a]	
			Unweighted	Weighted
$0	-	-	-	-
1	-	-	-	-
2	-	1	1	1.277
3	-	1	1	1.277
4	-	4	4	5.110
5	1	3	4	4.551
6	3	-	3	2.156
7	5	3	8	7.427
8	1	1	2	1.996
9	1	3	4	4.551
10	4	5	9	9.263
11	6	5	11	10.700
12	3	9	12	13.654
13	6	5	11	10.700
14	6	5	11	10.700
15	4	7	11	11.818
16	9	6	15	14.134
17	5	5	10	9.982
18	3	6	9	9.821
19	6	4	10	9.423
20	8	6	14	13.415
21	5	9	14	15.092
22	8	7	15	14.693
23	4	8	12	13.096
24	3	4	7	7.266
25	4	4	8	7.985
26	2	2	4	3.993
27	1	4	5	5.829
28	2	1	3	2.715
29	4	2	6	5.430
30	4	3	7	6.708
31	1	1	2	1.996
32	6	5	11	10.700
33	2	1	3	2.715
34	2	1	3	2.715
35	3	2	5	4.711
36	4	1	5	4.153
37	3	2	5	4.711
38	2	1	3	2.715

[a]Two totals are shown in this and following tables: The unweighted total represents only what the particular 300 families taking part in the test did, since, because of the way the sample was selected, it overrepresents television owners. The weighted total represents the behavior of the 300 families weighted so as to make them a representative sample of test volunteers; with allowance for biases resulting from substitutions, it is, therefore, an estimate of how the universe of which the participating families were a sample might have behaved.

TABLE 41 - Continued

Total Expenditures	Number of Test Families at Given Expenditure Level			
	Television Owners	Non-owners	Total[a]	
			Unweighted	Weighted
$39	3	1	4	3.434
40	1	1	2	1.996
41	1	3	4	4.551
42	-	1	1	1.277
43	2	1	3	2.715
44	4	2	6	5.430
45	-	-	-	-
46	1	-	1	0.719
47	-	-	-	-
48	1	1	2	1.996
49	-	2	2	2.555
50	2	-	2	1.438
51	1	-	1	0.719
52	-	-	-	-
53	-	1	1	1.277
54	-	-	-	-
55	-	-	-	-
56	-	-	-	-
57	-	-	-	-
58	-	-	-	-
59	-	-	-	-
60	-	-	-	-
61	1	-	1	0.719
62	-	-	-	-
63	-	-	-	-
64	-	-	-	-
65	-	-	-	-
66	-	-	-	-
67	-	1	1	1.277
68	-	-	-	-
69	-	-	-	-
70	-	-	-	-
71	-	-	-	-
72	-	-	-	-
73	-	-	-	-
74	1	-	1	0.719
Total families	149	151	300	300.000
Total expenditures	$3,545.00	$3,206.00	$6,751.00	$6,643.811
Mean expenditures	23.7919	21.2318	22.5033	22.1460
Standard deviation	12.1242	11.2882		
Standard error	0.9966	0.9217		0.6912

[a]Two totals are shown in this and following tables: The unweighted total represents only what the particular 300 families taking part in the test did, since, because of the way the sample was selected, it overrepresents television owners. The weighted total represents the behavior of the 300 families weighted so as to make them a representative sample of test volunteers; with allowance for biases resulting from substitutions, it is, therefore, an estimate of how the universe of which the participating families were a sample might have behaved.

TABLE 42

WEEKLY AND MONTHLY MEAN FAMILY EXPENDITURES FOR PHONEVISION

	Mean Expenditures per Family			
	Television Owners	Non-owners	Total	
			Unweighted	Weighted
Total for three months' test. . .	$23.79	$21.23	$22.50	$22.15
January	9.81	8.26	9.03	8.81
February.	6.32	5.61	5.96	5.86
March	7.66	7.36	7.51	7.47
First week.	3.36	2.82	3.09	3.01
Second week	2.04	1.75	1.90	1.85
Third week.	2.06	1.69	1.87	1.82
Fourth week	1.83	1.54	1.68	1.64
Fifth week.	1.63	1.41	1.52	1.49
Sixth week.	1.65	1.45	1.55	1.52
Seventh week.	1.48	1.46	1.47	1.47
Eighth week	1.56	1.32	1.44	1.41
Ninth week.	1.75	1.54	1.64	1.61
Tenth week.	1.66	1.39	1.53	1.49
Eleventh week	1.64	1.57	1.60	1.60
Twelfth week.	1.55	1.50	1.52	1.52
Thirteenth week[a].	1.58	1.79	1.69	1.72

[a]The last week of the test included only six days.

TABLE 43

CHANGES IN MEAN WEEKLY FAMILY EXPENDITURES FOR PHONEVISION

Week of Test	Mean Weekly Family Expenditures	Change from Preceding Period	Probability of Chance Occurrence
1	3.09	-	-
2	1.90	-1.19	<.0001
3	1.87	- .03	.7490
4	1.68	- .19	.0204
5	1.52	- .16	.0250
6	1.55	+ .03	.7040
7	1.47	- .08	.3078
8	1.44	- .03	.6528
9	1.64	+ .20	.0142
10	1.53	- .11	.1802
11	1.60	+ .07	.3576
12	1.52	- .08	.3222
13[a].	1.97	+ .45	<.0001
1	3.09	-	-
2- 4	1.82	-1.27	<.0001
5- 8	1.50	- .32	<.0001
9-12	1.57	+ .07	.0546
13[a].	1.97	+ .40	<.0001

[a]These figures are an estimate for a full week based on 7/6 of the expenditures during the six days in the period.

this so-called "normal" period of the ninth through twelfth weeks of the test. Nevertheless, it should be pointed out that variations in Phonevision programming, and in competing television programs and other forms of recreation--all of which are beyond the scope of this report--might well account for the relatively small difference in expenditure rates between the two time periods. Admittedly, there is somewhat less stability in rates based on a four week period rather than on an eight week period, but the correlation between rates of expenditures suggests that there was a relatively high rate of consistency in expenditures from one time period to another, so that families whose expenditures were high in one time period, tended to be the high-spending families in the next period, as well. (See Table 44 below.)

Expenditures for the "normal" period of the test are shown in Table 45, page 106. As presented there, the average family taking part in the test spent $1.55 a week during this period, from which it can be estimated that test volunteers, generally, would have spent on the average from $1.43 to $1.67 a week (1/4 of $6.21 ± $0.47), with $1.43 to $1.55 the more probable limits of average weekly expenditure.

THE ROLE OF TEST CONDITIONS

In the course of examination of expenditures for Phonevision, it is well to remember that these were expenditures made at a given period of time, for a given set of programs, in the course of a publicized test of Phonevision. Before too much is made of these expenditure data, the question of the extent to which the unique factors in the situation--especially the fact that it was a test--influenced the results needs to be examined, for it may well be that people, acting in the knowledge that they were a part of a test which was being closely observed, acted differently than they would have if Phonevision had simply been a commercially available service to which they chose to subscribe.

Among the major factors to be considered are the motives of the families who volunteered. It has been suggested earlier

TABLE 44

CORRELATION BETWEEN EXPENDITURES FOR PHONEVISION IN VARIOUS PERIODS

Week of Test	Correlation of this Period's Expenditures with Those of Preceding Period
1.	-
2.	.47
3.	.48
4.	.46
5.	.51
6.	.42
7.	.44
8.	.44
9.	.41
10.	.40
11.	.40
12.	.40
13.	.40
1.	-
2 - 4.	.65
5 - 8.	.69
9 - 12.	.73
13.	.57

TABLE 45

DISTRIBUTION OF EXPENDITURES FOR PHONEVISION DURING "NORMAL" FOUR WEEK PERIOD

Expenditures During Ninth - Twelfth Weeks	Number of Test Families			
	Television Owners	Non-owners	Total	
			Unweighted	Weighted
$ 0	5	5	10	9.981
1	5	11	16	17.646
2	14	11	25	24.116
3	8	17	25	27.468
4	15	14	29	28.667
5	15	20	35	36.332
6	20	15	35	33.538
7	18	10	28	25.713
8	10	15	25	26.350
9	3	12	15	17.486
10	10	2	12	9.743
11	9	6	15	14.134
12	4	4	8	7.985
13	4	3	7	6.708
14	3	-	3	2.156
15	4	-	4	2.875
16	-	4	4	5.110
17	1	1	2	1.996
18	-	-	-	-
19	-	-	-	-
20	-	-	-	-
21	1	-	1	0.719
22	-	-	-	-
23	-	1	1	1.277
Total families	149	151	300	300.000
Total expenditures	$ 984.00	$ 905.00	$1,889.00	$1,863.402
Mean expenditures	6.6040	5.9934	6.2967	6.2113
Standard error of mean	0.3225	0.3200		0.2356

that these motives were varied enough so that volunteering cannot be regarded as coterminous with interest in Phonevision. More particularly, however, did the families who volunteered for reasons which had less to do with Phonevision, itself, than with other features of the test tend to increase or decrease expenditures for Phonevision? Of special interest here, is the behavior of families who did not have television sets when they applied for the test, who might have been fundamentally more interested in the free use of a television set than they were in Phonevision.

A second factor to be considered is that those participants who had owned television sets before found themselves, because of the Phonevision test, in possession of two television sets--a situation which relatively few families would otherwise have encountered. It is easy to speculate that this circumstance could have affected expenditures for Phonevision, also, since in case of a family conflict over which program to view--say, a Phonevision program versus a free television program--families with only one television set might well resolve the conflict in favor of the less expensive program, while families with two sets could divide up and see both programs.

Finally, regardless of initial motives for volunteering, test families found themselves in a spotlight of attention and

publicity which did not attend their usual behavior. It is, thus, quite possible that a sense of their role as test participants, some feeling of identification, or of obligation or responsibility to help the test succeed influenced families to spend more for Phonevision than they would have under ordinary circumstances.

In addition to these problems, there are the two suggested earlier, which are not so much inherent in the fact that this was a test as in the fact that the test was conducted only once, so that its attendant conditions were unique. The first of these--the season in which the test was conducted--cannot be dealt with, within the limits of this research, but it should be borne in mind that the winter months which constituted the test period were probably the optimum time for home, indoor entertainment, so that expenditures in this period may well be regarded as the annual high. Secondly, however, the nature of the programs used for the test deserves some consideration. Phonevision was tested using movies, none of which were current. Newer movies or other types of programs would probably have resulted in different expenditure rates. While an attempt will be made, later in this report, to estimate the probable expenditures for Phonevision under varying programming, the limitation of all discussion of actual expenditure data to results obtained in the winter of 1951, using relatively old movies, should always be assumed.

With these qualifications, the problems inherent in the fact that a test was being conducted may now be examined. It is not to be expected that completely final and definitive answers can be given about some of the subtle psychological processes affecting human subjects of an experiment, but any estimate of the direction and extent of such tendencies should be of aid in interpreting the test results.

Motives for Volunteering

As the test families looked back to the time when they decided to volunteer for the Phonevision test, they most frequently referred to having been curious or interested; they recalled having wanted to see for themselves how Phonevision would work and having been eager to try something new. (See Table 46, page 109.) For instance, they said things like:

> "It was something new and out of curiosity, I wanted to see just what it would be like. I like to voice my opinion on something new if I really know what I'm talking about."

Closely allied to the novelty of Phonevision, though less frequently directly mentioned, were feelings that participation in the test would have high status and social prestige. Some test families recognized that selection for participation made them members of a special and limelighted elite--the lucky and, presumably, envied few to be chosen. The idea of having something that other people couldn't have, of being "first with the latest" had a strong appeal for these families. As one participant remarked: "Frankly it's a thrill to know that I've got it and no one else can have it."

The second leading single motive for applying that was recalled was the opportunity some families saw in the test to secure free use of a television set. While this motive was far more typical of families who did not have television sets (it was, in fact, the leading category of explanation, with 45.0% of them mentioning this as one of their motives for applying), a few families with small screen television sets or sets that gave unsatisfactory reception also saw the advantage of this detail of the test plan. Speaking of this aspect of the test plan, some families said:

> "I thought it would be a good chance to see how we'd like television."

> "I wanted to see television as I wanted to learn English, and my daughter and wife could learn much from it, too. We couldn't afford one at that time, and I thought this would be fortunate if we could get a set."

> "Frankly, the opportunity of having a television set in the home pleased us, too."

Finally, there were a number of categories of explanation which referred to the appeal of intrinsic features of Phonevision. Many families recalled their

application for the test in terms of the advantages they saw in Phonevision as television programming. These people wanted to take part in the Phonevision test because they thought that Phonevision was a good idea which would raise the quality of television programs available and, more specifically, would bring the newer movies to the television screen or eliminate the commercials they objected to in television programs. In a similar vein, other families regarded it as more comfortable, convenient or economical to pay for and see movies at home. For instance:

"You could get late movies, I mean more up-to-date and not all cut up. The ones we see on regular television are shortened."

"I thought it sounded good to see movies at home. Particularly in winter, we couldn't get out too much."

"We wanted to see pictures we had missed seeing at the theater. Going out to the theaters was too expensive to take the whole family."

"I thought it was a wonderful idea--a great thing for my family to see good movies without having to brave crowds and weather to go out to see them. It is an almost unbelievable convenience."

"Our only interest was to see feature films of full length without commercials."

Thus, it is apparent that there were three main lines of motivation in applying for participation in the Phonevision test: Intrinsic interest in Phonevision itself, novelty-prestige elements in the Phonevision test, and use of a free television set as part of the mechanics of the test. Of these, only the first group of motives can be regarded as relevant to interest in Phonevision, while volunteers with motives concerned with extraneous factors introduced by the conduct of a test simply indicate the extent to which volunteering for a test fails to correspond with intrinsic interest in the subject-matter of the test. On this basis, it can be estimated that about two-thirds of the television owners who volunteered did so at least in part because of intrinsic interest in Phonevision, while the remainder were primarily motivated by considerations of novelty and prestige.* Non-owners on the other hand more often volunteered for the novelty and prestige or the use of a television set or both, with 47.0% mentioning that one consideration, at least, was interest in Phonevision. (See Table 47, page 110.)

The effect of the inclusion in the test of families whose motives were not particularly oriented toward Phonevision may be seen in Table 48, page 111. It is apparent, there, that families who were solely or partially motivated toward securing the use of a television set tended to spend less for Phonevision than did families who entered the test for other reasons. Among the television-owning families, those with an intrinsic interest in Phonevision spent more than those who did not report this interest, whether the others were motivated by novelty and prestige or use of the television set or both. On the other hand, non-television owners who entered the test for the novelty or prestige tended to spend as much or more than families with an intrinsic interest in Phonevision. It follows that, if test results were based on participants interested in Phonevision, the average expenditures of television owners would be increased by $0.10 a week, while those of non-owners would decline a penny a week; overall estimated expenditures would increase by $0.06 a week. The use of expenditure rates based on all participating families, therefore, is a conservative procedure which somewhat underestimates the expenditures which would be made by families interested in Phonevision.

*It is interesting to note that the reasons given by families in the city, generally, or by families who volunteered but did not participate in explanation of their desire to participate were more frequently the "respectable" reasons of intrinsic interest and less frequently the considerations of novelty and prestige and use of television sets. While no claims are made for the absolute accuracy of either set of data, since motives are, at best, complex and difficult to assess accurately, it does seem likely that, in retrospect, test families were better able to recognize and admit extraneous motives than were respondents who sought to justify their desire to participate.

TABLE 46

REASONS FOR APPLYING FOR THE PHONEVISION TEST[a]

Reason for Applying	Proportion Giving Indicated Response in Each Group			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Interest, curiosity, experimental-mindedness	45.6	37.1	41.3	40.1
Opportunity to secure free use of television set	5.4	45.0	25.3	30.9
Convenience, comfort of seeing movies at home	24.8	22.5	23.7	23.3
Opportunity to see better programs than available on regular television, general	24.1	13.9	19.0	17.5
Opportunity to see newer movies than available on television	18.1	11.9	15.0	14.0
"Snob appeal," social prestige, opportunity to have something no one else could get	12.1	9.9	11.0	10.7
Opportunity to have programs free of commercialism of regular television	11.4	3.3	7.3	6.2
Economy of seeing movies at home	3.4	2.0	2.7	2.5
Miscellaneous reasons	6.0	2.6	4.3	3.8
Don't know reasons	5.4	5.3	5.3	5.3
Total per cent[b]	156.3	153.5	154.9	154.3
Number	149	151	300	300

[a]Based on the question: "Do you happen to remember now what you thought about the Phonevision test, when you first heard about it? I mean...what were your reasons for applying to take part in the test, as far as you remember? (What other reasons did you have?)"

[b]Percentages total more than 100.0 because some respondents gave more than one reason for participating.

The Second Television Set

It has been suggested that the introduction of an additional television set into the homes of the 163 test families who already had sets of their own before the test began introduced another factor which might make expenditures for Phonevision under these special conditions different than they would be under normal commercial operation. The fact is, however, that only 39, or 23.9%, of the families who had television sets of their own continued to use both sets during the Phonevision test.* Reasons for using only the test set were various, but a number of respondents mentioned things like lack of space for two sets, the superiority of the test set over their own set,** and a feeling that they should loan one set to friends or relatives who didn't have one.

*The question asked was: "During the Phonevision test, did your family use both television sets in your home, or did you use only one of them?"

**This fact could be inferred from the large percentage (80.6%) of test families with television sets at the time of application who had sets with screens smaller than the 16-inch test set, as shown in Table 16, pages 56 to 63. Another index of it derives from the fact that 16.6% of these families who already had sets spontaneously expressed to the interviewer a desire to buy the test set.

TABLE 47

CLASSIFICATION OF TEST FAMILIES' MOTIVES FOR VOLUNTEERING

Motive for Volunteering	Proportion of Families in Each Group Reporting Given Motive			
	Families with TV Sets at Time of Application	Families without TV Sets at time of Application	All Families	
			Unweighted	Weighted
Total Mentions of				
Intrinsic interest in Phonevision	67.8	47.0	57.3	54.4
Novelty, prestige of test	59.0	47.7	53.4	51.7
Use of television set	5.4	45.0	25.3	30.9
Total per cent[a]	132.2	139.7	136.0	137.0
Combinations of Motives Mentioned				
Intrinsic interest only	32.9	19.2	26.0	24.1
Intrinsic interest with:				
Novelty, prestige	31.5	11.9	21.7	18.9
Use of television set	2.7	13.9	8.3	9.9
Both	0.7	2.0	1.3	1.5
Novelty and prestige only	24.8	18.6	21.7	20.8
Novelty and prestige with:				
Use of television set	2.0	15.2	8.7	10.5
Use of television set only	-	13.9	7.0	9.0
Reasons not given	5.4	5.3	5.3	5.3
Total per cent	100.0	100.0	100.0	100.0
Number	149	151	300	300

[a]Percentages total more than 100.0 because some respondents mentioned more than one class of motives.

These families who did use both sets during the test period did so primarily because differences in program preferences could be resolved in this way--59.0% of them gave reasons of this kind.* Secondarily, 28.2% reported that they kept the two sets in different parts of the house and used the more convenient one at any given time--for instance, some families said they allowed a sick child to have the spare set in the bedroom, while the rest of the family used the test set in the living room, or that they watched one set in the dining room during meal hours and the other set the rest of the time. A much smaller number--7.7%--preferred the reception they received on their own sets and used them except when watching Phonevision movies, while 5.1% reported that they had used their own sets only when the test set was out of order.

In answer to a direct question about it, only 18 families--46.2% of those who used both sets, or 11.0% of those who had two sets available--reported that they had ever been in the situation where one set was used to view the Phonevision movie while the other set was being used to see a regular television program preferred by

*Families who used both sets were asked: "How did you happen to use both of them? (Did you have any other reasons for using both?)"

TABLE 48

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO MOTIVES FOR VOLUNTEERING

Motives for Volunteering	Mean Weekly Expenditure in Group with Given Motives			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Intrinsic interest in Phonevision.	1.75 (101)[a]	1.49 (71)	1.64	1.61
Only reason mentioned . . .	1.71 (49)	1.44 (29)	1.61	1.57
Novelty and prestige also mentioned	1.78 (48)	1.71 (21)	1.76	1.75
Use of television set also mentioned.	1.55 (5)	1.41 (24)	1.43	1.42
Novelty and prestige: Only reason mentioned . . .	1.44 (37)	1.55 (28)	1.49	1.50
Use of television set also mentioned	1.00 (3)	1.32 (23)	1.28	1.29
Use of television set only reason mentioned.	- (0)	1.37 (21)	1.37	1.39
All families giving reasons . .	1.65 (141)	1.46 (143)	1.55	1.53

[a]The number in parentheses is the number of cases on which the means are based.

some members of the family.* It is, thus, immediately apparent that the unique circumstance of two television sets in the home could have affected expenditures for Phonevision in only a very limited number of cases.

The test families themselves, even those who had used both sets, tended to feel that the presence of two sets in the home had in no way affected their purchase of Phonevision programs--only 12.9% of the families with two sets felt their purchases of Phonevision programs would have been different if they had had only the test in their home, but all but one of these did feel that the effect of the second set was to lower their expenditures for Phonevision.** (For the smaller number who used both sets, 34 felt their purchases of Phonevision programs were unaffected, while five said they would otherwise have spent more for Phonevision.) In terms of actual behavior, families who used both sets spent $1.67 a week on the average, while those television owners who used only one set spent $1.66, the mean for the whole group being $1.66.*** The exclusion of the families who tested Phonevision under the atypical conditions

*Regardless of the reasons they had given for it, families who used both sets were asked: "Did it ever happen that part of the family saw a Phonevision movie on one set, while the rest of the family watched some other program on the other set?"

**All families with television sets of their own were asked: "If you had had only the Phonevision test television set in your home during the test, do you think your family would have bought about the same number of Phonevision programs as you did, or do you think you might have bought more programs or fewer programs?"

***This mean expenditure is higher than that usually cited for television owners--$1.65--because of the inclusion here of the 14 families who were not television owners at the time they applied but became owners before the start of the test. Since they cannot be regarded as representative of the group who would have become the relatively recent television owners if it had not been for the test, they are in most cases included with non-owners in order that they receive their proper weight. For this particular problem, however, they belong with the television owners, and their higher mean expenditures--$1.86 per week--serves to raise the mean for all owners.

of using two television sets would, therefore, in no way affect estimates of expenditures.

On the other hand, it should be noted that the smaller group who did use both sets under conditions of viewing the Phonevision program and a competing regular television program simultaneously had a substantially higher rate of expenditure for Phonevision:

	Mean Weekly Expenditures
Families who used both sets:	
Saw Phonevision and competing programs simultaneously . .	$2.14 (18)
Did not use simultaneously with Phonevision	1.29 (21)
Families who didn't use both sets	1.66 (124)
Families who had only test set.	1.46 (137)

Obviously, the mere fact that the group who used both sets to see Phonevision and competing programs simultaneously spent more for Phonevision does not prove that their higher rate of expenditure was attributable to this circumstance. It could well be that even if they had had only one set their rate of expenditures for Phonevision would have been high, and nothing short of a controlled experiment could satisfactorily determine whether their rate of expenditures was in fact influenced by the unique situation of being able to have the Phonevision movie for some members of the family while others saw a different program that they preferred.

In order to evaluate the significance of factors like this, however, it can be assumed that the higher rate of expenditure was entirely due to the unique situation of not having to choose between paid Phonevision programs and competing free programs, simply to see how much difference it could make in estimates of Phonevision expenditures. If, then, it is assumed that these 18 families would have spent at the same rate as other television owners instead of at their higher rate, if they had not had access to another set, the mean rate of expenditures for Phonevision by test families (uncorrected for the overrepresentation of television owners) would be $1.54 a week instead of the actual $1.57. Thus, at most, the effect of the second television set could not have been more than $0.03 a week.

Compulsions of the Test

While test families could not help being aware that they were part of a test, few of them were conscious of any compulsion, either internal or external, to regulate their purchases of Phonevision programs from the standpoint of the needs of the test rather than of their personal preferences. When asked:

> "During the Phonevision test, did you ever get any feeling that you had to buy Phonevision programs when you didn't particularly want to?"

90.9% said "No," while 8.6% said they sometimes felt this way and 0.5% weren't sure, with no particular differences between families who had had their own television sets and families who had not.

The few families who were conscious of compulsions were thinking primarily of the inner pressures of gratitude, obligation and responsibility:** Thus, 22 of the 27 families who reported that they sometimes felt compelled to buy Phonevision programs said things like:

> "The Zenith people had been so nice that we felt we owed them cooperation."

*This conclusion is exactly the same when the expenditure rates of the two major strata are properly weighted--mean expenditures would then be estimated as $1.52 a week instead of the $1.55 a week that actually prevailed.

**These respondents were answering the question: "What gave you that feeling? (What else?)"

"We knew it was an honor to be chosen, so we felt obligated to help make the test successful."

"I took the television set, so I thought I should take come of their programs."

Three families were motivated by their own identification with Phonevision; they tended to feel that every purchase of a Phonevision program was a vote in favor of it, as, for example, the respondent who said, "I felt I had to show how much in favor of Phonevision I was." Of the remaining two families who reported feelings of compulsion, one said they had felt outside pressure from the Zenith Radio Corporation ("They called us to ask if we weren't interested so we felt we had to buy some."),* while one had misunderstood test conditions ("At first I thought you had to take so many a week in order to stay in the test.").

In terms of expenditures for Phonevision, the few families who were conscious of pressures could make very little difference, overall.** Among previous television owners, those who recognized the psychological pressures spent on the average $0.04 a week more than those who did not ($1.69 as compared with $1.65), while among non-owners they actually spent a good deal less--$1.14 as compared with $1.53. Once again, some assumption about how these families would have behaved with regard to Phonevision if this test factor were not influencing them must be made, in order to evaluate its possible effect on estimates of expenditure rates derived from the test. If it is assumed that only the excess of expenditures over the mean for those families who were not conscious of test compulsions is attributable to this test factor, then the estimate of expenditures for families who had television sets at the time of application is not changed at all. Among the non-owners, it is difficult to decide what would have been normal expenditures for a group who, even under felt compulsions, spent substantially less than families who entered the test simply to get a free television set, but it is clear that any assumptions that might reasonably be made about these 14 families would not have any substantial effect on overall estimates of expenditures.

Even though relatively few families were conscious of pressures, half the test families did report that their expenditures actually had diverged from what they had wanted to spend on Phonevision. Primarily, these families felt that they had spent less than they had intended:

"Do you think your family actually <u>did</u> buy either <u>more</u> or <u>fewer</u> Phonevision programs than you really wanted to?"

	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Yes, more	9.4%	7.3%	8.3%	8.0%
Yes, fewer	47.0	37.0	42.0	40.6
No	42.9	55.0	49.0	50.7
Not sure	0.7	0.7	0.7	0.7
Total per cent	100.0%	100.0%	100.0%	100.0%
Number	149	151	300	300

*After one week of the test, there were nine families who had not purchased any Phonevision programs. An official of the Zenith Radio Corporation telephoned these families to determine whether anything was wrong, so that in these nine instances there was the possibility that families could misinterpret the inquiries as pressure to purchase programs.

**It is reasonable to assume that there were other families who also were under these compulsions, even though not thoroughly conscious of and able to verbalize them. But the relatively small number who could identify these trends within themselves should represent the extreme effect of these tendencies.

Those who felt they spent more than they wanted to were about equally divided between families who were influenced entirely or in part by conditions pertinent to the Phonevision test rather than to Phonevision itself and families whose increased expenditures appeared to be an inherent effect of Phonevision. In the first group were the 12 families who explained their excess expenditures in terms of the sense of obligation they felt to participate or the initial novelty of Phonevision, while in the second, were 13 families for whom the Phonevision programs proved so attractive, so superior to regular television programs or so adapted to special problems--entertaining all family members or controlling the children--that they found themselves spending more than they intended. It seems that factors of the latter sort would be pervasive, affecting expenditures for Phonevision whether under test or ordinary conditions, so that only the expenditures of the first group need be examined for test effect.

Somewhat analogously, reasons for spending less can be grouped into two main groups: First those which pertained to the special conditions of this particular test of Phonevision (i.e. the particular set of programs employed), and, second, the pervasive reasons which seem likely to affect the operation of Phonevision under any conditions. In the first group were families who said they bought less than they wanted to because they had seen so many of the movies already or because the movies were of the wrong type or poor quality. In the second group were families who said they spent less because (in order of frequency of mention) they were busy and had other social things to do; they couldn't afford to buy as many programs as they wanted; they were sometimes out of town; the programs were poorly scheduled for them because they worked nights, etc.; there was illness or other personal emergencies in their families which distracted them; and so forth.

The expenditures of these groups reveal a very interesting circumstance, however. Families who felt they spent about what they wanted to spent more on the average than families who spent more than they wanted to:

	Mean Weekly Expenditures
Families who bought more than they wanted to	
Because of pervasive reasons.	1.42 (13)
Because of (generic) test conditions.	1.44 (12)
Families who bought what they wanted.	1.78 (149)
Families who bought less than they wanted to	
Because of pervasive reasons.	1.41 (83)
Because of (particular) test conditions	1.24 (43)

Since only the behavior of the twelve families who bought more than they wanted to because of generic test conditions--conditions that might occur in any test of Phonevision--is relevant to assessing the role of uncontrollable test factors, it is at once obvious that generic test conditions had little effect on expenditures.

It is equally clear, however, that the set of circumstances which required that this particular test of Phonevision be conducted with relatively old movies led to conservative estimates of expenditures for Phonevision, since a substantial group did spend less because of the age and quality of the movies used. It must be borne in mind that a change in programming designed to satisfy people who objected to the programs used might simultaneously have increased dissatisfaction among those satisfied with present programming, but it is most improbable that the use of new movies would simply have resulted in an increase of expenditures on the part of those who preferred them no larger than the decrease of expenditures to be expected from those who found the change undesirable.

TABLE 49

TEST FAMILIES' REACTIONS TO THE USE OF NEWER MOVIES[a]

Reaction	Proportion of Families in Each Group with Indicated Reaction			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
If they hadn't seen any of the movies shown on Phonevision				
Would have bought more.	65.8	55.0	60.3	58.9
Would have bought same number .	32.9	42.3	37.7	38.9
Would have bought fewer	1.3	2.0	1.7	1.8
Don't know.	-	0.7	0.3	0.4
Total per cent.	100.0	100.0	100.0	100.0
Number.	149	151	300	300

[a]Based on the question: "If all the movies shown on Phonevision had been movies that no one in your family had seen before, do you think your family would have bought about the same number of Phonevision programs as you did, or do you think you would have bought more programs, or fewer programs?"

In point of fact there were among the test families only nine who reported that no member of their household had seen any of the movies used in the Phonevision test; the median report was that about a third of the ninety movies used had been seen by one or another household member.* Test families generally felt that their expenditures would have been higher if all the movies shown on Phonevision had been ones that they had not seen before (See Table 49 above), and, in general, the larger the number of Phonevision movies previously seen, the lower was the rate of expenditure for Phonevision. (See Table 50, page 116.)

It would thus appear that none of the conditions peculiar to tests involving human subjects in general or to this test in particular could have led to any substantial overestimation of the expenditures of the same families under non-test conditions. On the contrary, the participation of families with mixed and questionable motives, on the one hand, and the use of older movies, on the other, probably led to an underestimation of expenditures under ordinary operating conditions.

FACTORS IN PHONEVISION TEST EXPENDITURES

While not so directly relevant to an appraisal of the overall results of the Phonevision test, the differential response to Phonevision, in terms of expenditures, among various sub-groups participating in the test does serve to show the groups from whom Phonevision received greatest response. From these differences some inferences can be made about the basic appeals of Phonevision, while they also serve to underline the fact that the rates of expenditures observed during the Phonevision test cannot be uncritically projected to groups of different characteristics.

Three main groups of factors will be considered here: Family composition, socio-economic status and recreational preferences and habits.

*The questions asked were: "Were there any movies shown on Phonevision that someone in your family had seen before?" and "About how many of the movies shown on Phonevision had someone in your family seen before?"

TABLE 50

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO NUMBER OF PHONEVISION MOVIES PREVIOUSLY SEEN

Number of Phonevision Movies Previously Seen by at Least One Member of Household	Mean Weekly Expenditure for Phonevision in Group with Given Previous Program Experience			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
17 or less (under 20%)	1.57 (40)[a]	1.69 (46)	1.64	1.65
18-35 (20-39%)	1.81 (50)	1.54 (47)	1.68	1.64
36-53 (40-59%)	1.62 (36)	1.49 (25)	1.57	1.55
54 and over (60% and over)	1.49 (23)	1.18 (33)	1.31	1.27

[a]The number of parentheses is the number of cases on which the mean is based.

TABLE 51

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO FAMILY CHARACTERISTICS

Family Characteristic	Mean Weekly Expenditures in Group with Given Characteristic			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Number of persons in family:				
One or two	1.29 (36)[a]	1.37 (51)	1.35	1.35
Three	1.62 (44)	1.48 (45)	1.55	1.53
Four	1.79 (39)	1.66 (30)	1.73	1.71
Five or more	1.95 (30)	1.60 (25)	1.79	1.74
Number of adults (20 and over):				
One or two	1.57 (114)	1.43 (110)	1.50	1.48
Three or more	1.92 (35)	1.67 (41)	1.79	1.75
Number of children (under 20):				
No children	1.47 (54)	1.40 (73)	1.43	1.42
Children	1.75 (95)	1.59 (78)	1.68	1.66
One	1.64 (38)	1.65 (40)	1.65	1.65
Two or more	1.83 (57)	1.52 (38)	1.70	1.66
Age of children:				
All under 5 years	1.25 (21)	1.39 (29)	1.33	1.35
Some five and over	1.90 (74)	1.70 (49)	1.82	1.79

[a]The number in parentheses is the number of cases on which the mean is based.

TABLE 52

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO SOCIO-ECONOMIC INDICES

Socio-Economic Characteristic	Mean Weekly Expenditures in Group with Given Characteristic			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Annual family income:				
Under $5,000.	1.58 (45)[a]	1.47 (77)	1.51	1.49
$5,000 - $7,499	1.68 (49)	1.48 (45)	1.58	1.55
$7,500 and over	1.61 (43)	1.60 (24)	1.61	1.61
Educational level of head of household:				
Grade school.	1.52 (14)	1.57 (17)	1.55	1.56
Some high school.	1.87 (32)	1.70 (24)	1.80	1.77
High school graduation.	1.67 (41)	1.62 (43)	1.65	1.64
Some college.	1.56 (33)	1.36 (36)	1.46	1.43
College graduation and over . .	1.54 (29)	1.29 (31)	1.41	1.38
Income and educational level:				
$5,000 and over:				
High school graduation or less.	1.77 (50)	1.63 (30)	1.72	1.70
Some college and over	1.60 (54)	1.47 (44)	1.54	1.52
Under $5,000:				
High school graduation or less.	1.65 (37)	1.64 (54)	1.64	1.64
Some college and over	1.25 (8)	1.05 (23)	1.10	1.09

[a]The number in parentheses is the number of cases on which the mean is based.

Family Composition

From the data presented in Table 51, page 116, it is clear that large families spent a good deal more, on the average, for Phonevision than did families with fewer members, the difference in expenditures between a one-or-two-person family and a five-or-more-person family averaging $0.39 a week. Expenditures were relatively high for families with children, but further refinement of the data clearly indicates that this was true only in families with some children of at least five years of age. Even the fact that families with three or more adults spent more than families with fewer adults suggests the presence in the household of young adult children.

Socio-economic Status

Families with annual incomes of $7,500 more spent somewhat more on the average for Phonevision than did families of less means. Differences were not large however, there being a difference of $0.12 a week on the average between families with incomes of under $5,000 and families with incomes of $7,500 or more (See Table 52, above.)

Part of the reason for the relative smallness of this difference lies in the fact that families of lower educational background tended to spend more for Phonevision than did families whose heads had attended college. Since education and

income tend to be positively correlated, some of the income differential is obscured. In Table 52, page 117, however, an attempt has been made to examine each of these variables holding the other constant. While, in the light of the small number of cases available, the groupings must be coarse, it is apparent that, at each of the two income levels, families whose heads had less education spent more for Phonevision than did families whose heads had some college education. Conversely, within each educational level, families with higher incomes tended to spend somewhat more for Phonevision, although income differentials had a far sharper effect on the expenditures of families of college-educated heads than on families with heads of less educational status.

The combined influence of salient family characteristics and these socio-economic variables on Phonevision is presented in Table 53 below. Here, the number of cases gets so thin that data cannot be presented for the two strata separately and, even with the strata combined, some of the means are still based on a very small number of cases. Nevertheless, a number of relationships appear relatively certain:

1. Even when families of roughly comparable size and income or educational level are compared, it is consistently evident that families with children aged 5 to 19 spent more for Phonevision than did otherwise similar families with no children in this age group.
2. When groups differing only in income are compared, it appears that the expenditures of families of three or less persons did not vary much with income. Among the larger families, however, wealthier families spent more for Phonevision than did families with lower incomes.
3. At the higher income level, larger families spent more for Phonevision than smaller families, when age of children is held constant; at the lower income level, larger families spent less than smaller families.
4. As judged by the two comparisons for which there are a reasonable number of cases, families of lower educational background did spend more for Phonevision than families of similar composition but higher educational attainment.

It thus appears that the interest of the children in the home old enough to participate in family viewing was a central factor in buying Phonevision programs.

TABLE 53

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO FAMILY COMPOSITION AND SOCIO-ECONOMIC STATUS

Family Composition	Mean Weekly Expenditures in Each Socio-Economic Group with Given Family Composition[a]			
	Families with Incomes of $5,000 and Over	Families with Incomes Under $5,000	Families with Heads Having No College Education	Families with Heads Having at Least Some College Education
Families of four or more persons:				
With some children, 5-19. .	1.88 (59)[b]	1.66 (38)	1.95 (62)	1.52 (35)
With no children, 5-19. . .	1.78 (16)	1.18 (11)	1.47 (18)	1.60 (9)
Families of three or less persons:				
With some children, 5-19. .	1.75 (14)	1.75 (13)	1.58 (17)	2.05 (10)
With no children, 5-19. . .	1.37 (89)	1.41 (60)	1.52 (74)	1.26 (75)

[a]These figures are weighted averages, giving correct representation to the television owning and non-owning strata.

[b]The number in parentheses is the number of cases on which the mean is based.

Relatively large families, when they had sufficient income, bought Phonevision programs more frequently than similar families; where income was low, especially in terms of the size of the family it supported, expenditures for Phonevision were limited. Families of college background less often bought Phonevision, presumably because of differences in cultural standards and tastes.*

Recreational Preferences and Habits

It was shown earlier that volunteers for the Phonevision test showed some tendency toward a set of attitudes and recreational interests which could easily find Phonevision a satisfactory solution to their interest in movies, on the one hand, and their liking of the physical comfort and convenience of television entertainment, on the other, both of which, quite apart from Phonevision, had already merged in their interest in getting newer movies shown on television. Because most of these attitudes could not be obtained from test families except as they were intensified and modified by the Phonevision test and, even where an attempt was made to secure them retrospectively, they must be regarded as quite inexact, it is difficult to assess with any certainty the role of these taste factors in expenditures for Phonevision. The data that can be presented here leave much to be desired and should be regarded as suggestive rather than conclusive.

Table 54 below, brings together the relevant attitudes in relation to Phonevision expenditures. As shown there, test families who recalled that before the Phonevision test they had been interested in both going to the movies and watching television spent more for Phonevision, on

TABLE 54

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO RECREATIONAL PREFERENCES

Recreational Preference	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Adult pre-Phonevision test preferences included:				
Both going to movies and watching television	1.86 (64)[a]	1.64 (42)	1.76	1.76
Watching television but not going to the movies	1.53 (57)	1.43 (37)	1.49	1.48
Going to the movies but not watching television	1.31 (17)	1.41 (45)	1.38	1.39
Neither	1.59 (11)	1.47 (27)	1.51	1.49
Mentioned physical comfort and convenience of television	1.63 (88)	1.53 (96)	1.57	1.56
Did not mention	1.69 (61)	1.45 (55)	1.58	1.54
Mentioned wanting newer movies on television	1.70 (67)	1.58 (68)	1.64	1.62
Did not mention	1.61 (82)	1.43 (83)	1.52	1.50
Criticized television commercials	1.73 (99)	1,53 (93)	1.63	1.60
Did not criticize television commercials	1.50 (50)	1.45 (58)	1.47	1.47

[a]The number in parentheses is the number of cases on which the mean is based.

*It is noteworthy that these same tendencies apply as well to interest in and purchase of television as they do to Phonevision itself.

the average, than did families whose preferences included only one or the other or neither. Thus, there is some suggestion that families who felt the opposed pulls of the movie theater and the home television set did turn to Phonevision more often. On the other hand, appreciation of television for the comfort and convenience it permits did not relate to expenditures at all, although it should be remembered that it is the post-test attitude which is being employed here. Finally, those who either before or after seeing Phonevision programs came to want newer movies on television and those who before or after seeing Phonevision had become critical of the advertising policies of ordinary television programs tended to spend more for Phonevision than those who did not express these attitudes.

In terms of actual habits of movie attendance, it appears that families where the adults were most frequent or least frequent movie-goers spent the most for Phonevision. (See Table 55 below.) The data for children's movie attendance do not permit an examination of the two extremes of movie attendance, but do also indicate highest Phonevision expenditures in families where the children actually attended the movies most frequently. It has already been indicated that test families' reports of their movie attendance may not be reliable. Any tendency for the families who spent most for Phonevision to place their movie attendance at either extreme simply because they were projecting --positively or negatively--their reactions to Phonevision would tend to produce this relationship between movie attendance and Phonevision expenditures as an artifact, without there being any real relationship. It is difficult to believe that the entire relationship shown is artifactual, however, when the differences are so large--the expenditures of most frequent movie-goers were $0.36 a week above mean expenditures, and when it is entirely plausible to assume that people who enjoyed movies, as indicated by frequent attendance, and people who would enjoy them, but found themselves unable to go to them very often for one reason or another, constituted the two best markets for Phonevision.

Implicit in all the relationships presented so far is the fact that families with their own television sets spent more on the average for Phonevision than did families who had no sets of their own. No

TABLE 55

RELATION OF WEEKLY PHONEVISION EXPENDITURES TO USUAL MOVIE ATTENDANCE

Usual Movie Attendance	Mean Weekly Expenditures in Given Movie Attendance Group			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Adults				
Twice a week or more.	2.15 (26)[a]	1.80 (32)	1.96	1.91
Once a week	1.60 (38)	1.55 (47)	1.58	1.57
Two or three times a month. . . .	1.50 (27)	1.07 (23)	1.31	1.24
Once a month.	1.03 (19)	1.15 (18)	1.09	1.11
Less than once a month.	1.77 (39)	1.62 (31)	1.70	1.68
Children, 5-19				
Twice a week or more.	2.32 (15)	2.03 (16)	2.17	2.13
Once a week	1.90 (39)	1.46 (18)	1.76	1.70
Less than once a week	1.57 (20)	1.65 (15)	1.61	1.62

[a]The number in parentheses is the number of cases on which the mean is based.

matter what relationship has been shown, it has generally been true that the expenditures of the various sub-groups of television-owning test families exceeded those of the comparable sub-groups of non-owners. In fact, even if the major compositional differences between television owners and non-owners--family size, number of children, income and education--are all controlled simultaneously by a process of standardization (using the weights presented in Table 6, pages 41 and 42), the size of the difference in mean expenditures between the groups is in no way altered.* It is, however, possible that if the interrelations of these compositional factors and motives for entering the test could be simultaneously controlled some of the differences would vanish, but the number of cases available makes this impracticable.**

Some approximation of the factors making for this difference can be inferred, however, from the relation of expenditures to plans to own television. There were among the test families, first, the group of "old" television owners--those who had had sets at the time of application for the test and so had owned sets for at least eleven months before interview; these were the families who usually had the highest expenditures for Phonevision. But, secondly, there were the group of "new" television owners--those who had owned sets for less than eleven months. Since one effect of the test was to postpone the purchase of sets, the 18 families who did purchase sets cannot be regarded as representative of "new" television owners; instead both these families and the 56 families who said they would have owned sets by the time of interview if it had not been for having the test set are taken to represent "new" owners. This group's expenditures for Phonevision were only slightly lower than those of "old" owners.***

The remaining families, who would not have been television owners by the Spring of 1951 had, on the average, much lower rates of expenditure for Phonevision than either of the two groups of television owners. Even among these families,

TABLE 56

RELATION OF WEEKLY EXPENDITURES FOR PHONEVISION TO TELEVISION OWNERSHIP STATUS

Television Ownership Status	Mean Weekly Expenditures	
Owned set at time of application	1.65 (149)[a]	
Did not own set at time of application		1.50 (151)
Would have owned by time of interview, except for test	1.59 (74)	
Would not have owned by time of interview		1.41 (77)
Intended to get set within a year of interview	1.53 (46)	
Intended to get set later	1.38 (27)	
Did not intend to get set	0.125(4)	

[a]The number in parentheses is the number of cases on which the mean is based.

*From the standpoint of estimation from samples, it should be pointed out that the overall mean difference between television owners and non-owners of $0.15 is not statistically significant; with the number of families who took part in the test, the probability of the occurrence of a difference this great is .18. The consistency of these differences through a number of relationships does strengthen the probability that a true underlying difference exists.

**For example, families who entered the test to secure the use of a television set were lower expenders, but they also tended disproportionately to be larger families (which tend toward higher expenditures) and to have lower incomes (which tend toward lower expenditures).

***It is worth noting that mean expenditures of the families who had actually bought sets ($1.60) were not appreciably different from the mean expenditures of those who merely said they would have bought sets ($1.59).

however, those who planned to get sets within a year bought Phonevision programs at a rate only slightly below that for "new" television owners, while it was only those who did not intend to get sets for at least a year who were substantially lower in expenditures. (See Table 56, page 121.)

In effect, this is another way of saying that those who liked television most responded best to Phonevision, and it is notable that even though there were only four test families who liked television so little that they never intended to buy a set, these four families together in a four week period spent only $2.00 for Phonevision, for a mean weekly family expenditure of less than $0.13. Looked at in terms of expressed attitudes toward television, the relationship is equally clear:

	Mean Weekly Expenditures	
	Families Who Liked Television "Very Much" Before Phonevision Test	Families Who Didn't Like Television This Much Before Phonevision Test
All families		
Weighted	1.69	1.41
Unweighted	1.69	1.44
Families with television sets at time of application	1.72	1.54
Families without television sets at time of application	1.66	1.36

It thus appears that the primary factor in differences in expenditures for Phonevision between the two major strata were differences in liking for television and interest in owning television sets.

ATTITUDES OF PARTICIPANTS TOWARD THE PHONEVISION TEST

Although actual expenditures for Phonevision constitute an effective index of the reception of Phonevision, they do not in themselves indicate whether the level of expenditure constitutes a relatively favorable or unfavorable reaction to Phonevision. In order to assess this more qualitative side of the Phonevision test, what test families said about the test may be put alongside of what they did during the test.

Expectations about the Test

Test families approached the test with their hopes high. Despite the fact that there had been considerable publicity given to the Zenith Radio Corporation's difficulty obtaining suitable motion pictures for the test, and even though all the publicization of the Phonevision test was in terms of movies, many families were expecting (or hoping for) not only new movies but also the televising of Broadway plays, key sports events, concerts and so forth. Thus, when asked what they had expected Phonevision to be like, over half the test families indicated that they had been expecting Phonevision to have features which the test did not, objectively, provide, while only 5.3% indicated that their expectations of Phonevision were more than met by the test.* (See Table 57, page 123.) The leading disappointments, as already suggested, were the age of the movies used, the lack of other types of entertainment and the limitation of choice of movies--some families having made the logical extension of Phonevision to a system whereby they would be able to call up any theater in the city and order its programs.

*These people said they had not expected to be given such excellent television sets, had not anticipated how good the reception would be or had assumed there would be fewer movies to choose from, etc.

TABLE 57

EXPECTATIONS ABOUT THE PHONEVISION TEST[a]

Expectations about Phonevision Test	Proportion in Each Group Reporting Given Expectation			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
Had expectations that were disappointed.	62.4	54.3	58.3	57.2
Had expectations that were exceeded.	5.3	5.3	5.3	5.3
Had only realistic expectations . .	26.2	34.4	30.3	31.5
Didn't know what to expect.	7.4	7.3	7.4	7.3
Total per cent[b]	101.3	101.3	101.3	101.3
Disappointed expectations:				
Expected newer movies than were shown, ...	36.3	36.4	36.3	36.4
Expected programs other than movies--Broadway plays, sports events, concerts, etc	28.1	22.5	25.3	24.5
Expected to be able to order any movie playing in city	11.4	13.9	12.7	13.0
All other disappointments	13.4	5.3	9.3	8.2
Didn't have any disappointed expectations.	37.6	45.7	41.7	42.8
Total per cent[b]	126.8	123.8	125.3	124.9
Number.	149	151	300	300

[a]Based on the question: "Do you happen to remember now what you thought about the Phonevision test, when you first heard about it? I mean....When you first applied for the test, what did you expect Phonevision would be like? (What else did you expect?)"

[b]Percentages total more than 100.0 because some respondents had more than one kind of expectation.

Reactions to Phonevision

It would, however, be a mistake to assume that, because Phonevision did not fulfill these more grandiose hopes, test families were, by and large, disappointed in it. Quite the contrary, about three-fifths of the families said that Phonevision turned out to be as good as they expected it to be, while a fifth said they didn't like it as well as they expected to and another fifth actually volunteered the comment that it was better than they expected it to be. Families who had been expecting more of Phonevision than the test fulfilled were somewhat more likely to say that they hadn't liked Phonevision as well as they expected to, but even among them, the substantial majority said Phonevision was as good as or better than expected. (See Table 58, page 124.) It thus appears likely that when families talked about what they had expected Phonevision to be like, they remembered most vividly those of their expectations that proved to be contrary-to-fact, but when they reacted to Phonevision they did so in terms not merely of their incorrect initial assumptions but of the actual character of Phonevision as they had

TABLE 58

REACTIONS TO THE PHONEVISION TEST[a]

Reaction to Phonevision	Proportion in Each Group Reporting Given Reactions			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
ALL FAMILIES				
Was better than expected (volunteered)	19.5	21.8	20.7	21.0
As good as expected	61.0	56.4	58.6	58.0
Didn't like as well	19.5	21.8	20.7	21.0
Total per cent.	100.0	100.0	100.0	100.0
Number.	149	151	300	300
ALL FAMILIES WHO HAD DISAPPOINTED EXPECTATIONS				
Was better than expected (volunteered)	16.1	19.5	17.7	18.2
As good as expected	61.3	45.1	53.7	51.4
Didn't like as well	22.6	35.4	28.6	30.4
Total per cent.	100.0	100.0	100.0	100.0
Number.	93	82	175	175

[a]Based on the question: "Did Phonevision turn out to be as good as your family expected it to be, or didn't you like it as well as you thought you would?"

observed it, as well. It may even be said, however, that, to succeed as well as it did in the face of these great expectations which it could not satisfy, Phonevision did have to offer a great deal.

What Phonevision offered and failed to offer, so far as these test families were concerned, will be discussed shortly, but, before this topic is dealt with, it should be pointed out that these impressionistic reactions to Phonevision do sharply reflect actual behavior with respect to Phonevision. These attitudes correlate with expenditures and, in doing so, indicate at one and the same time that the attitudes are meaningful appraisals of the success of the Phonevision test and that the size of expenditures reflects degrees of favorableness of response to Phonevision. On the average, there was a difference of $0.77 a week in the expenditures of those who didn't like Phonevision as well as they expected to and those who liked it better than they anticipated:

	Mean Weekly Expenditures		
	Families Who Found Phonevision Better than They Expected	Families Who Found Phonevision as Good as They Expected	Families Who Didn't Like Phonevision as Well as Expected
All Families			
Weighted.	1.93	1.56	1.16
Unweighted.	1.89	1.59	1.21
Families with television sets at time of application.	1.76	1.70	1.38
Families without television sets at time of application	2.01	1.47	1.05

This relationship indicates that the attitudes expressed were meaningful appraisals of the success of the Phonevision test and, at the same time, gives support to the idea that the size of expenditures may be taken as a rough index of the degree of favorableness of response to Phonevision.

The Pros and Cons of Phonevision

The features of Phonevision which test families found appealing and disappointing are presented in Table 59 below, and Table 60, page 126. The two major appeals which Phonevision, as they saw it in the test,

TABLE 59

APPROVED FEATURES OF PHONEVISION AND THE PHONEVISION TEST[a]

Approved Feature	Proportion in Each Group Approving Given Feature			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
PROGRAM PRESENTATION				
Programs were uninterrupted, free of commercials	53.0	45.7	49.3	48.3
Programs were complete, not cut to fit the time	5.4	4.0	4.7	4.5
PROGRAM TYPE				
Phonevision movies were better than others on television, general	16.8	14.6	15.7	15.4
Phonevision movies were a good choice, gave variety, etc . .	13.4	6.6	10.0	9.0
Phonevision movies were the best of the older movies. . .	4.0	6.6	5.3	5.7
Phonevision movies were newer than others on television . .	8.7	3.3	6.0	5.2
NON-PROGRAM FEATURES OF PHONEVISION				
Comfort, convenience of having this entertainment at home. .	40.3	53.0	46.7	48.5
Good reception and other technical transmission features .	26.9	21.2	24.0	23.2
Economy of having this entertainment at home.	8.0	13.9	11.0	11.8
Promotion of sociability; strengthening of family bonds	8.0	10.6	9.3	9.7
TEST ARRANGEMENTS				
Various aspects of the test (apart from Phonevision itself) were well handled . . .	14.1	11.9	12.7	12.7
MISCELLANEOUS	7.4	6.6	7.0	6.9
NOT ASCERTAINED	3.4	4.6	4.0	4.2
Total per cent[b]	209.4	202.6	205.7	205.1
Number.	149	151	300	300

[a]Based on the question: "What did you like (Was there anything you liked) about Phonevision? (What else did you like?)"

[b]Percentages total more than 100.0 because many respondents approved of more than one feature.

TABLE 60

DISAPPROVED FEATURES OF PHONEVISION AND THE PHONEVISION TEST[a]

Disapproved Feature	Proportion in Each Group Disapproving Given Feature			
	Families with TV Sets at Time of Application	Families without TV Sets at Time of Application	All Families	
			Unweighted	Weighted
PROGRAM PRESENTATION				
Poor time scheduling; conflicted with other programs, etc.	5.4	5.9	5.7	5.7
Programs were incomplete; lacked shorts, newsreels, etc	4.0	1.3	2.7	2.3
PROGRAM TYPE				
Age of movies used.	55.7	47.0	51.3	50.1
Poor choice, lack of variety in movies used.	8.0	11.9	10.0	10.5
Lack of programs other than movies: plays, sports, etc.	10.1	8.6	9.3	9.1
Poor quality of movies used	9.4	7.9	8.7	8.4
NON-PROGRAM FEATURES OF PHONEVISION				
Reception difficulties.	5.4	4.6	5.0	4.9
MISCELLANEOUS CRITICISMS.	5.4	3.3	4.3	4.0
NO CRITICISMS: Liked everything.	19.5	19.2	19.3	19.3
NOT ASCERTAINED	8.7	17.9	13.3	14.6
Total per cent[b]	131.6	127.6	129.6	128.9
Number.	149	151	300	300

[a]Based on the question: "What was (Was there anything) disappointing about Phonevision? (What else was disappointing?)"

[b]Percentages total more than 100.0 because some respondents expressed more than one disappointment.

had for these test families were the high value they placed on being able to have such entertainment in the comfortable and convenient surroundings of their own homes and the pleasure they derived from seeing full television programs with no interruption by commercials. Third in importance was the improvement over regular television in the type of program made available, although the age and kind of movies shown in the test were far more often grounds for dissatisfaction with it. In addition to these three major categories, test families mentioned their pleased surprise over the good reception and clarity of the pictures,* their approval of the way general test arrangements were handled, the economy of Phonevision entertainment and its role in promoting sociability. It is noteworthy that almost all of the criticism centered around the particular programming of the test, with almost no objection to intrinsic features of Phonevision.

*It is likely that the use of movie prints especially prepared for television transmission accounted for much of this. Insofar as this satisfaction is attributable to the compulsory use of roof antennae and to the use of a television set with a screen larger than some families were accustomed to, however, it must be discounted as a test factor which would not hold true under ordinary commercial operation of Phonevision.

Thus, what Phonevision offered to these families corresponded fairly well with what they were seeking in taking part in the Phonevision test, insofar as they had any intrinsic interest in Phonevision, as may be seen by referring to Table 46, page 109; namely, an improvement in television programming both as to quality of programs and their presentation and a solution of the conflict between their preference for entertainment in the home and their preference for the kind of entertainment not usually available in the home.

If there is any doubt left about the favorable reception which these families by and large gave Phonevision, it may be noted here that all but 12 of them were sure that, if they had it to do over, they would still decide, in the light of what they had seen of Phonevision, to take part in the test, and seven of these 12 based their uncertainty or decision not to take part simply on the fact that they weren't satisfied with the use of old movies. In fact, all but five of the test families said they would sign up for Phonevision immediately if it were commercially available. These data will be presented more fully in the next major section, where they serve to evaluate city-wide reactions to Phonevision; they are cited here simply to illustrate in one further way the extent to which test families themselves endorsed Phonevision.

CONCLUSION

Expenditures for Phonevision began at a high of over three dollars per week per family, but gradually leveled off, with an upturn toward the end of the test, at about $1.55 a week, from which it can be estimated that other families like the test families would, under the same conditions, have spent, on the average, between $1.43 and $1.67 a week. (Because of the possible biases introduced by substitution, it is probably more likely that their expenditures would have been between $1.43 and $1.55.)

The conduct of this test of Phonevision introduced conditions which would not occur if Phonevision were simply a service available in an ordinary commercial way to anyone who wanted it. Factors which tended to make families spend more than they would have under normal circumstances were the consciousness that they were participating in a test which attendant feelings of obligation and responsibility for helping the test succeed, as well as the mechanics of the conduct of the test which led to the presence of two television sets in many test homes. These factors tended to influence the behavior of relatively few of the test families, so far as it can be determined, so that their overall effect leads to only a small overestimation of expenditures for Phonevision. On the other hand, the fact that many of the test participants had, to begin with, little intrinsic interest in Phonevision, but had volunteered in order to get the use of a television set or because social prestige attached to being selected means that expenditures are underestimated, compared with what the expenditures of a group interested in Phonevision would have been. From the extent to which these divergent factors operated, it seems likely that the countertendencies toward over-and underestimation either balanced, or else there was a slight preponderance in the direction of underestimating normal expenditures, given the surrounding conditions of the test.

These surrounding conditions of the test --factors which might easily vary from one test to another, but which become crucially significant because there has been only one test--again probably worked in opposite directions. On the one hand, the occurrence of the test in the winter months probably resulted in maximum estimates of expenditures, given the type of program used and all the other conditions of the test. But the use of relatively old movies on the Phonevision programs undoubtedly led to much lower estimates of expenditures than would occur if the programs had been newer.

In balance, then, it appears likely that the expenditures made for Phonevision during the weeks selected as normal are probably a quite conservative estimate of what families like these test families would spend for Phonevision in the winter months under its normal commercial operation.

Statements about the amount of money spent do not in themselves demonstrate what the subjective reactions of the

participants were, even though one way of judging the success of such a program as Phonevision can be to examine expenditures without reference to attitudes. From this other standpoint of how participants felt, the Phonevision test can be regarded as quite successful. Even in the face of expectations and hopes about Phonevision which the test itself did not fulfill, the great majority of participants enjoyed Phonevision, would take part in the test again, and would subscribe to Phonevision if it were commercially available. The reasons for the success of the Phonevision test reside primarily in the fact that, even in the limited form in which it was tested, Phonevision did succeed in supplying these families with some of the values that had attracted them to Phonevision in the first place--a better quality of entertainment without leaving the comfort of their homes.

From the correlation of subjective reactions to the test with actual expenditures, it is clear that differences in expenditures, other things being equal, can be interpreted as representing differences in degree of approval of Phonevision. On the basis of this, it may be said that Phoenvision received best response from relatively large families (provided they had the means to pay for it) and, especially those families who had children old enough to watch the programs too. Similarly, Phonevision appealed most to people who enjoyed both television and movies, so that, probably because of differences in tastes and interests, it had less appeal for the families of the college-educated. Finally, it had somewhat more appeal for those who directly expressed a desire for the two leading features of Phonevision--newer movies on television and television programs without commercial sponsorship.

It is important to note that many of the variables which related positively to expenditures for Phonevision were factors which also tended to distinguish test volunteers from other families. Thus, it had earlier been shown that the test volunteers tended to be complete family groups of higher socio-economic status, with some recreational attitudes which could well have led them to view Phonevision favorably. Since these same tendencies are related to expenditures for Phonevision it would begin to appear that Phonevision not only appealed to relatively fewer families of certain types, but also had less attraction for families of these types to whom Phonevision did appeal sufficiently to lead to volunteering for the test. Thus, variables of this kind not only serve to indicate some of the determinants of expenditures for Phonevision, but emphasize as well that the unrepresentativeness of test families in relation to the city as a whole did have the effect of making their expenditures for Phonevision higher than those of a representative sample would have been. It is because of the existence of such relationships that the behavior of Phonevision test families cannot be immediately extrapolated to the city as a whole, but requires the more complex process of estimation that will be described in Chapter VI of this report.

V

CITY-WIDE REACTIONS TO PHONEVISION

FAMILIARITY WITH PHONEVISION

Phonevision had come to the attention of a sizeable majority of the residents of Chicago by the Spring of 1951--73.2% of the respondents said they had heard of Phonevision and 62.7% could give some explanation of what Phonevision was about.* Over half of those who knew what Phonevision was--33.2% of the city--had learned about Phonevision prior to the start of the test on January 1, 1951. (See Table 61.)

Apparently because Phonevision is, after all, a new development in television, television owners had attended more closely to it; in the city as a whole, 85.3% of the television owners had heard about Phonevision, 77.4% had some idea of what it was, and 42.1% had known about Phonevision before the test began. Among non-owners, on the other hand, 57.4% had heard of Phonevision, 43.4% had some grasp of what it was, and 21.5% had known about Phonevision before the test began.

As might be expected in the light of the location of the test and the canvassing for test participants that went on within the Lakeview-Lincoln area, residents of this area were even more likely than the city as a whole to have heard of Phonevision and to have some understanding of it, and over half the families in the area (52.7%) had learned about Phonevision before the test began.

Impressive as this extensive familiarily with Phonevision is,** it is probably an underestimate of the amount of acquaintance with Phonevision. Two lines of evidence support this view: in the first place, Table 61 shows that, among the sample of Phonevision test volunteers, all of whom had heard of Phonevision sufficiently to apply for participation in the test, only 92.0% reported themselves as having learned about the test before it began, and 4.4% either reported that they hadn't heard of Phonevision or couldn't explain it. This underreporting of familiarity with Phonevision could have come about in one of three ways: since only one individual in each family was interviewed it might be that it was someone else in the family who had become familiar with and applied for participation in the Phonevision test without any communication with the person interviewed; it might also be that some people had forgotten that they had applied, or some may have forgotten or never known exactly what they were applying for. While all of these factors probably played some part, the fact that there was more forgetting or lack of understanding among the non-television owners than among the owners suggests that the latter factor was certainly operating. In any event, it is clear that among these test volunteers, the measure of familiarity with Phonevision used underestimated their initial acquaintance with it.

*An explanation was regarded as satisfactory if the respondent knew at least that Phonevision involved television programs for which a charge was made. Those who could not give this much of an explanation were about equally divided between people who said they had heard of it, but really didn't know what it was and those who misidentified Phonevision with a system whereby one could see the person to whom he was talking on the telephone.

**Surveys have repeatedly shown an extensive lack of information about topics of presumably public interest. For instance, in 1950, national surveys showed that: 70% had heard of the hydrogen bomb, while 52% knew anything about it; 66% knew who Dean Acheson was; 54% had heard of Voice of America broadcasts; 46% could name at least one of the first four books of the New Testament correctly.

TABLE 61

FAMILIARITY WITH PHONEVISION[a]

Degree of Familiarity	Proportion in Each Group with Given Familiarity			
	Total City	City Exclusive of Lakeview-Lincoln	Lakeview-Lincoln	
			All Families	Phonevision Test Volunteers[b]
ALL FAMILIES				
Had not heard of Phonevision.	26.8	27.1	23.6	2.2
Had heard of Phonevision				
Could not explain it correctly. . .	10.5	10.9	6.3	2.2
Could explain it at least partially correctly				
Learned about it after start of test.	29.5	30.5	17.4	3.6
Learned about it before test. .	33.2	31.5	52.7	92.0
Total per cent.	100.0	100.0	100.0	100.0
Number.	1526	1404	735	137
FAMILIES WITH TELEVISION SETS				
Had not heard of Phonevision.	14.7	15.1	9.3	1.0
Had heard of Phonevision				
Could not explain it correctly. . .	7.9	8.2	4.1	1.0
Could explain it at least partially correctly				
Learned about it after start of test.	35.3	36.5	19.4	4.1
Learned about it before test. .	42.1	40.2	67.2	93.9
Total per cent	100.0	100.0	100.0	100.0
Number	868	804	387	97
FAMILIES WITHOUT TELEVISION SETS				
Had not heard of Phonevision.	42.6	43.1	37.4	5.0
Had heard of Phonevision				
Could not explain it correctly. . .	14.0	14.3	10.9	5.0
Could explain it at least partially correctly				
Learned about it after start of test.	21.9	22.5	15.8	2.5
Learned about it before test. .	21.5	20.1	35.9	87.5
Total per cent	100.0	100.0	100.0	100.0
Number	658	600	348	40

[a]Based on the questions: "Have you ever heard anything about Phonevision?", "(If 'Yes') As far as you know, what is Phonevision? (How does it work?) (Do you know anything else about it?)", and "(If 'Yes') "Where did you hear or find out about Phonevision? (Where? When? What did it say?) (Any other way or place?)"

[b]Phonevision test volunteers had presumably all heard about Phonevision before the test, since they all applied, in actuality. Their retrospective answers are presented here to give some indication of the errors in such data.

In the second place, however, there were respondents who said they hadn't heard of Phonevision or who couldn't explain it correctly, who proved to be familiar with the telecasts on Channel 2 and knew what they were about. Thus, if these respondents who knew and understood Phonevision, though not its name, were added to those who were able to explain the work Phonevision, the estimate of acquaintance with Phonevision in the city would rise from 62.7 to 74.0%.

Extent of Viewing of Phonevision

From the start of the Phonevision test on January 1, 1951, the jittered Phonevision programs shown on Channel 2 in Chicago attracted a good deal of attention. A survey conducted on January 9th and 10th of a random sample of the residential telephone subscribers in Chicago* showed that, at this period of the test, about 1.5% of the television sets in use at the times of Phonevision showings were tuned to the Phonevision channel, while 62.2% of the households with television sets had already viewed Phonevision at least once. Even at this early period, the majority of those who had watched Phonevision at all had watched it more than once, and over a third of them had watched Phonevision within a day of the interview. For those who had, by the second week of the test, watched Phonevision at all, the median time for which they had last viewed Phonevision was five minutes, with 23.8% of those who had viewed at all (14.8% of all television owners) having last viewed Phonevision for at least a half-hour.

By the end of the Phonevision test, 78.8% of the families with television sets had watched the jittered picture at least once, and 27.7% of the families without television sets had also seen it.** This rather wide-spread viewing of Phonevision indicates the interest and curiosity about it, at least initially, and the fact that almost two-thirds of the television owners viewed Phonevision more than once suggests that the Phonevision programs themselves, even in the jittered form, were finding an interested audience.*** Even if all the families who watched Phonevision only once, no matter how long they viewed it, are regarded as having been only initially curious, and all families who watched Phonevision more than once, but never for more than five minutes, are regarded as mere casual viewers in the course of channel-tuning, there still remained a substantial proportion--27.6% of the television owners--who watched Phonevision more than once and, at least once, watched it for more than a casual one-minute glance. In fact, one-eigth of the television-owning families (12.4%) had watched at least one complete Phonevision program. (See Table 62.)

This curiosity and interest in the actual Phonevision programs was, if anything, more wide-spread in the rest of the city than it was in the Lakeview-Lincoln district itself, with the exception that Phonevision test volunteers were more likely to have seen Phonevision at all and to have watched it for sizeable periods of time than were other families--fully 21.7% of the television owners among the volunteers had watched at least one complete program.

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*A random sample of 1,632 residential telephone listings was drawn, and interviews were obtained by telephone from the homes of 98.5% of this sample. The interview schedule and instructions are shown in Appendix B, Exhibit III.

**While these figures, collected after the Phonevision test, include both telephone subscribers and non-subscribers, they are, nevertheless, comparable with the earlier data, since inclusion of the non-subscribers does not appreciably alter them. That is, the corresponding figures, based on telephone subscribers only, would be 79.2% and 27.2% respectively.

***It is probable that this program interest held true only during the first nineteen days of the test, during which time only the picture was jittered. The jittering of the sound as well after that time probably substantially eliminated the jittered Phonevision audience.

TABLE 62

FREQUENCY AND LENGTH OF PHONEVISION VIEWING[a]

Frequency and Length	Proportion in Each Group with Given Frequency and Length of Phonevision Viewing								
	All Families			Families with Television Sets			Families without Television Sets		
	City	Lakeview-Lincoln		City	Lakeview-Lincoln		City	Lakeview-Lincoln	
		All Families	Phonevision Test Volunteers		All Families	Phonevision Test Volunteers		All Families	Phonevision Test Volunteers
None	43.3	48.4	26.3	21.2	25.8	14.4	72.3	73.6	55.0
One time only	(11.1)	(11.7)	(19.7)	(13.8)	(12.9)	(17.5)	(7.3)	(10.3)	(25.0)
Five minutes or less at most	7.6	8.8	15.3	9.0	9.8	13.4	5.8	7.7	20.0
10-20 minutes at most.	1.5	1.5	2.2	2.1	1.0	1.0	0.5	2.0	5.0
30-60 minutes at most.	0.8	0.4	-	1.2	0.3	-	0.5	0.6	-
Entire program	1.2	1.0	2.2	1.5	1.8	3.1	0.5	-	-
More than once	(45.6)	(39.9)	(54.0)	(65.0)	(61.3)	(68.1)	(20.4)	(16.1)	(20.0)
Five minutes or less at most	24.3	23.3	27.0	34.2	36.5	32.0	11.6	8.6	15.0
10-20 minutes at most.	6.8	6.1	7.3	9.9	8.5	10.3	2.7	3.5	-
30-60 minutes at most.	4.4	3.7	5.1	6.8	5.4	7.2	1.2	1.7	-
Entire program at least once.	6.9	6.3	13.9	10.9	10.4	18.6	1.7	1.7	2.5
Not ascertained.	3.2	0.5	0.7	3.2	0.5	-	3.2	0.6	2.5
Total per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1526	735	137	868	387	97	658	348	40

[a]Based on the questions: "Have you, or anyone in your family, ever happened to see those jittered Phonevision pictures on Channel 2--the Zenith experimental television station?", "(If 'Yes') About how often has your family looked at the jittered Phonevision programs?", and "(If 'Yes') What was the longest, at any one time, that anyone in your family looked at the jittered Phonevision programs?"

THE QUESTION OF SUBSCRIPTION TELEVISION

Since Phonevision is, in essence, a system of subscription television, general attitudes toward subscription television supply the background against which public reception of Phonevision on a commerical basis may be judged. In the Spring of 1951, a majority of the families in Chicago reacted favorably to the idea of having some television programs on a paid subscription basis. As over against the 57.9% who favored subscription television in this unqualified fashion, there were 28.8% who opposed it and 13.3% who had not arrived at an opinion on the subject. When the condition was introduced that the television programs on a subscription basis would be programs that would not otherwise appear on television, the proportion favoring subscription television under these conditions rose to 66.2% with

16.8% opposed and 17.0% undecided. In other words, among families who had an opinion, the general idea of subscription television was approved by 2 to 1, while the use of subscription financing to make available programs not ordinarily available was approved by about 4 to 1. (See Table 63.)*

Subscription television was favored, by those who had favored it in its more general form, primarily because people felt that it would result in an improvement in television programming, either generally, or by making feasible the presentation of types of entertainment that were not current on regular television, or by eliminating commercials, and they were willing to help finance such improvements. Secondaily, the proponents of subscription television simply assumed that it would bring other forms of commercial entertainment into the home via television and stressed the convenience and economy of obtaining these amusements in the home. (See Table 64.) Those who had generally opposed subscription television indicated that television was already a relatively expensive investment, made in order to economize on entertainment, and they were unwilling or financially unable to support any increase in the costs of television entertainment; then, too, some of these opponents feared that any introduction of subscription television would lead to a discriminatory system--either that all programs would ultimately be on a fee basis or that all desirable programs would require payment, thus either eliminating lower income families from the television audience or restricting them to second-class fare; and, finally, there were those who either were already satisfied with entertainment commercially-sponsored television provided or felt that the cost of improvement should be borne by the sponsors rather than the audience. (See Table 65.)

Endorsement of subscription television is not quite the same as personal willingness to pay for programs; in fact, it may have been noted that some of those who endorsed subscription television did so with the explicit statement that they had no interest in it, but saw no reason to oppose it if others wanted it. The proportions who felt that they might pay for such programs, however, closely approximated the proportions who favored limited subscription television: 65.5% of the families in the city said they might pay, 20.9% said they would never pay and 13.6% weren't sure. (See Table 66.) Those who had favored subscription television either unconditionally or in the explicitly limited form were most likely to feel that they might pay for some programs, with about four-fifths of them expressing this opinion. Only among those opposed to limited subscription television did a majority indicate that they would never buy such programs, and, even in this group, 28.7% said they might pay. (See Table 67.)

While these data are presented here primarily to depict city-wide opinions on the issues involved in Phonevision and subscription television generally, it is also well to note, insofar as these facts bear on the representativeness of the Phonevision test results, that the Lakeview-Lincoln district did not differ from the city as a whole in either attitude toward subscription television or willingness to pay for such programs. Test volunteers and participants were, however, far more favorably disposed and willing to pay than were average families, and, as will be shown shortly, their greater support of subscription television both in theory and practice was not to be wholly explained in terms of the differences in characteristics and attitudes that have already been assigned to them, but rather constituted another distinguishing trait.

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*The discussion of subscription television has primarily been in terms of the more limited conception of charging for the televising of programs which are presented elsewhere for a fee, and, as will shortly be seen, many respondents were assuming this restriction when they gave seemingly unqualified support to subscription television. The discussion in the test will, therefore, concentrate on the division of opinion about subscription television in this narrower sense, although the data are presented in the tables in a form which will permit of either interpretation of the issue.

TABLE 63

OPINIONS OF SUBSCRIPTION TELEVISION[a]

Opinion of Subscription Television	Proportion in Each Group with Given Opinion			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families
ALL FAMILIES				
Favored unconditionally	57.9	58.5	75.9	93.2[b]
Opposed conditionally (i.e. favored for programs not otherwise available)	8.3	6.8	5.3	2.3
Opposed at first, not sure about condition	3.7	3.3	1.6	0.4
Opposed unconditionally	16.8	15.3	10.6	-
Weren't sure or had no opinion	13.3	16.1	6.6	4.1
Total per cent	100.0	100.0	100.0	100.0
Number	1526	735	137	300
FAMILIES WITH TELEVISION SETS				
Favored unconditionally	59.0	57.1	75.3	92.2
Opposed conditionally (i.e., favored for programs not otherwise available)	10.2	8.4	4.1	2.4
Opposed at first, not sure about condition	3.4	3.4	3.1	-
Opposed unconditionally	18.6	19.5	12.4	-
Weren't sure or had no opinion	8.8	11.6	5.1	5.4
Total per cent	100.0	100.0	100.0	100.0
Number	868	387	97	167
FAMILIES WITHOUT TELEVISION SETS				
Favored unconditionally	56.6	60.1	77.5	94.0
Opposed conditionally (i.e. favored for programs not otherwise available)	5.9	5.0	7.5	2.3
Opposed at first, not sure about condition	3.9	3.2	-	0.7
Opposed unconditionally	14.4	10.8	5.0	-
Weren't sure or had no opinion	19.2	20.9	10.0	3.0
Total per cent	100.0	100.0	100.0	100.0
Number	658	348	40	133

[a]Based on the question: "In general, do you think it is a good idea, or a bad idea, to have some television programs that people have to pay to see, if they want to see them?", and "(If 'Bad idea') Suppose the television programs that people were charged to see were programs that wouldn't be on television at all, otherwise... In that case, would you favor or oppose having some television programs which people would have to pay to see, if they wanted to see them?"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

TABLE 64

REASONS FOR FAVORING SUBSCRIPTION TELEVISION[a]

Reason	Proportion in Each Group Reporting Given Reason			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families[b]
Paid programs would be superior to current programming	16.6	17.4	22.6	54.0
People would be (should be) willing to pay for good entertainment on television	15.4	12.9	13.2	16.4
Paid programs would permit the presentation of types of entertainment not now available on television	11.9	10.2	19.7	26.6
Paying to see entertainment on television would be more convenient than going out for it	11.8	11.9	15.4	14.3
Paid programs would be free of commercials	6.5	8.4	16.8	30.2
Paying to see entertainment on television would be more economical than going out for it	6.4	6.9	10.2	9.1
Not personally interested, but nothing wrong with it if other people want it	6.5	5.2	0.7	-
Miscellaneous reasons	1.5	0.7	0.7	2.7
Favored, but reasons not ascertained	1.8	2.5	2.9	1.3
Did not favor unconditionally	42.1	41.5	24.1	6.8
Total per cent[c]	120.5	117.6	126.3	161.4
Number	1526	735	137	300

[a]Based on the question: "What are your reasons for favoring the idea of charging people to see some television programs? (What other reasons do you have?)"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]Percentages total more than 100.0 because some respondents mentioned more than one reason.

TABLE 65

REASONS FOR OPPOSING SUBSCRIPTION TELEVISION[a]

Reason	Proportion in Each Group Reporting Given Reason			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families[b]
Costs of purchase and maintenance of television set high enough already	12.3	8.6	7.3	1.3
Paid programs would (might) set a dangerous precedent, lead to a discriminatory system	4.9	2.0	2.9	-
Television sets were (will be) bought in order to have free entertainment	4.2	3.8	1.5	-
Paid programs would cost too much; respondent couldn't afford them	4.1	5.7	3.7	0.5
Sponsors can (should) provide good entertainment at no cost to viewer	3.1	3.1	2.2	1.1
Current programming is satisfactory without paid programs	2.3	2.9	0.7	0.2
Would prefer to go outside home for paid entertainment	2.1	1.6	-	-
All television channels should be equally available to everyone	0.9	1.0	1.5	-
Miscellaneous reasons	1.3	2.0	3.7	-
Opposed but reasons not ascertained	1.2	0.7	0.7	0.2
Did not oppose	71.2	74.6	82.5	97.3
Total per cent[c]	107.6	106.0	106.7	100.6
Number	1526	735	137	300

[a]Based on the question: "What are your reasons for opposing the idea of charging people to see some television programs? (What other reasons do you have?)"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]Percentages total more than 100.0 because some respondents mentioned more than one reason.

TABLE 66

WILLINGNESS TO PAY FOR TELEVISION PROGRAMS[a]

Willingness to Pay	Proportion in Each Group with Given Willingness to Pay		
	City	Lakeview-Lincoln	
		All Families	Phonevision Test Volunteers
ALL FAMILIES			
Might pay	65.5	67.4	84.7
Would never pay	20.9	20.4	8.0
Not sure	13.6	12.2	7.3
Total per cent	100.0	100.0	100.0
Number	1526	735	137
FAMILIES WITH TELEVISION SETS			
Might pay	67.4	68.2	80.4
Would never pay	20.6	21.4	10.3
Not sure	12.0	10.4	9.3
Total per cent	100.0	100.0	100.0
Number	868	387	97
FAMILIES WITHOUT TELEVISION SETS			
Might pay	62.8	66.4	95.0
Would never pay	21.5	19.2	2.5
Not sure	15.7	14.4	2.5
Total per cent	100.0	100.0	100.0
Number	658	348	40

[a]Based on the question: "If there actually were some television programs that people had to pay to see (and you had a television set), do you think your family ever would pay for any of them that you wanted to see and couldn't get on television any other way?"

TABLE 67

RELATION OF OPINION OF SUBSCRIPTION TELEVISION TO WILLINGNESS TO PAY FOR TELEVISION IN CHICAGO

Opinion of Subscription Television	Proportion of Given Opinion Group with Each Degree of Willingness to Pay			Total	
	Might Pay	Not Sure	Would Never Pay	Per cent	Number
Favored unconditionally	82.4	9.1	8.5	100.0	885
Opposed conditionally	79.2	10.4	10.4	100.0	125
Opposed uncertainly	50.0	21.4	28.6	100.0	56
Opposed unconditionally	28.7	8.5	62.8	100.0	258
Weren't sure or had no opinion	33.2	40.1	26.7	100.0	202

Group Differences in Opinions of Subscription Television

It was already apparent, in Tables 63 and 66, that there was relatively little difference in attitudes toward subscription television between television owners and non-owners. While 69.2% of the television owners favored subscription television, if it were used simply as a system of financing the televising of programs that could not otherwise be televised, 62.5% of the non-owners did; opponents of limited subscription television were 18.6% and 14.4% of the two groups, respectively. Non-owners, in other words, were somewhat less likely than owners to have an opinion on the issue, but, among those with opinions, the division of opinion was very similar--78.8% of the owners and 81.3% of the non-owners with opinions approved.*

In the city as a whole, smaller families tended to give somewhat less support to limited subscription television than did larger families; the proportions giving at least qualified support running from about 64% of the one-and two-person families to about 67% of the three-and four-person families, 68.1% of the five-person families, and 72.5% of the six-or-more-person families. Opposition to limited subscription television did not follow this systematic pattern, however, the bulk of the difference in attitudes between family size groups being attributable to the tendency on the part of smaller families to have no opinion on the question. (See Table 68.) Families whose children were in the early years were most likely to look with approval on subscription television as a means of importing outside entertainment into the home; 75.1% of them approved, as compared with 67.3% of those with some of their children in the age group of 5 to 19, and 63.6% of those with no children under 20.

Approval of limited subscription television also varied with ability to pay, running from 62.2% of the families with incomes under $2,500 a year to 81.7% of families with incomes of $10,000 or more. (See Table 69.) Subscription television was also received least favorably by the families of heads with education under the high school level: 52.4% of the families whose heads had never completed grammar school and 61.9% of those whose heads had graduated from grammar school, but gone no further, endorsed limited subscription television, while over 70% of families at all the higher educational levels approved.

The factors earlier found to predispose families favorably toward Phonevision and/or to be reinforced by participation in the Phonevision test were all related to attitudes toward subscription television in the expected way. That is to say, families whose recreational preferences leaned toward movies, who liked television because it was convenient and comfortable, who wanted newer movies shown on television and television commercials improved, curtailed or eliminated were somewhat more favorably disposed toward subscription television than were families who did not have these tendencies. Thus, it is shown in Table 70 that 75.0% of the families who wanted newer movies on television gave at least limited support to subscription television, while 64.1% of the families who made no mention of this desire favored it. Similarly 72.2% of the critics of television commercials favored subscription television, while 63.7% of those who volunteered no criticisms did; and 71.8% of those who praised television for its comfort and convenience were in favor of using subscription television, as compared with 64.0% of those who did not mention these factors. Finally, subscription television was favored by 70.7% of the families whose recreational interests included both going to the movies and watching television, 70.0% of those who mentioned going to the movies but not watching television, 66.9% of those who mentioned television but not going to the movies, and 59.1% of those who mentioned neither. These differences are, however, all relatively small, and the data indicate that the families with these positively predisposing recreational preferences

*In view of this lack of substantial difference between the two groups in attitudes and, it may be added, in reasons adduced in support of these attitudes, further analysis of attitudes toward subscription television is presented here without respect to the ownership consideration. The data, while not presented, have been examined and indicate that no differences in tendencies are eliminated by combining the two groups.

TABLE 68

OPINIONS OF SUBSCRIPTION TELEVISION AMONG FAMILIES OF VARIOUS COMPOSITION IN CHICAGO

Family Composition Group	Proportion of Given Group with Each Opinion of Subscription Television					Total	
	Favored Unconditionally	Opposed Conditionally	Opposed Uncertainly	Opposed Unconditionally	Weren't Sure or Had No Opinion	Percent	Number
Family Size							
One person	56.7	7.7	2.4	10.6	22.6	100.0	208
Two persons	58.2	5.6	3.9	17.7	14.6	100.0	412
Three persons	58.7	8.0	3.1	19.1	11.1	100.0	325
Four persons	57.0	9.3	3.3	18.5	11.9	100.0	302
Five persons	58.2	9.9	4.3	17.7	9.9	100.0	141
Six or more persons	59.4	13.1	5.8	15.9	5.8	100.0	138
Presence of Children							
Some children, 5-19	56.6	10.7	4.2	19.4	9.1	100.0	525
Children under 5 only	64.1	11.0	2.8	14.9	7.2	100.0	181
No children, 0-19	57.8	5.8	3.5	15.8	17.1	100.0	820
Race							
White	58.8	7.2	3.8	16.7	13.5	100.0	1337
Negro	53.2	14.4	2.9	20.8	8.7	100.0	173
Other[a]							16

[a]Too few cases to report percentages

TABLE 69

OPINIONS OF SUBSCRIPTION TELEVISION AMONG FAMILIES OF VARIOUS SOCIO-ECONOMIC STATUS IN CHICAGO

Socio-Economic Status	Proportion of Given Group with Each Opinion of Subscription Television					Total	
	Favored Unconditionally	Opposed Conditionally	Opposed Uncertainly	Opposed Unconditionally	Weren't Sure or Had No Opinion	Percent	Number
Annual Family Income							
Under $2,500	52.7	9.5	3.6	16.0	18.2	100.0	275
$2,500 - $4,999	60.5	7.7	3.8	16.4	11.6	100.0	663
$5,000 - $7,499	63.9	9.6	1.5	16.2	8.8	100.0	260
$7,500 - $9,999	61.7	9.3	2.3	20.9	5.8	100.0	86
$10,000 and over	77.2	4.5	2.3	13.7	2.3	100.0	44
Education of Head of House							
Some grade school	46.8	5.6	3.2	19.8	24.6	100.0	248
Grade school graduation	53.8	8.1	7.0	15.7	15.4	100.0	286
Some high School	62.4	8.8	3.3	15.9	9.6	100.0	364
High school graduation	62.3	8.5	2.1	17.6	9.5	100.0	284
Some college	60.4	11.2	3.0	16.3	9.1	100.0	197
College graduation and above	63.3	7.5	2.0	16.3	10.9	100.0	147

TABLE 70

OPINIONS OF SUBSCRIPTION TELEVISION AMONG FAMILIES OF VARIOUS RECREATIONAL INTERESTS IN CHICAGO

Interest Group	Proportion of Given Interest Group with Each Opinion of Subscription Television					Total	
	Favored Unconditionally	Opposed Conditionally	Opposed Uncertainly	Opposed Unconditionally	Weren't Sure or Had No Opinion	Percent	Number
Families whose adult interests included							
Both going to movies and watching television	61.3	9.4	4.5	17.9	6.9	100.0	307
Watching television but not going to the movies	57.7	9.2	3.5	19.9	9.7	100.0	547
Going to the movies but not watching television	62.2	7.8	4.3	11.8	13.9	100.0	281
Neither	52.7	6.4	2.5	15.6	22.8	100.0	391
Families who mentioned liking television because of its physical comfort and convenience	61.2	10.6	4.6	16.3	7.3	100.0	454
Families who didn't mention this feature	56.7	7.3	3.3	17.0	15.7	100.0	1072
Families who mentioned wanting new movies on television	64.1	10.9	3.8	16.7	4.5	100.0	312
Families who didn't mention this desire	56.5	7.6	3.6	16.9	15.4	100.0	1214
Families who criticized television commercials	60.7	11.5	3.0	17.7	7.1	100.0	462
Families who didn't mention this criticism	56.9	6.8	3.9	16.5	15.9	100.0	1064

were primarily different in having more frequently arrived at an opinion on the issue, perhaps as a result of their preferences in the recreational field.

The interesting thing to note in these opinions of subscription television among families of differing composition, socio-economic status or recreational preferences is that, except for the group with heads of less than grammar school education, where a quarter had no opinion, an absolute majority gave unqualified support to subscription television in general, while, even when qualified and uncertain opposition is included, the proportion with any opposition to subscription television never rose above 35%, with 10-21% representing the range of unqualified opposition.

Much the same conclusions may be reached through examination of the relationships of family composition, socio-economic status, and recreational preferences to willingness to pay for subscription programs, which are shown in Tables 71-73. Since these data simply corroborate what has already been said, they are presented here without further discussion.

TABLE 71

WILLINGNESS TO PAY FOR TELEVISION PROGRAMS AMONG FAMILIES OF VARIOUS COMPOSITION IN CHICAGO

Family Composition Group	Proportion of Given Group with Each Degree of Willingness to Pay			Total	
	Might Pay	Not Sure	Would Never Pay	Percent	Number
Family size					
One person	61.5	15.9	22.6	100.0	208
Two persons	61.1	14.1	24.8	100.0	412
Three persons	65.5	16.0	18.5	100.0	325
Four persons	68.6	11.9	19.5	100.0	302
Five persons	73.7	7.8	18.5	100.0	141
Six or more persons	68.8	13.1	18.1	100.0	138
Presence of children					
Some children, 5-19	69.3	12.6	18.1	100.0	525
Children under 5 only	74.6	7.7	17.7	100.0	181
No children, 0-19	60.9	15.5	23.6	100.0	820
Race					
White	64.8	13.8	21.4	100.0	1337
Negro	68.8	11.6	19.6	100.0	173
Other[a]					16

[a]Too few cases to report percentages.

TABLE 72

WILLINGNESS TO PAY FOR TELEVISION PROGRAMS AMONG FAMILIES OF VARIOUS SOCIO-ECONOMIC STATUS IN CHICAGO

Socio-Economic Status	Proportion of Given Group with Each Degree of Willingness to Pay			Total	
	Might Pay	Not Sure	Would Never Pay	Percent	Number
Annual Family Income					
Under $2,500	48.7	20.4	30.9	100.0	275
$2,500 - $4,999	71.1	10.5	18.4	100.0	663
$5,000 - $7,499	77.7	9.2	13.1	100.0	260
$7,500 - $9,999	71.0	11.6	17.4	100.0	86
$10,000 and over	86.4	6.8	6.8	100.0	44
Education of Head of House					
Some grade school	46.0	21.7	32.3	100.0	248
Grade school graduation	53.8	17.6	28.6	100.0	286
Some high school	71.1	11.8	17.1	100.0	364
High school graduation	72.2	9.9	17.9	100.0	284
Some college	78.7	8.6	12.7	100.0	197
College graduation and above	76.2	10.2	13.6	100.0	147

RESPONSE TO PHONEVISION PROGRAMS

Subscription television in the abstract, it has just been shown, received the endorsement of the majority of Chicago families. The question may now be raised, however, as to what the public response in Chicago would have been to any concrete operating system of subscription television. Since Phonevision in the form used in the test was the system of subscription television most familiar to Chicagoans, the questions were posed in terms of Phonevision, but nothing in this research touches on the issue of which particular system of subscription television would have been preferred by the public.

Because of the complexities of the problem of predicting how people would have behaved if a system of subscription television had been available, the presentation has been divided into two sections: in this, the first section, the intention is merely to present people's verbal statements of how they would have behaved in the hypothetical situation of having Phonevision available as further indications of their attitudes toward subscription television; in the next section, the implications of these statements are evaluated from the standpoint of all of the information furnished by the Phonevision test and the attendant research in order to arrive at estimates of the probable size and character of the market for subscription television.

TABLE 73

WILLINGNESS TO PAY FOR TELEVISION PROGRAMS AMONG FAMILIES OF VARIOUS RECREATIONAL INTERESTS IN CHICAGO

Interest Group	Proportion of Given Interest Group with Each Opinion of Subscription Television			Total	
	Might Pay	Not Sure	Would Never Pay	Percent	Number
Families whose adult interests included					
Both going to movies and watching television	67.4	11.7	20.9	100.0	307
Watching television but not going to the movies	66.4	12.6	21.0	100.0	547
Going to the movies but not watching television	75.1	11.0	13.9	100.0	281
Neither	55.7	18.2	26.1	100.0	391
Families who mentioned liking television because of its physical comfort and convenience	71.4	10.1	18.5	100.0	454
Families who didn't mention this feature	62.9	15.0	22.1	100.0	1072
Families who mentioned wanting new movies on television	77.9	9.0	13.1	100.0	312
Families who didn't mention this desire	62.2	14.8	23.0	100.0	1214
Families who criticized television commercials	73.6	9.3	17.1	100.0	462
Families who didn't mention this criticism	62.1	15.4	22.5	100.0	1064

Phonevision Purchases

In a set of four questions, families in Chicago were asked what types of programs they would purchase, if they had a television set already equipped to receive Phonevision programs. Well over half the families in the city (64.9%) indicated that they would be willing to pay for new movies on television, while slightly under half (46.0%) said they would pay for older movies of about the vintage used in the Phonevision test. Sports events that would not otherwise be on television appealed to 45.1% as a Phonevision feature, and 37.1% named other types of programs that they would be willing to pay to have on television. Families who owned television sets were only slightly more likely to indicate readiness to pay for these programs, while non-owners, perhaps because they found these questions less cogent, more often indicated uncertainty. (See Table 74.) As summarized in Table 75, three-fourths of the Chicago families said they would purchase programs of at least one of these four program types. Specific details of the kinds of sports and other types of entertainment people wanted to see on Phonevision are shown in Tables 76 and 77.

TABLE 74

INTEREST IN VARIOUS TYPES OF PHONEVISION PROGRAMS IN CHICAGO[a]

Type of Phonevision Program	Proportion Giving Each Answer with Respect to Given Type of Phonevision Program			Total	
	Would Pay	Not Sure	Would Not Pay	Percent	Number
ALL FAMILIES					
New movies	64.9	10.4	24.7	100.0	1526
Older movies	46.0	11.6	42.4	100.0	1526
Sports events	45.1	8.8	46.1	100.0	1526
Others	37.1	15.7	47.2	100.0	1526
FAMILIES WITH TELEVISION SETS					
New movies	69.2	9.5	21.3	100.0	868
Older movies	46.3	10.5	43.2	100.0	868
Sports events	47.9	6.5	45.6	100.0	868
Others	38.2	13.4	48.4	100.0	868
FAMILIES WITHOUT TELEVISION SETS					
New movies	59.3	11.5	29.2	100.0	658
Older movies	45.3	13.5	41.2	100.0	658
Sports events	41.4	11.8	46.8	100.0	658
Others	35.9	18.5	45.6	100.0	658

[a]Based on the questions: "During the Phonevision test, they were showing movies that were a couple of years old, but which had never been seen on television before... If Phonevision were available now, and they were showing only movies that were one or two years old, do you think your family would pay to see some of these movies on television (assuming you had a television set that could get the Phonevision programs), at a dollar per picture?"; "Suppose they were showing only new movies on Phonevision... Do you think your family would pay to see some of these movies on television at a dollar per picture?"; "If Phonevision were available now, and they were showing only sports events that weren't on television anywhere else, do you think your family would pay to see some of these sports events on television, at a dollar per program?"; and "Are there any other kinds of programs (besides movies and sports events) that your family would be interested in seeing on Phonevision--that is, programs that you would be willing to pay to see?"

While it is, thus, again apparent that the types of programs subscription television might offer had a wide appeal in Chicago, not everyone who acknowledged interest in these programs was ready or able to implement his interest. When families were asked how they would respond if Phonevision were on the market at that moment, a smaller majority--55.7%--said they would have their television sets (assuming they had one) connected up to it, while 15.8% weren't sure they would want to, and 28.5% said they would not.*

TABLE 75

COMPARISON OF INTEREST IN VARIOUS TYPES OF PHONEVISION PROGRAMS

Group	Number of Cases	Proportion in Given Group Who Would Pay for Each Type of Phonevision Program				
		New Movies	Older Movies	Sports Events	Others	At Least One of the Four Types
ALL FAMILES						
City	1526	64.9	46.0	45.1	37.1	75.6
Lakeview-Lincoln						
All familes	735	64.1	47.0	43.3	36.5	75.4
Phonevision test volunteers	137	87.6	68.6	59.9	56.2	92.7
Phonevision test families[a]	300	98.7	87.7	76.7	83.2	100.0
FAMILIES WITH TELEVISION SETS						
City	868	69.2	46.3	47.9	38.2	78.6
Lakeview-Lincoln						
All families	387	67.2	48.3	46.0	33.1	77.3
Phonevision test volunteers	97	87.6	69.1	66.0	70.1	91.8
Phonevision test families	149	98.7	92.0	81.2	82.7	100.0
FAMILIES WITHOUT TELEVISION SETS						
City	658	59.3	45.3	41.4	35.9	71.5
Lakeview-Lincoln						
All families	348	60.6	45.4	40.2	40.2	73.3
Phonevision test volunteers	40	87.5	70.0	45.0	50.0	95.0
Phonevision test families	151	98.7	85.5	74.2	83.5	100.0

[a]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

*The question asked was: "All in all, if Phonevision were on the market today (and you had a television set), do you think you would have your television set connected up with it, so you could sometimes see some of these programs at a dollar per program, or wouldn't you want your set connected up with Phonevision?"

TABLE 76

KINDS OF SPORTS EVENTS DESIRED ON PHONEVISION[a]

Kind of Sports Event	Proportion in Each Group Interested in Given Sport on Phonevision			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families[b]
Baseball	31.2	28.5	37.9	58.7
Boxing	25.5	24.7	39.4	52.4
Football	25.5	23.9	35.6	64.5
Basketball	11.2	9.9	12.4	24.4
Hockey	8.1	6.7	8.8	21.2
Wrestling	6.9	7.6	6.6	11.9
Horse racing	4.2	5.4	9.5	6.6
Roller derby	3.2	3.9	5.1	5.7
Auto racing	2.4	2.2	1.5	4.0
All others	9.5	9.4	10.9	18.6
Can't specify	1.3	0.7	1.4	1.3
Wouldn't pay for sports or not sure	54.9	56.7	40.1	23.3
Total per cent[c]	183.9	179.6	209.2	292.6
Number	1526	735	137	300

[a]Based on the question? "Which sports events would your family be interested in seeing on Phonevision? (Any others?)"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]Percentages total more than 100.0 because many families were interested in more than one kind of sports event.

These data may be combined into a set of types with reference to the purchase of Phonevision. At the one extreme are those families who said they would subscribe immediately if Phonevision were available and who had previously said that they would pay for at least one kind of program if they had television sets adapted to receiving Phonevision programs; at the other extreme are those families who consistently indicated no interest in Phonevision--they were either uncertain about or definitely against both purchasing any types of programs and subscribing to Phonevision; in the middle were those who had expressed willingness to pay for one or another type of Phonevision program but were not sure of or not in favor of subscribing at this point. If these three types are regarded as probable subscribers, probable non-subscribers and "doubtfuls," the city may be divided into:

Probable subscribers	54.4%
Doubtfuls	22.5
Probable non-subscribers	23.1

Families with television sets were, as shown in Table 78, only slightly more disposed to become probable subscribers to Phonevision than were families without sets.

TABLE 77

OTHER TYPES OF ENTERTAINMENT DESIRED ON PHONEVISION[a]

Type of Entertainment	Proportion in Each Group Interested in Given Type of Entertainment on Phonevision			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families[b]
Legitimate theater Broadway plays, musicals, etc	13.3	15.4	26.3	64.1
Opera	7.2	8.3	12.4	35.3
Symphony, concerts, recitals	5.5	6.0	10.2	17.5
Spectacles: circuses, ice-shows, etc	2.6	2.3	4.4	14.7
Ballet	2.0	1.6	2.2	8.9
Lectures, tours of museums, and other cultural programs	6.0	7.1	12.4	6.9
On-the-spot coverage of governmental proceedings	6.4	5.8	11.7	17.3
News programs, other and unspecified	2.2	3.0	4.4	1.2
Other informative programs	2.1	1.5	0.7	14.1
Formal educational courses	0.3	0.5	-	1.6
All other types	11.2	7.3	10.2	12.1
Can't specify	0.7	0.9	-	0.2
Wouldn't pay for other types or weren't sure	62.9	63.5	43.8	16.8
Total per cent[c]	122.4	123.2	138.7	210.7
Number	1526	735	137	300

[a]Based on the question: "What other kinds of programs would your family like to have on Phonevision? (Any others?)"

[b]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[c]Percentages total more than 100.0 because some respondents were interested in more than one type of entertainment.

Phonevision Movies Versus Competing Entertainment

A substantial majority--60.8%--of families in Chicago would rather watch a movie they wanted to see on Phonevision than see a similar movie at a regular theater, and 53.1% felt they would choose a Phonevision movie they wanted to see in preference to their favorite radio program if the two were scheduled for the same hour. A minority, but the leading plurality of families--44.6%--would watch a Phonevision movie if it merely sounded "all right" in preference to watching regular television when there was nothing on that they particularly wanted to see. Only 23.5%, however, would pay for even a Phonevision movie they wanted to see, if it were in conflict with their favorite television program. (See Tables 79 and 80.) Television owners were more likely to make the Phonevision choice in each of these comparisons in contrast with non-owners who more frequently felt unable to make the comparison. Nevertheless, among non-owners, too, the largest single group chose Phonevision in every comparison except that involving favorite television programs.

TABLE 78

TYPES OF REACTIONS TO PHONEVISION

Group	Proportion in Each Group Classified into Given Type			Total	
	Probable Sub-scribers	Doubt-fuls	Probable Non-sub-scribers	Per cent	Number
ALL FAMILIES					
City	54.4	22.5	23.1	100.0	1526
Lakeview-Lincoln					
All families	53.1	23.5	23.4	100.0	735
Phonevision test volunteers	75.9	17.5	6.6	100.0	137
Phonevision test families[a]	98.5	1.5	-	100.0	300
FAMILIES WITH TELEVISION SETS					
City	55.9	23.5	20.6	100.0	868
Lakeview-Lincoln					
All families	54.5	23.8	21.7	100.0	387
Phonevision test volunteers	74.3	17.5	8.2	100.0	97
Phonevision test families	98.0	2.0	-	100.0	149
FAMILIES WITHOUT TELEVISION SETS					
City	52.6	21.0	26.4	100.0	658
Lakeview-Lincoln					
All families	51.4	23.3	25.3	100.0	348
Phonevision test volunteers	80.0	17.5	2.5	100.0	40
Phonevision test families	98.7	1.3	-	100.0	151

[a]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

About a quarter of Chicago families--26.1%--consistently rejected Phonevision movies in these comparisons, while 14.7% chose Phonevision movies once out of the four possible times. At the other extreme, 12.4% consistently chose Phonevision movies and 23.9% chose them three out of four times. Families who owned television sets, as already suggested, more frequently responded to Phonevision--66.0% of them chose Phonevision at least twice in the four comparisons while 50.4% of the non-owners chose Phonevision this frequently. (See Table 81.)

CONCLUSION

The conduct of the Phonevision test in Chicago and the publicity attending it brought the issue of subscription television--or, at least, this particular system of subscription television -- to the attention of the majority of families in Chicago. They knew what Phonevision was and had seen the jittered programs, so that their reactions to subscription television may be regarded as resting on a base of prior information and consideration rather than being off-hand, unconsidered judgments.

In the light of this familiarity, the fact that two-thirds of Chicago families approved of subscription television as a method of providing entertainment that would not otherwise appear on television and that about the same proportion indicated a willingness to pay for such programs must be regarded as significant support for subscription television, especially when it is noted that this support was distributed rather generally throughout major population sub-groups.

TABLE 79

PREFERENCE FOR PHONEVISION MOVIES IN CHICAGO IN COMPARISON WITH OTHER ENTERTAINMENT[a]

Situation in Which Entertainment Choice was Made	Proportion Making Each Choice of Entertainment in Given Situation				Total	
	Phonevision Movie	Other Choice	Neither	Don't Know	Per cent	Total
ALL FAMILIES						
Two movies they wanted to see--one on Phonevision and one at regular movie theater . . .	60.8	21.0	6.0	12.2	100.0	1526
Movie they wanted to see on Phonevision at same time as favorite radio program	53.1	30.4	3.0	13.5	100.0	1526
Movie on Phonevision sounded all right and there was nothing on television they particularly wanted to see . .	44.6	25.4	15.7	14.3	100.0	1526
Movie they wanted to see on Phonevision at same time as favorite television program.	23.5	55.4	3.5	17.6	100.0	1526
FAMILIES WITH TELEVISION SETS						
Two movies they wanted to see--one on Phonevision and one at regular movie theater.	68.1	18.2	5.0	8.7	100.0	868
Movie they wanted to see on Phonevision at same time as favorite radio program	61.0	25.6	3.4	10.0	100.0	868
Movie on Phonevision sounded all right and there was nothing on television they particularly wanted to see . .	49.7	25.9	13.6	10.8	100.0	868
Movie they wanted to see on Phonevision at same time as favorite television program. .	24.0	62.2	1.5	12.3	100.0	868
FAMILIES WITHOUT TELEVISION SETS						
Two movies they wanted to see--one on Phonevision and one at regular movie theater.	56.1	22.6	7.1	14.2	100.0	658
Movie they wanted to see on Phonevision at same time as favorite radio program	42.9	36.6	2.5	18.0	100.0	658
Movie on Phonevision sounded all right and there was nothing on television they particularly wanted to see . .	37.9	24.8	18.3	19.0	100.0	658
Movie they wanted to see on Phonevision at same time as favorite television program. .	22.8	46.5	6.0	24.7	100.0	658

[a]Based on the question: "Now, suppose your family had a television set that could get the Phonevision programs... Which do you think you would do: A. If there were two movies you wanted to see being shown--one on Phonevision and the other at a regular movie theater? (Would you stay home and see the Phonevision movie or go to the movie theater?); B. If a movie you wanted to see was being shown on Phonevision at the same time as your favorite radio program? (Would you see the Phonevision movie or listen to the radio program?); C. If a movie you wanted to see was being shown on Phonevision at the same time as your favorite regular television program? (Would you see the Phonevision movie or watch the regular television program?); D. If the movie being shown on Phonevision sounded all right to you, and there was nothing on regular television that you particularly wanted to see? (Would you see the Phonevision movie or watch regular television?)"

TABLE 80

COMPARISON OF PREFERENCE FOR PHONEVISION

Group	Number of Cases	Proportion in Each Group Choosing Phonevision Movie in Preference to:			
		Movie Theater	Favorite Radio Program	"Run-of-the-Mill" Television	Favorite television Program
ALL FAMILIES					
City	1526	60.8	53.1	44.6	23.5
Lakeview-Lincoln					
All families	735	61.5	49.4	49.2	22.4
Phonevision test volunteers	137	83.2	64.2	63.4	32.9
Phonevision test families[a]	300	95.7	91.5	71.3	60.5
FAMILIES WITH TELEVISION SETS					
City	868	68.1	61.0	49.7	24.0
Lakeview-Lincoln					
All families	387	66.2	58.9	54.3	23.5
Phonevision test volunteers	97	81.4	70.1	61.9	29.9
Phonevision test families	149	94.0	94.0	79.2	59.8
FAMILIES WITHOUT TELEVISION SETS					
City	658	56.1	42.9	37.9	22.8
Lakeview-Lincoln					
All families	348	56.3	38.8	43.7	21.3
Phonevision test volunteers	40	87.5	50.0	67.5	40.0
Phonevision test families	151	96.7	90.1	66.9	60.9

[a]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

Thus, whether consideration is given to television owners or non-owners, to the rich or the poor, to small families or large families, to the well-educated or the less-educated, there was always more support of and willingness to pay for subscription television than there was opposition to it.

When the issue of subscription television was concretized in terms of Phonevision--the only system with which there was widespread familiarity, a sizeable majority of Chicago families continued to indicate their support for subscription television in terms of willingness to pay to have movies, special sports events and other entertainment features on television. Their interest and approval of Phonevision was, in part, expressed in and, in part, explained by the majority's preference for movies by Phonevision at home rather than movies at regular theaters, as well as the preference given Phonevision movies over even favorite radio programs. A plurality felt that they would even rather pay for a Phonevision movie than take their chances on run-of-the-mill television programming, while a minority picked a Phonevision movie in preference to their favorite television programs. Over half the families interviewed were consistently interested in subscribing to Phonevision immediately, if it were available, even in the face of uncertainty about just what its programming might consist of.

TABLE 81

FREQUENCY OF CHOOSING PHONEVISION MOVIES IN PREFERENCE TO COMPETING ENTERTAINMENT

Number of Times Phonevision Movies were Chosen	Proportion in Each Group Choosing Phonevision Movie Given Number of Times			
	City	Lakeview-Lincoln		
		All Families	Phonevision Test Volunteers	Phonevision Test Families
ALL FAMILIES				
None	26.1	24.6	5.1	0.3[a]
One	14.7	16.6	10.9	2.7
Two	22.9	22.5	33.6	17.5
Three	23.9	24.2	35.8	37.0
Four	12.4	12.1	14.6	42.5
Total per cent	100.0	100.0	100.0	100.0
Number	1526	735	137	300
FAMILIES WITH TELEVISION SETS				
None	19.8	19.4	7.2	0.7
One	14.2	14.5	10.3	2.7
Two	23.5	23.8	32.0	12.1
Three	28.7	28.6	33.0	38.2
Four	13.8	13.7	17.5	46.3
Total per cent	100.0	100.0	100.0	100.0
Number	868	387	97	149
FAMILIES WITHOUT TELEVISION SETS				
None	34.4	30.5	-	-
One	15.2	19.0	12.5	2.7
Two	22.1	21.0	37.5	20.5
Three	17.6	19.2	42.5	36.4
Four	10.7	10.3	7.5	40.4
Total per cent	100.0	100.0	100.0	100.0
Number	658	348	40	151

[a]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

In closing, it may be noted that one effect of the Phonevision test was to intensify interest in and approval of subscription television and Phonevision among those who participated. Approval of subscription television and desire to subscribe to Phonevision approached unanimity among them.

VI

CONCLUSION: IMPLICATIONS OF THE PHONEVISION TEST FOR THE COMMERCIAL OPERATION OF PHONEVISION

Up to this point, three conclusions have emerged from this research:

1. The Phonevision test was a success both subjectively and economically, with the three hundred families who participated in it; and, presumably, Phonevision would have succeeded about as well with the entire universe of volunteers from which they were drawn.

2. These test families, or, for that matter, test volunteers in general, differed from families in the city in a number of significant respects, so that their reactions to Phonevision cannot be immediately extended to the city.

3. There was, in the city as a whole, however, considerable support for Phonevision, though it was probably not distinguished from subscription television generically.

In order to estimate more precisely how the city of Chicago might respond to the commercial operation of a system of subscription television like Phonevision, an approach can be made by inquiring how many families there were in Chicago sufficiently like the Phonevision test families in relevant respects to make it reasonable to assume that their response to Phonevision would approximate that of the test families. More generally, the problem may be posed as one of dividing the city population into strata that differ in terms of criteria affecting response to Phonevision and separately forecasting the reactions of each stratum from what is known about the behavior of the comparable stratum among the test families.

To this end, the major differences between Phonevision test volunteers and Chicago families may be briefly reviewed at this point. First and most obvious is the fact that all of the Phonevision test volunteers were sufficiently interested in Phonevision and/or the test to attempt to participate in it. As a corollary of this interest, it may have been noted, in the preceeding section of this report, that Phonevision test volunteers generally (and test participants even more intensely) were more likely to indicate information about and interest in Phonevision; these factors, in fact, made for the largest differences between Phonevision test families and other Chicago families.

For example, in Table 61, it was shown that 95.6% of the volunteers could explain Phonevision correctly and Table 62 indicated that 73.7% of them had watched the jittered pictures. Volunteers' attitudes toward subscription television, presented in Tables 63 and 66, were markedly more favorable than the average family's, as were their responses to Phonevision, shown in Tables 75, 78, 80 and 81. Since these disparities were to be expected in view of the fact that this group had, after all, volunteered for the Phonevision test, and could, therefore,--especially on the basis of the motives for volunteering reported by the test families--be regarded as more interested in Phonevision than average, they are stressed here only to indicate that they may be used as one major criterion for separating those likely to make expenditures for Phonevision from those not likely to.

Secondly, it may be recalled, that test volunteers were of higher than average socio-economic status and more likely to be complete family groups with children.

And, finally, relatively minor differences in recreational tastes existed between test volunteers and other families, all of which were in the direction of favorably predisposing volunteers toward Phonevision; that is, they tended to be, somewhat more than other families, interested in having newer movies on television as a resolution of their simultaneous interest in movies and in the comfort and convenience of home.

CHARACTERISTICS AND ATTITUDES OF PROBABLE SUBSCRIBERS*

If, as a starting-point, the division of all families into probable subscribers, doubtfuls, and probable non-subscribers, described earlier, is selected, it becomes apparent that the same variables which serve to distinguish Phonevision test volunteers from other families also sharply differentiated probable subscribers from probable non-subscribers. Thus, families classified as probable subscribers to Phonevision were far more likely than those classified as non-subscribers to have heard of Phonevision, seen the jittered Phonevision programs and expressed interest in participating in the Phonevision test. They were similarly far more likely to choose Phonevision movies over other forms of entertainment and to approve as fair the price that had been charged for them during the test. And their attitudes toward subscription television in general were also markedly more favorable--85.2% approved as compared with 28.1% of the probable non-subscribers. (See Table 82.)

These probable subscribers were also more likely to have the general recreational preferences associated with volunteering for the Phonevision test. As shown in Table 83, they significantly more often than probable non-subscribers mentioned going to the movies as an adult recreational preference, praised television because it permitted the comfort and convenience of staying home for entertainment, and volunteered their desire to have newer movies on television.

Finally, in comparison with probable non-subscribers, the probable subscribers tended to be larger families, and more frequently had children under 19. They were also higher in socio-economic status, as indicated by a substantially higher median family income and by the greater proportion of family heads in the professional and managerial occupations and their higher median educational attainment. (See Table 84.)**

As far as attitudes toward Phonevision and subscription television were concerned, these probable subscribers in many respects approximated the views of Phonevision test volunteers. By the nature of the way they were defined, the probable subscribers were unanimous in saying that they would subscribe to Phonevision if it were available and would pay for at least one of the four types of programs asked about, while Phonevision test volunteers held these views significantly less frequently. Probable subscribers regarded the test charge for Phonevision programs as reasonable about as frequently as the

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*At this point, probable subscribers are defined simply as those who indicated they would pay for one or more types of subscription programs and would subscribe to Phonevision now if it were available. Two points should be noted: first, the number of families so classified would vary with the programs offered, so that, in place of the 54.4% of the city families classified as probable subscribers there would be 37.3%, if the programming were limited to older movies; 50.4%, if limited to newer movies; 34.8%, if limited to sports events, and 53.2%, if both movies and sports were available. Second, no account has thus far been taken of whether these would-be subscribers were actually in a position to subscribe; that is, all systems of subscription television so far proposed require that the subscriber own a television set, and Phonevision, in the form tested, further requires a telephone. Both of these qualifications will be dealt with more fully in later discussion, but are noted here to prevent confusion before the later sections are reached.

**These three sets of relationships held in the Lakeview-Lincoln area as well as the rest of the city, although, for simplicity, the data are presented in Tables 82-84 only for the city as a whole.

TABLE 82

OPINIONS OF SUBSCRIPTION TELEVISION AMONG PROBABLE SUBSCRIBERS AND NON-SUBSCRIBERS TO PHONEVISION IN CHICAGO

Paraphrase of Response	Proportion in Each Group Giving Indicated Response		
	Probable Subscribers	Doubtfuls	Probable Non-subscribers
Had heard of Phonevision before the interview.	82.6	70.5	52.0
Had seen the jittered Phonevision picture.	62.8	56.3	42.9
General opinion of limited subscription television was:			
Approval.	85.2	60.5	28.1
Uncertainty	8.0	18.0	37.2
Disapproval	6.8	21.5	34.7
If subscription television programs were available:			
Might pay	89.5	64.7	10.0
Not sure.	3.7	13.4	29.5
Would never pay	6.8	21.9	60.5
If Phonevision test were now starting:			
Would want to take part	62.5	26.8	8.0
Not sure.	10.4	11.7	11.7
Would not want to	27.1	61.5	80.3
Choose Phonevision movie over competing entertainment:			
Four times.	18.9	7.3	2.0
Three times	35.3	17.8	3.4
Twice	27.8	27.6	6.8
Once.	12.1	19.9	15.6
Never	5.9	27.4	72.2
Thought charge of $1.00 per program:			
Was all right	70.0	52.5	22.7
Didn't know	3.1	9.0	35.8
Was too high.	26.9	38.5	41.5
Number of cases	831	343	352

volunteers did, and were at least as favorable as the volunteers in their opinions of subscription television in general. On the other hand, these probable volunteers significantly less frequently had previously heard of Phonevision or watched the jittered Phonevision programs, and were less interested in participating in a Phonevision test than were the volunteers. These relationships may be seen in comparing the data for volunteers and participants in Table 85 with those for probable subscribers in Table 82.

In other words, aside from their lesser familiarity with Phonevision and their lesser interest in the Phonevision test, these probable subscribers had, as far as this set of factors is concerned, the attitudes which would make it reasonable to suppose that, everything else being equal, they would have responded to Phonevision in about the same way as the Phonevision test volunteers would have. And it can only be assumed that this sample of Phonevision test volunteers would have responded in about the same way as the sample

TABLE 83

SELECTED RECREATIONAL PREFERENCES OF PROBABLE SUBSCRIBERS AND NON-SUBSCRIBERS TO PHONEVISION IN CHICAGO

Paraphrase of Response	Proportion in Each Group Giving Indicated Response		
	Probable Subscribers	Doubtfuls	Probable Non-subscribers
Going to the movies was among adults' recreational preferences	43.1	35.3	30.7
Liked television because of the comfort and convenience of such entertainment	32.9	30.7	21.9
Wanted newer movies on television	26.3	16.6	9.7
Number of cases	831	343	352

TABLE 84

SELECTED CHARACTERISTICS OF PROBABLE SUBSCRIBERS AND NON-SUBSCRIBERS TO PHONEVISION IN CHICAGO

Characteristic	Probable Subscribers	Doubtfuls	Probable Non-Subscribers
Number of persons per household (per cent)			
One	12.4	13.4	16.8
Two	24.2	28.9	31.8
Three	22.0	20.7	20.2
Four	21.2	19.2	17.0
Five	11.2	7.3	6.2
Six and over	9.0	10.5	8.0
Proportion of households with no children (19 and under)	47.5	57.4	64.5
Mean number:			
Adults (20 and over)	2.23	2.30	2.24
Children (19 and under)	1.02	0.88	0.71
Proportion of heads of households with occupations classified as professional and semi-professional, or proprietors, managers and officials	23.1	15.5	12.2
Median years of education, heads of households	11.8	10.9	8.9
Median annual family income	$4,281	$3,742	$3,244
Number of cases	831	343	352

of participants did, since the differences between these two groups can only be attributed to sampling fluctuations, to minor biases resulting from substitutions in selecting participants or to the effects of experience with Phonevision on attitudes.*

TABLE 85

COMPARISON OF OPINIONS OF PHONEVISION AND SUBSCRIPTION TELEVISION AMONG TELEPHONE SUBSCRIBERS WHO WERE PROBABLE SUBSCRIBERS TO PHONEVISION AND PHONEVISION TEST VOLUNTEERS AND PARTICIPANTS

Paraphrase of Response	Proportion in Each Group Giving Indicated Response			
	Probable Subscribers		Phonevision Test Volunteers	Phonevision Test Families[a]
	City	Lakeview-Lincoln		
Had heard of Phonevision before the interview.	87.5	91.8	97.8	b
Had seen the jittered Phonevision picture.	68.8	65.2	73.7	b
Favored limited subscription television	85.9	85.7	81.2	95.5
Might pay for subscription television programs.	89.3	92.5	84.7	b
Would want to take part, if Phonevision test were starting now.	66.6	58.8	72.3	95.7
Chose Phonevision movie over competing entertainment at least two out of four times.	82.7	81.0	84.0	97.0
Thought charge of $1.00 per program was all right.	71.2	74.2	73.8	94.5
Would pay for at least one of four possible types of Phonevision programs if had television set equipped to receive them	100.0	100.0	92.7	100.0
Would subscribe to Phonevision immediately, if it were available and owned television set	100.0	100.0	76.6	98.5
Number of cases	625	279	137	300

[a]These figures are weighted averages, giving correct representation to the television-owning and non-owning strata.

[b]These questions were not asked of test families, since the percentages should all approach 100.0.

*As suggested earlier, the large differences between volunteers and actual participants apparent in Table 85 reflect the extent to which participation in the test won converts to and strengthened support of subscription television.

In addition to their lesser information about and interest in the Phonevision test, however, probable subscribers remained significantly different from test volunteers in other respects. If Table 86 is compared with Table 83, for example, it is apparent that, while the probable subscribers were about as likely as Phonevision test volunteers to mention going to the movies as an adult recreational preference, they were, though above the general population in these respects, still significantly less likely to stress the comfort and convenience of entertainment by television and their wish to see the newer movies on television than were the volunteers. Moreover, as a comparison of the data in Tables 84 and 87 makes clear, there remained a difference in family size and, especially, in the presence of children in the household between probable subscribers and test volunteers, more particularly when the volunteers are compared with probable subscribers in the Lakeview-Lincoln area from which they came. And, similarly, though differences have been reduced, test volunteers were still significantly wealthier and had higher educational attainment and occupational status than did the probable subscribers.

One of the factors in these differences was the restriction of volunteers and test participants to residential telephone subscribers, a fact of which no account has thus far been taken in defining the probable Phonevision subscribers. If the restriction of subscribing to telephone service is imposed on the probable subscribers as well, then, as may be seen in Tables 85-87, differences between those classified as probable Phonevision subscribers and actual volunteers and participants narrow, for the most part, although the differences in recreational preferences shown in Table 86 and in family composition and socio-economic status, presented in Table 87, remained significant.

TABLE 86

COMPARISON OF SELECTED RECREATIONAL PREFERENCES OF TELEPHONE SUBSCRIBERS WHO WERE PROBABLE SUBSCRIBERS TO PHONEVISION AND PHONEVISION TEST VOLUNTEERS AND PARTICIPANTS

Paraphrase of Response	Proportion in Each Group Giving Indicated Response			
	Probable Subscribers		Phonevision Test Volunteers	Phonevision Test Families[a]
	City	Lakeview-Lincoln		
Going to the movies was among adults' recreational preferences.	41.3	39.8	48.9	33.5
Liked television because of the comfort and convenience of such entertainment.	33.8	40.5	51.1	61.6
Wanted newer movies on television	28.1	26.5	35.0	45.0
Number of cases.	625	279	137	300

[a]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

Phonevision Versus the Phonevision Test

One possibility which presents itself in an attempt to account for the remaining differences between Phonevision test volunteers and those who have been called probable Phonevision subscribers is that which has been referred to earlier--namely, that volunteering for the Phonevision test was not coterminous with either interest in the test or interest in Phonevision. It has already been shown that, on the one hand, many families interested in the test did not volunteer, while, on the other, many families who did volunteer for the test had little intrinsic interest in Phonevision, at least when they applied. And, in Table 82, it was apparent that not everyone classified as a probable subscriber would want to take part in the Phonevision test if it were starting now, which implies that still fewer would have gone to the trouble of actually volunteering; on the other hand, some families classified as probable non-subscribers did indicate that they would volunteer for the test.

TABLE 87

COMPARISON OF SELECTED CHARACTERISTICS OF TELEPHONE SUBSCRIBERS WHO WERE PROBABLE SUBSCRIBERS TO PHONEVISION AND PHONEVISION TEST VOLUNTEERS AND PARTICIPANTS

Characteristic	Probable Subscribers		Phonevision Test Volunteers	Phonevision Test Families[a]
	City	Lakeview-Lincoln		
Number of persons per household (per cent)				
One	6.1	6.4	3.6	2.8
Two	23.2	34.4	27.0	27.6
Three	24.6	26.2	31.4	29.7
Four	24.3	19.7	26.3	22.2
Five	12.7	8.6	5.1	9.6
Six and over	9.1	4.7	6.6	8.1
Proportion of households with no children (19 and under)	42.4	52.0	37.2	43.8
Mean number:				
Adults (20 and over)	2.42	2.22	2.18	2.38
Children (19 and under)	1.08	0.84	1.09	0.99
Proportion of heads of household with occupations classified as professional and semi-professional, or proprietors, managers, and officials	26.4	28.6	35.7	42.7
Median years of education, heads of households	12.0	12.1	12.5	12.8
Median annual family income	$4,531	$4,746	$5,266	$5,324
Number of cases	625	279	137	300

[a]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

In fact, when families are classified simultaneously on the basis of their interest in Phonevision test participation and Phonevision subscription, 18.3% of the families in the city who said they would want to participate in the Phonevision test if it were now beginning were not probable subscribers to Phonevision--13.9% were classified as doubtfuls and 4.4% were classified as probable non-subscribers. Families could be divided into the following four types:

	City	Lakeview-Lincoln All Families	Lakeview-Lincoln Phonevision Test Volunteers	Lakeview-Lincoln Phonevision Test Families
Probable subscribers who would participate in a test.	35.5%	32.1%	65.0%	95.7%
Probable subscribers who would not participate.	18.9	21.0	10.9	2.8
Doubtfuls and probable non-subscribers who would participate in a test	7.9	4.8	7.3	-
Doubtfuls and probable non-subscribers who would not participate.	37.7	42.1	16.8	1.5

An explanation of these types may begin from an examination of the sub-sample of families in Lakeview-Lincoln who were actually canvassed by mail for interest in test participation and whose actual behavior is, therefore, known. As shown below, those who actually did volunteer were most likely to say they would participate in the test and most likely to say they would subscribe to Phonevision. Partial volunteers, on the other hand, were markedly less likely to indicate that they would volunteer, but were not significantly lower in interest in subscribing to Phonevision:

	Proportion Who Would Probably Subscribe	Proportion Who Would Participate in Test	Proportion Who Would Do Both
All families canvassed.	54.1	37.2	32.1
Non-volunteers.	47.3	29.1	23.3
Partial volunteers.	71.8	50.0	43.0
Full volunteers	75.9	72.3	65.0

Two observations may be made about these data, both of which tend to support the reliability and consistency of the verbal reports. First, among the full volunteers, there were relatively few families who would subscribe but not participate or participate but not subscribe; while, on the other hand, 27.2% of the partial volunteers reported that they would subscribe but would not participate. Since a substantial proportion of this latter group actually did drop out of the volunteering process because they objected to the procedures they had to follow to qualify or because they had apprehensions or misapprehensions about the test, it is quite consistent that they should be about as interested in Phonevision as other volunteers, but less willing to participate in a test. Similarly, the earlier research had indicated that there was some interest in test participation among non-volunteers,

although there was a good deal of opposition to the ideal of Phonevision as well, and this group is substantially lower in both willingness to participate and intention to subscribe than either volunteer group.

Secondly, however, it may be noted that, while the proportion of all families canvassed who would participate in the test is not substantially different from the estimate of interest in the test made over a year earlier there appears to have been considerable shifting of interest. Thus, if the earlier estimates are compared with these reports, the full volunteers have lost interest in the test, while non-volunteers have increased in interest:

	Proportion Classified as Interested in Test Participation	
	January, 1950	April-May, 1951
All families canvassed	33.0	37.2
Non-volunteers	17.1	29.1
Partial volunteers	43.9	50.0
Full volunteers	100.0	72.3

The answer to this seeming unreliability and inconsistency is not, however, difficult to find. For instance, during the period intervening between the two results above, understanding of the Phonevision test greatly increased, so that many of the non-volunteers earlier classified as indifferent to the test could have since become interested. This factor alone could well account for the increase in interest among the non-volunteers,* while a similar clearing up of misunderstandings could account for the slighter increase in interest among the partial volunteers. On the other hand, the decrease in willingness to participate among the full volunteers can be traced to two major factors--acquisitions of their own television sets and unwillingness to pay for older movies. That is, among the full volunteers who would volunteer again, 89.1% appeared to have intrinsic interest in Phonevision,** while the estimates, based on test families, indicated that initially, at least, only 54.4% of the volunteers were so motivated. Even if an allowance is made for increased interest in Phonevision itself, and for, perhaps, lesser frankness in revealing their motives among those who did not actually participate in the test, it would still seem that the volunteers who had lost interest in participation came disproportionately from those who had little intrinsic interest in Phonevision. In fact, exactly half of those who would not now participate had acquired a television set since the time they had applied for test participation. Beyond this, however, there was greater familiarity with exact test conditions and the question asked, itself, stressed the concrete form the test had taken.*** Among these volunteers who would not participate now, three-fourths said that they would not pay for movies of the vintage used in the Phonevision test.

*It is noteworthy that the earlier research found roughly 40% of those classified as indifferent interested when Phonevision was explained to them. If this rate is applied to the 27.6% of the non-volunteers then classified as indifferent, it would increase the earlier estimate of interest in this group to 28.1%, which, allowing for sampling error, is the same figure as that now obtained.

**These respondents were asked: "What would interest you about taking part in the Phonevision test? (What other reasons would you have for taking part?)"

***The exact question was: "Well (as you know), Phonevision is a system of charging

Taken together, these two factors of no longer wanting use of a test set and lack of interest in older movies account for 86.9% of those who would no longer participate, so that only 3.6% of the entire group of volunteers were inexplicably classified inconsistently by the opinion data.

The purpose of this discussion has been to suggest that would-be Phonevision test volunteers and probable Phonevision subscribers were two somewhat different groups of people, even though the two groups overlap. In order to give any reliability to the discussion, however, it was necessary, as has just been shown, to demonstrate that the interview data did yield relatively dependable classifications. Now that this crucial point is established, the characteristics and attitudes of would-be test participants can be compared with those of actual volunteers and participants and of potential subscribers.

As presented in Tables 88-90, when telephone subscribers who reported that they would want to participate in the Phonevision test are compared with the data for actual Phonevision test volunteers and participants in Tables 85-87, it is clear that these would-be participants were about as informed about Phonevision as actual volunteers were and had, if anything, even more favorable attitudes toward subscription television in general and toward Phonevision than the actual volunteers. When those would be participants who were also probable subscribers are examined separately these tendencies are intensified. (See Table 88.) Similarly, the recreational preferences shown in Table 89 move toward those of actual volunteers, and differences in family composition and socio-economic status are likewise reduced, as shown in Table 90.

It is thus apparent that the group of probable Phonevision subscribers who said they would participate in the Phonevision test and met the condition of having a telephone which had been necessary for participation closely approximated the families who did actually volunteer, especially when these comparisons are restricted to the Lakeview-Lincoln district. Such differences as still remain in the Lakeview-Lincoln comparisons are probably attributable to actual changes in the group who would volunteer (that is, some families lost interest, while others gained it), to slight inaccuracies in classification, and to differences which probably existed between all interested families and the sub-group of them who would actually have taken the trouble to volunteer. Residual differences in the city as a whole were larger and probably reflect, in addition to the factors just enumerated, the underlying differences in composition of the population between the Lakeview-Lincoln district and the city as a whole, the logical implication being that if Phonevision test participants had been drawn from the city as a whole they would have had somewhat different characteristics. In comparison with other probable Phonevision subscribers, the would-be test participants among them were (compare Tables 85-87 with Tables 88-90) somewhat larger family groups, more likely to

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people to see television programs by sending the programs out in scrambled form. If people pay for it, they can get the picture unscrambled, through a special device installed in their television set. They've been testing Phonevision, for the last three months, with three hundred families who were loaned a television set which could receive the jittered programs clearly, if the family called up and ordered the program. Then the family saw a regular full-length movie on their television set and was charged a dollar for each movie they saw. Of course, the families didn't have to buy any movies unless they wanted them, and they could use the television set they were loaned to see regular television programs any time they wanted to...

If the Phonevision test were beginning now (just as I described it), do you think your family would want to take part in the test or not?"

TABLE 88

OPINIONS OF PHONEVISION AND SUBSCRIPTION TELEVISION AMONG TELEPHONE SUBSCRIBERS WHO WERE WOULD-BE PHONEVISION TEST PARTICIPANTS

Paraphrase of Response	Proportion in Each Group Giving Indicated Response			
	All Would-be Participants		Would-be Participants Who Were Probable Subscribers	
	City	Lakeview-Lincoln	City	Lakeview-Lincoln
Had heard of Phonevision before the interview	90.8	92.6	91.8	93.1
Had seen the jittered Phonevision picture	72.4	71.9	72.4	73.2
Favored limited subscription television	84.1	87.3	89.7	90.9
Might pay for subscription television programs	88.4	94.2	92.3	97.6
Would want to take part, if Phonevision test were starting now	100.0	100.0	100.0	100.0
Chose Phonevision movie over competing entertainment at least two out of four times	82.9	85.2	87.3	90.2
Thought charge of $1.00 per program was all right	67.9	72.2	71.9	73.8
Would pay for at least one of four possible types of Phonevision programs if had television set equipped to receive them	96.6	98.4	100.0	100.0
Would subscribe to Phonevision immediately, if it were available and owned television set	83.0	86.8	100.0	100.0
Number of cases	501	189	416	164

have children, and of higher socio-economic status.*

These differences between would-be test volunteers and non-volunteers and between probable subscribers in Lakeview-Lincoln and in the city imply that the behavior of the test families during the test can be extended only to the relatively small sub-group of probable subscribers in Lakeview-Lincoln who had telephones and were would-be participants, for it is only this sub-group which approximates the test families in composition, socio-economic status and attitudes and preferences, and which the test families can, therefore, be taken as representing. In order to estimate what the behavior of other probable subscribers would be, and to estimate what might have happened to any sub-group, including the test families, if the Phonevision programming were different, methods other than direct projection must be adopted. In order to simplify the presentation, the number of potential subscribers is outlined in the next section, before estimates of per-capita expenditures are attempted.

*This finding is probably the counterpart of the prestige appeals of the Phonevision test discussed earlier. It seems likely that complete family groups in comfortable circumstances were more apt to regard themselves as "representative" families, "worthy" of inclusion in the test.

TABLE 89

SELECTED RECREATIONAL PREFERENCES OF TELEPHONE SUBSCRIBERS WHO WERE WOULD-BE PHONEVISION TEST PARTICIPANTS

Paraphrase of Response	Proportion in Each Group Giving Indicated Response			
	All Would-be Participants		Would-be Participants Who Were Probable Subscribers	
	City	Lakeview-Lincoln	City	Lakeview-Lincoln
Going to the movies was among adults' recreational preferences	40.3	45.0	41.6	43.9
Liked television because of the comfort and convenience of such entertainment.	33.5	44.4	34.9	47.6
Wanted newer movies on television	30.0	31.2	31.0	31.7
Number of cases.	501	189	416	164

TABLE 90

SELECTED CHARACTERISTICS OF TELEPHONE SUBSCRIBERS WHO WERE WOULD-BE PHONEVISION TEST PARTICIPANTS

Characteristic	All Would-be Participants		Would-be Participants Who Were Probable Subscribers	
	City	Lakeview-Lincoln	City	Lakeview-Lincoln
Number of persons per household (per cent)				
One	4.6	5.3	4.3	4.9
Two	22.3	31.3	22.6	32.3
Three	23.0	27.0	23.5	26.8
Four.	26.9	22.7	26.7	22.0
Five.	13.4	7.9	14.2	8.5
Six and over.	9.8	5.8	8.7	5.5
Proportion of households with no children (19 and under).	38.9	46.0	38.7	43.9
Mean number:				
Adults (20 and over).	2.44	2.22	2.43	2.19
Children (19 and under)	1.16	0.94	1.15	0.96
Proportion of heads of households with occupations classified as professional and semi-professional, or proprietors, managers and officials	26.9	30.2	28.4	32.4
Median years of education, heads of households.	12.0	12.2	12.1	12.3
Median annual family income	$4,588	$4,932	$4,613	$5,238
Number of cases.	501	189	416	164

ESTIMATES OF THE NUMBER OF SUBSCRIBERS

In view of the fact that these opinion data do show such striking consistency and reliability, there would appear to be little doubt that the number of potential subscribers--apart from considerations of feasibility--to Phonevision would be larger than the potential number of participants in a test of Phonevision which duplicated the present test. This conclusion should not be surprising, since probable subscribers were defined in terms of a far more varied program offering than the test was able to supply. While the procedure of permitting respondents to think of any type of program they would like on Phonevision and then classifying them as potential subscribers if they would pay for these slightly increased the number classified as probable subscribers (there were 1.2% in the city who apparently would not be subscribers unless something other than movies and sports events were offered) without any assurance that their sometimes unique program desires could be fulfilled by Phonevision, this slight inflation is probably far overbalanced by the total exclusion of families who were already somewhat drawn to Phonevision, as evidenced by their interest in paying for some programs. When it is considered that this estimate of probable subscribers gives no weight to the effectiveness of either an advertising campaign or an opportunity to see Phonevision at the homes of friends and neighbors in converting many of those here classified as doubtful and even some of those now classified as non-subscribers whose attitudes were otherwise favorable to subscription television, while these circumstances would undoubtedly attend any commercial operation of subscription television, there is every reason to believe that the number of potential subscribers will be, if anything, underestimated here.

In fact, all of the procedures followed here aim at conservatism--underestimating rather than overestimating. For instance, it may be estimated that there are 1,149,000 dwelling units in Chicago, in terms of the definition used in this research.* Nevertheless, because interviews were obtained in only 85.9% of the occupied dwelling units assigned in the sample, the rates of interest in and desire for Phonevision observed in the survey are projected only to the 987,000 households represented by the sample. The 162,000 "missing" households are thus treated as if they would yield not one subscriber to Phonevision. While it is probably true that the kinds of households lost from the sample would have a lower subscription rate than the households interviewed,** it is almost certain that the assumption used here of no subscribers and no expenditures in this group of households understates the case.

If these 987,000 households are distributed according to their joint possession of telephones, television sets and interest in subscribing to Phonevision, the complete potential market picture, shown in Table 91, emerges. As summarized in Table 92, where sampling error is taken account of, there were in Chicago in the Spring of 1951 a minimum of 246,000 to 304,000 families*** who would subscribe to a system of subscription television requiring the use of a telephone and of 283,000 to 343,000 who would participate in subscription television if a telephone were not needed. Since television ownership is steadily growing, two other major estimates are also shown: one indicates that there would be a minimum of 282,000 to 342,000 subscribers to a system of subscription television requiring telephones if families who planned to actually carried out their intentions to buy television sets by the Spring of 1952 and

*See Appendix A.

**Losses tended to come disproportionately from one-person families and from lower economic groups, both of which strata were less likely to own or plan to own television sets. There is also some evidence that losses came disproportionately from families who were not interested in television.

***The range is $\pm 2\sigma$. Standard errors were computed, taking account of clustering in the sample. On the basis of selected computations, the sample was estimated to have 66% of the efficiency of a simple random sample. Use of this estimate undoubtedly leads to some exaggeration of the sampling error of the larger estimates, since the removal of the restrictions with regard to current television and telephone ownership in these estimates reduced or eliminated the intra-block correlations.

TABLE 91

DISTRIBUTION OF CHICAGO FAMILIES WITH REFERENCE TO INTEREST IN SUBSCRIBING TO PHONEVISION AND TELEVISION AND TELEPHONE OWNERSHIP

Television and Telephone Ownership Status	Proportion and Estimated Number of Families in Each Group with Given Telephone and Television Ownership Status							
	Probable Subscribers		Doubtfuls		Probable Non-subscribers		All Families	
	Per cent of Sample Interviewed	Estimated Number of Households (in 1,000's)	Per cent of Sample Interviewed	Estimated Number of Households (in 1,000's)	Per cent of Sample Interviewed	Estimated Number of Households (in 1,000's)	Per cent of Sample Interviewed	Estimated Number of Households (in 1,000's)
Had television set at time of interview								
Had telephone	27.9	275	11.3	112	10.1	100	49.3	487
Planned to get telephone								
Within a year	1.1	11	0.3	3	0.2	2	1.6	16
Later	1.2	12	0.7	7	0.1	1	2.0	20
Did not plan to get telephone	1.5	15	1.1	10	1.4	14	4.0	39
Planned to get television set within a year								
Had telephone	3.8	37	0.9	9	0.7	7	5.4	53
Planned to get telephone								
Within a year	1.1	11	0.3	3	0.1	1	1.5	15
Later	0.5	5	-	-	-	-	0.5	5
Did not plan to get telephone	1.0	10	0.4	4	0.1	1	1.5	15
May get television set later								
Had telephone	6.1	60	2.2	22	1.1	11	9.4	93
Planned to get telephone								
Within a year	0.2	2	0.2	2	0.1	1	0.5	5
Later	2.4	24	0.7	7	0.3	3	3.4	34
Did not plan to get telephone	1.9	19	1.2	11	0.8	8	3.9	38
Did not intend to get television set								
Had telephone	3.1	30	2.0	20	4.4	43	9.5	93
Planned to get telephone								
Within a year	0.1	1	-	-	0.1	1	0.2	2
Later	0.3	3	0.3	3	0.1	1	0.7	7
Did not plan to get telephone	2.2	22	0.9	9	3.5	34	6.6	65
Total	54.4	537	22.5	222	23.1	228	100.0	987

TABLE 92

SUMMARY OF ESTIMATED NUMBER OF SUBSCRIBERS (IN 1,000's) TO SUBSCRIPTION TELEVISION

Time Period to Which Estimate Applies	If Telephone Is Necessary		If Telephone Is Not Necessary and Television Ownership Intentions Are Carried Out
	and Television Ownership Intentions Are Carried Out	and Both Television and Telephone Ownership Intentions are Carried Out	
At time of interview (April-May, 1951). .	275 ± 29	275 ± 29	312 ± 30
By Spring, 1952 . . .	312 ± 30	334 ± 31	376 ± 31
By saturation of television market	372 ± 31	437 ± 32	481 ± 32

continued their subscription to telephone service. This estimate for the Spring of 1952 rises to 303,000 to 365,000 if it is assumed that families will also carry out their intentions to get telephone service within a year, and to 345,000 to 407,000, if a system of subscription television not requiring a telephone is adopted. The final estimate made is based on the assumption that ultimately every family that felt it might get a television set actually would do so, in order to indicate the probable maximum extent of the market; this estimate is also made under the three assumptions: that telephone ownership remains constant, that everyone who planned ultimately to have a telephone will do so and that telephones will not be needed.*

In view of the size of these estimates of the public for subscription television, it may be well to emphasize again that all of the preceeding estimates assume, first, that none of the 162,000 households unrepresented in the sample would subscribe and, second, that none of the 450,000 households classified as doubtful or non-subscribers would subscribe. It would be possible to attempt to make reasonable assumptions about the actual behavior of these households and, thus, include them in these estimates,** but, since the purpose here is only to set a minimum figure, no effort has been made in this direction. The data provided are, however, sufficient for those who wish to do so to estimate the audience for subscription television under assumptions other than that of these 162,000 households being entirely outside the market for subscription television.

It should be pointed out, as well, that, in addition to these two major conservative assumptions, no account has been

*It should, of course, be remembered that estimates of this kind always contain the assumption that all conditions not explicitly specified remain the same as they were at the time the research was done. Obviously, any marked change in economic conditions or, perhaps, even in regular television programming--to mention only two of the many variables subject to change--would radically affect these estimates.

**For example, on the basis of the attitudinal data presented earlier, it does not seem too unreasonable to believe that at least half of the doubtfuls and perhaps a tenth of the probable non-subscribers who had or acquired television sets would ultimately become subscribers if a system of subscription television were actually operating successfully. Assumptions about the unrepresented households would be more difficult to make because it must be assumed that they would have lower rates of telephone subscription and television ownership as well as lower rates of interest in Phonevision.

taken of the possible effect of the introduction of subscription television on the rate at which television sets or telephone service, if needed, is acquired. For example, in the current sample, there were 2.1% who said they would get television sets only if Phonevision (i.e. subscription television) were available, and 2.5% who said they would get telephones only under similar conditions, while there were more who indicated that their acquisition of telephones or television sets would be hastened by the advent of subscription television (10.4% said they would be more interested in a television set and 6.5% said they would be more interested in a telephone, if the tested form of Phonevision were available).

Finally, there is also reason to believe that interest in subscription television will increase as television sets become more familiar possessions, provided programming remains at its current levels. That is, at the time of this research, interest in subscription television was related to length of television ownership, with those who had had television sets at least one year more interested in subscribing than were owners whose experience with television had been briefer. (See Table 93.) While there are differences in the composition and attitudes of the groups who have owned television sets for varying lengths of time (for example, larger families and wealthier families are more likely to have owned television sets for longer periods of time), there is evidence to suggest that the differences in willingness to subscribe to Phonevision among television set owners of various lengths of ownership are not a function of these prior differences which helped to determine which families got television sets first, but are a function of their experience with television.

TABLE 93

RELATION OF LENGTH OF TELEVISION OWNERSHIP TO INTEREST IN SUBSCRIBING TO PHONEVISION IN CHICAGO

Length of Television Ownership	Proportion in Given Television Ownership Group Classified as:			Total	
	Probable Subscribers	Doubtfuls	Probable Non-subscribers	Per cent	Number
ALL FAMILIES					
Two years and over	62.1	21.3	16.6	100.0	169
One to two years	62.4	21.2	16.4	100.0	269
Six months to one year	52.0	25.4	22.6	100.0	256
Three to six months	47.4	26.3	26.3	100.0	114
Less than three months	41.7	28.3	30.0	100.0	60
Do not own					
Plan to get set within a year	72.6	16.3	11.1	100.0	135
May get set later	61.5	24.8	13.7	100.0	262
Will not get set	33.4	19.5	47.1	100.0	261
FAMILIES WITH TELEPHONE SERVICE					
Two years and over	62.7	21.5	15.8	100.0	158
One to two years	63.2	19.5	17.3	100.0	231
Six months to one year	52.1	25.1	22.8	100.0	219
Three to six months	49.0	25.0	26.0	100.0	96
Less than three months	45.8	27.1	27.1	100.0	48
Do not own					
Plan to get set within a year	72.0	14.6	13.4	100.0	82
May get set later	64.6	23.6	11.8	100.0	144
Will not get set	32.4	22.8	44.8	100.0	145

Two lines of evidence appear in the data in Table 93: first, since the groups shown have progressively fewer of the types of families favorably disposed toward subscription television (e.g., large families, families with children, families of higher socio-economic status, etc), it would follow that, if their attitudes toward subscription television were a function of these factors, non-owners should be even less favorably oriented toward subscription television than the relatively new owners; on the contrary, however, those among the non-owners who were at all likely to enter the television market were at least as favorable to subscription television as those who had had television sets at least a year. Moreover, although the limitation of the comparisons to families with telephone service serves to increase both average family size and economic level in all the groups shown, these groups are not particularly different in their attitudes toward subscription television from people of similar television ownership status of smaller average family size and lower economic status. Although they are not shown here, detailed comparisons of sub-groups in which these compositional factors are controlled while length of television ownership varies support this conclusion. Both of these patterns strongly suggest that new television owners, upon acquisition of a television set, become temporarily engrossed with it, but that in the course of a year or so they become more critical of it and are receptive to suggested improvements of television. If this tentative conclusion is correct, then the "aging" of the television public will lead to greater interest in and subscription to Phonevision.

ESTIMATES OF EXPENDITURES

In an attempt to estimate how much subscribers to Phonevision would spend, respondents were asked to estimate their expenditures for Phonevision under five conditions: if only older movies like those used in the test were available, if only new movies were available, if only sports events were available, if only other types of programs (which the respondent had indicated he wanted on Phonevision) were available, and, finally, if all the different kinds of programs the respondent wanted were available.* The object of this approach was, of course, to permit estimates of expenditures under programming conditions different than those used in the Phonevision test. Since self-estimates are not always accurate, however, some examination of the relation between estimated and actual expenditures of test participants should serve to indicate the extent to which self-estimates may be relied upon.

Reliability of Self-Estimates of Expenditures

As shown in Table 94, test families as a group estimated that their expenditures for older movies on Phonevision would be $1.60 per week,** a figure which was only $0.05 a week higher than they actually spent. As the data indicate, however, actual and estimated expenditures for older movies approached as closely as they did because there was a sizeable group (34 families) who said they would spend nothing for older movies, even though most of them had actually bought the older test movies, and this group, whose estimates were lower than their actual expenditures, tended to counterbalance the tendency of those who said they would buy older movies to give estimates of expenditures which exceeded their actual expenditures by an average of $0.21 a week.

Moreover, when test families are divided into three groups--those who were

*For each of the separate program types, respondents were asked: "If these were the only programs on Phonevision, about how many of these programs a month do you think your family would take at one dollar per program? (Just your guess....)" For the combined programming, the question asked was: "Suppose all the different kinds of programs you are interested in having were on Phonevision... About how many programs a month do you think your family would take, at one dollar per program? (Just your guess...)"

**While the questions calling for estimates of expenditures asked for monthly estimates, it was clear from interviewers' reports and analysis of the distribution of expenditures that most respondents were computing the month by arriving at a weekly estimate and multiplying by four. Consequently, one-fourth of the reported estimate is shown throughout this section as a weekly estimate.

TABLE 94

ACTUAL AND ESTIMATED EXPENDITURES OF PHONEVISION TEST FAMILIES FOR OLDER MOVIES ON PHONEVISION

Television Ownership	Mean Weekly Expenditures for Older Movies			
	All Test Families		Families Who Would Buy Older Movies	
	Actual	Estimated	Actual	Estimated
All families[a]	1.55 (300)[b]	1.60 (300)	1.61 (266)	1.82 (266)
Old television owners	1.65 (149)	1.86 (149)	1.69 (137)	2.03 (137)
"New television owners"[c]	1.59 (74)	1.59 (74)	1.61 (65)	1.81 (65)
Non-owners	1.41 (77)	1.30 (77)	1.50 (64)	1.57 (64)

[a]These figures are weighted averages, giving correct representation to the three groups shown below.

[b]The number in parentheses is the number of cases on which the mean is based.

[c]This group includes both families who became television owners after applying for test participation and families who felt that they would have become television owners by the end of the test except for their test participation.

TABLE 95

CORRELATIONS BETWEEN TEST FAMILIES' ACTUAL AND ESTIMATED EXPENDITURES FOR VARIOUS TYPES OF PHONEVISION PROGRAMS

Group	Number of Cases	Coefficient of Correlation in Given Group between Actual Expenditures and Estimated Expenditures for Each Program Type				
		All Program Types	New Movies	Older Movies	Sports Events	Other Types
ALL TEST FAMILIES						
Old television owners	149	.253	.277	.240	.153	.120
"New television owners"	74	.386	.569	.634	-.001	-.231
Non-owners	77	.402	.548	.497	.196	.020
FAMILIES WHO WOULD BUY EACH PROGRAM TYPE						
Old television owners		.250	.263	.203	.089	.135
"New television owners"		.438	.555	.768	.247	-.081
Non-owners		.381	.534	.508	.166	-.017

television owners at the time of their test application, those who became or would have become television owners by the end of the test, and those who would still not have been television owners at the end of the test--it is apparent that the "old" owners were most prone to overestimate their expenditures, while the non-owners were least likely to do so.*

The implication of these data is that, while the over-all group estimate closely approaches the true situation, there is a good deal of internal counterbalancing error, so that for individual families or for sub-groups the estimated expenditures may seriously deviate from actual behavior. This conclusion is shown in another way in Table 95, where correlations between actual expenditures for older test movies and estimated expenditures are shown. The size of these correlation coefficients makes it clear that while there was a relationship between actual expenditures and estimated expenditures for either older movies, new movies or a combined programming,** the relationship was far from perfect. At the same time, these coefficients also indicate that the relationship, as far as movies were concerned, was closest in the sub-group of "new television owners," some what more imperfect among non-owners and least operative in the group of "old" television owners.***

Since it appears that the self-estimates of Phonevision expenditures of even the test families, who had prior experience with Phonevision to base their estimates on, are not completely reliable, what can be said of the self-estimates made by groups who did not have any experience with Phonevision? These self-estimates for Phonevision test volunteers who did not participate in the test and for all families (regardless of telephone and television ownership status) classified as probable subscribers in the Lakeview-Lincoln area and in the city as a whole are compared with those of test families in Table 96 on page 170.

If the Phonevision test volunteers are examined first, it is obvious that their estimates--either for what families who would spend money for a given program type would spend or for what all families, on the average, would spend--were substantially below those of test families. In fact, the volunteers' estimated rate of expenditure for older movies was just about half of what was actually spent by test families, and, even when the rate of expenditure for older movies is increased by limiting it to the average estimated expenditures of volunteers who thought they would buy older movies, it was still $0.41 a week below actual test expenditures for older movies.

When this result is juxtaposed with the fact that Phonevision test volunteers were, except for such minor biases as might have resulted from substitution in completing the roster of test participants, a counterpart of the sample of test families in everything but actual test participation, it is obvious that test volunteers were substantially underestimating what their actual expenditures would have been, at least as regards older movies, where an objective standard of evaluation exists. To put it another way, test

*Much of this result is due to the presence among the "old" television owners of only five families who systematically gave the highest estimates of expenditures, whatever the program type under consideration, while having been among the lowest actual expenders for older movies. With the elimination of these five families, the estimated weekly per capita expenditures of all families becomes $1.55, which corresponds exactly to actual expenditures, while the estimates for families who would buy older movies exceeds their actual expenditures by $0.13.

**The lack of relationship between actual expenditures for older movies and estimated expenditures for either sports events or other types of entertainment suggests that there is little reason to expect that those who spend most for movies will also be most interested in other types of entertainment on Phonevision. Rather, it appears that the different program types appeal to somewhat different groups.

***Once again, this result is largely due to the five aberrant cases mentioned earlier. When they are eliminated, the correlation coefficients rise to .439 and .492 for new and older movies, respectively, among all "old" television owners, and to .430 and .494, respectively, among "old" television owners who would buy the program type.

TABLE 96

SELF-ESTIMATES OF EXPENDITURES FOR PHONEVISION UNDER VARIOUS TYPES OF PROGRAMMING

Group	Estimated Mean Weekly Expenditures of Given Group for Each Programming				
	All Program Types	New Movies Only	Older Movies Only	Sports Events Only	Other Types Only
ALL FAMILIES					
Phonevision test families[a] . . .	2.85(300)[b]	2.26(300)	1.60(300)	1.44(300)	1.22(300)
Phonevision test volunteers. . .	1.55(137)	1.17(137)	0.78(137)	0.70(137)	0.63(137)
Probable subscribers					
Lakeview-Lincoln	1.89(390)	1.21(390)	0.84(390)	0.77(390)	0.64(390)
City	1.90(831)	1.21(831)	0.75(831)	0.76(831)	0.61(831)
FAMILIES WHO WOULD BUY PROGRAM TYPE					
Phonevision test families[a] . . .	2.90(295)	2.29(296)	1.82(266)	1.49(233)	1.47(249)
Phonevision test volunteers. . .	2.03(105)	1.34(120)	1.14(95)	1.17(82)	1.12(77)
Probable subscribers					
Lakeview-Lincoln	1.89(390)	1.32(356)	1.15(286)	1.25(240)	1.23(203)
City	1.90(831)	1.33(769)	1.13(567)	1.20(531)	1.14(446)

[a]These figures are weighted averages giving correct representation to the television-owning and non-owning strata.

[b]The number in parentheses is the number of cases on which the mean is based.

families came much closer to actuality in estimating their expenditures for older movies, while families with no actual experience with Phonevision appeared to have seriously underestimated the attraction Phonevision programs would have for them. While it is only with respect to older movies that this conclusion can be completely demonstrated, it appears likely that the tendency of volunteers to underestimate their expenditures operated consistently, regardless of the type of program under consideration, since even their estimated expenditures for new movies were substantially below actual test expenditures for older movies.

If the other comparison is made--test volunteers, on the one hand, and probable Phonevision subscribers in Lakeview-Lincoln and the city as a whole, on the other--it is apparent that Phonevision test volunteers and probable Phonevision subscribers made about the same estimates of expenditures for Phonevision programs in each program category. The only exception to this statement is the average rate of expenditures for all program types where probable subscribers gave somewhat higher estimates than did volunteers, but this result comes about because the Phonevision test volunteers include some families classified as doubtful and non-subscribers, who lower the average rate, while probable subscribers by definition exclude these groups.

From the fact that probable subscribers estimated their expenditures at about the same level as did Phonevision test volunteers, while Phonevision test volunteers have been shown to have been substantially underestimating their expenditures, it seems likely that probable subscribers, who, like the Phonevision test volunteers, lacked actual experience with Phonevision, were also underestimating their expenditures to about the same degree as the volunteers did. This tentative conclusion also receives support from a quite different approach to the data: if the probable subscribers are divided into the 158

strata, based on five compositional factors--television ownership at the time of test application, family size, number of children, education of head of household and family income, which were used in selecting the test families, and to each stratum is applied the average rate of expenditure actually made by test families in that stratum, then the weighted average expenditures of the 158 strata, based on the distribution of probable subscribers among these strata, are $1.55 a week--exactly the actual expenditure rate.* In other words, the residual differences between test families and probable subscribers in these compositional factors were not large enough to lead to an expectation of lower expenditures among probable subscribers.

On the other hand, it should be remembered that there were also some attitudinal differences remaining in addition to these residual compositional differences. If willingness to participate in a test of Phonevision is selected as an index of these differences, then, as shown in Table 97, probable subscribers who would also be test volunteers tended to give higher estimates of their expenditures for each program type, and this was true whether estimates were based only on those families who would buy the program type or on all families. These differences in expenditure rates between would-be test volunteers and non-volunteers were, however, most marked in the case of expenditures for either new or older movies and for total expenditures, which reflect movie purchases to a large extent. This difference in interest in movies between would-be participants and non-participants in a Phonevision test was not an artifact of compositional differences between the two groups, for, if the same standardization procedure of applying test families' mean intra-strata expenditure rates to the two distributions among the 158 strata of probable subscribers who were would-be test participants and those who were not, the predicted expenditures, based on their distribution among the strata and test families' actual expenditures within the strata are exactly the same ($1.55 per week) for both the would-be participants and the non-participants. It follows, then, that real taste differences were operating, and it cannot be expected that all those classified as probable subscribers would purchase movies at the same rate as test families did.

Yet, those probable subscribers who were telephone subscribers and were would-be test participants should, if anything, be expected to spend more money on older movies than test families did. This expectation follows from the fact that few residual differences in composition and attitude remain between test families and this sub-group of probable subscribers, especially if the Lakeview-Lincoln families in this sub-group are considered. Moreover, the group of probable subscribers who were also would-be volunteers, unlike the test family group, excludes those who had no intrinsic interest in Phonevision, and, with greater knowledge of the test, there was also a tendency to exclude those who had no initial interest in older movies on Phonevision. Nevertheless, as the data in Table 97 make clear, even this sub-group of probable subscribers who were would-be test participants and had telephones estimated their expenditures for older movies at a much

*It should, nevertheless, not be concluded from these data that probable subscribers as a whole would average $1.55 per week as expenditures for older movies. Even apart from sampling error and the conclusion arrived at earlier that the expenditures of test families should be regarded as coming from the upper range of sample estimates, there is the fact that the probable subscribers included many families (31.6%) who said they would not pay for older movies. If this 31.6% of probable subscribers are assigned a zero expenditure rate, while the remaining 68.4% are assigned the expenditure rate predicted from their strata distribution and test families' intra-strata expenditure rates (this rate is also $1.55), then the predicted expenditures for the entire group of probable subscribers would be $1.06 a week. It is probable, however, that this latter figure is an underestimate, for, under actual operating conditions, it seems likely that some families classified as zero expenders for older movies would find themselves sometimes buying older movies; that is, since underestimation apparently was operating, the underestimation tendency must also be expected from the group who estimated that they would make no expenditures for older movies.

TABLE 97

RELATION OF WILLINGNESS TO PARTICIPATE IN A PHONEVISION TEST TO SELF-ESTIMATES OF EXPENDITURES FOR PHONEVISION AMONG PROBABLE SUBSCRIBERS IN CHICAGO

Willingness to Participate in Phonevision Test	Estimated Mean Weekly Expenditures of Given Group for Each Programming				
	All Program Types	New Movies Only	Older Movies Only	Sports Events Only	Other Types Only
ALL FAMILIES					
ALL PROBABLE SUBSCRIBERS					
City					
Those who would participate. .	2.05(541)[a]	1.38(541)	0.89(541)	0.77(541)	0.67(541)
Those who would not participate	1.60(290)	0.88(290)	0.55(290)	0.73(290)	0.50(290)
Lakeview-Lincoln					
Those who would participate. .	2.12(236)	1.42(236)	1.02(236)	0.87(236)	0.73(236)
Those who would not participate	1.50(154)	0.88(154)	0.56(154)	0.62(154)	0.49(154)
PROBABLE SUBSCRIBERS WHO WOULD BUY PROGRAM TYPE					
City					
Those who would participate. .	2.07(541)	1.45(518)	1.19(404)	1.19(351)	1.17(309)
Those who would not participate	1.60(290)	1.09(251)	0.97(164)	1.19(180)	1.06(137)
Lakeview-Lincoln					
Those who would participate. .	2.12(236)	1.47(227)	1.26(191)	1.32(155)	1.31(132)
Those who would not participate	1.50(154)	1.04(129)	0.90(95)	1.12(85)	1.06(71)
TELEPHONE SUBSCRIBERS ONLY					
ALL PROBABLE SUBSCRIBERS					
City					
Those who would participate. .	2.03(416)	1.36(416)	0.91(416)	0.74(416)	0.67(416)
Those who would not participate	1.62(209)	0.93(209)	0.54(209)	0.78(209)	0.49(209)
Lakeview-Lincoln					
Those who would participate. .	2.09(164)	1.43(164)	1.05(164)	0.88(164)	0.72(164)
Those who would not participate	1.50(115)	0.84(115)	0.50(115)	0.59(115)	0.46(115)
PROBABLE SUBSCRIBERS WHO WOULD BUY PROGRAM TYPE					
City					
Those who would participate. .	2.03(416)	1.43(397)	1.21(312)	1.16(264)	1.13(245)
Those who would not participate	1.62(209)	1.07(180)	1.00(112)	1.17(139)	1.07(95)
Lakeview-Lincoln					
Those who would participate. .	2.09(164)	1.48(159)	1.27(135)	1.30(110)	1.29(91)
Those who would not participate	1.50(115)	1.03(94)	0.83(69)	1.06(63)	0.98(54)

[a]The number in parentheses is the number of cases on which the mean is based.

TABLE 98

SELF-ESTIMATES OF EXPENDITURES FOR PHONEVISION PROGRAMS UNDER VARIOUS MARKET CONDITIONS IN CHICAGO

Program Type and Time of Estimate	Mean Self-Estimates of Weekly Expenditures of Probable Phonevision Subscribers		
	If Telephone Is Necessary		If Telephone Is Not Necessary and Television Ownership Intentions Are Carried Out
	and Television Ownership Intentions Are Carried Out	and Both Television and Telephone Ownership Intentions Are Carried Out	
ALL PROGRAM TYPES			
At time of interview (April-May, 1951)	2.05 ± 0.14 (427)[a]	2.05 ± 0.14 (427)	2.05 ± 0.13 (485)
By Spring, 1952	2.00 ± 0.13 (486)	2.01 ± 0.13 (519)	2.03 ± 0.12 (583)
By saturation of television market	1.93 ± 0.11 (579)	1.95 ± 0.10 (678)	1.96 ± 0.10 (744)
NEW MOVIES			
At time of interview (April-May, 1951)	1.34 ± 0.11	1.34 ± 0.11	1.39 ± 0.11
By Spring, 1952	1.31 ± 0.10	1.33 ± 0.10	1.35 ± 0.09
By saturation of television market	1.25 ± 0.09	1.27 ± 0.08	1.28 ± 0.08
OLDER MOVIES			
At time of interview (April-May, 1951)	0.81 ± 0.09	0.81 ± 0.09	0.79 ± 0.09
By Spring, 1952	0.81 ± 0.08	0.81 ± 0.08	0.81 ± 0.07
By saturation of television market	0.80 ± 0.07	0.80 ± 0.06	0.79 ± 0.06
SPORTS EVENTS			
At time of interview (April-May, 1951)	0.79 ± 0.10	0.79 ± 0.10	0.79 ± 0.09
By Spring, 1952	0.80 ± 0.09	0.80 ± 0.09	0.80 ± 0.08
By saturation of television market	0.77 ± 0.08	0.78 ± 0.08	0.79 ± 0.08
OTHER TYPES			
At time of interview (April-May, 1951)	0.63 ± 0.09	0.63 ± 0.09	0.60 ± 0.09
By Spring, 1952	0.61 ± 0.09	0.61 ± 0.09	0.61 ± 0.08
By saturation of television market	0.61 ± 0.08	0.61 ± 0.07	0.61 ± 0.07

[a]The number in parentheses is the number of cases on which the means for this group, throughout the table, are based.

TABLE 99

FINAL ESTIMATES OF EXPENDITURES FOR PHONEVISION UNDER VARIOUS MARKET CONDITIONS IN CHICAGO

Program Type and Time of Estimate	Estimated Weekly Expenditures for Phonevision (In $1,000's) in Chicago Under Given Market Conditions		
	If Telephone Is Necessary		If Telephone Is Not Necessary and Television Ownership Intentions Are Carried Out
	and Television Ownership Intentions Are Carried Out	and Both Television and Telephone Ownership Intentions Are Carried Out	
DIVERSIFIED PROGRAMMING			
At time of interview (April-May, 1951)	580 ± 88	580 ± 88	640 ± 93
By Spring, 1952	624 ± 90	671 ± 93	763 ± 94
By saturation of television market	718 ± 93	852 ± 93	943 ± 94
NEW MOVIES ONLY			
At time of interview (April-May, 1951)	368 ± 58	368 ± 58	434 ± 63
By Spring, 1952	409 ± 58	444 ± 62	508 ± 63
By saturation of television market	465 ± 58	555 ± 62	616 ± 62
MINIMUM ESTIMATE			
At time of interview (April-May, 1951)	220 ± 34	220 ± 34	250 ± 36
By Spring, 1952	250 ± 36	267 ± 38	301 ± 38
By saturation of television market	297 ± 38	350 ± 39	385 ± 39

lower rate than the actual expenditures of test families, even when the estimated rate is limited to those who believed they would buy old movies. In fact, it is the estimates of this sub-group of expenditures for new movies which approached the sampling range of actual expenditures to be expected for older movies from groups like the test families--$1.43-$1.55.

Predicted Expenditures for Phonevision

In view of the preceding discussion, it seems reasonable to regard probable Phonevision subscribers' self-estimates of expenditures for Phonevision as conservative estimates of what expenditures would actually be. These self-estimates for the various program types under differing possible market conditions are presented in Table 98. In Table 99, estimates of the total weekly expenditures in Chicago under these differing market conditions are presented for three different types of programming.

From these data, it appears that if the form of Phonevision tested had been operating commercially in the late winter and early Spring of 1951, and had been offering a diversified programming of movies, sports events, plays, concerts and so forth, Chicago families would have spent

at least $492,000 to $668,000 weekly.* If a system of subscription television not requiring telephones had been in use, $547,000 - $733,000 would have been spent weekly, under the same programming conditions. With the growth in ownership of television sets, weekly expenditures for a system of subscription television requiring telephones, and offering diversified programming could rise to $625,000 to $811,000, while non-telephone systems of subscription television would reach $849,000 to $1,037,000.

If only new movies were made available by subscription television, expenditures would have been $310,000 to $426,000 weekly, early in 1951, if telephones were needed, while receipts would probably have been $371,000 to $497,000 weekly, if telephones were not necessary. Similarly, with increased ownership of television sets, expenditures for new movies in Chicago could reach $407,000 to $523,000 a week for telephone and $554,000 to $678,000 for non-telephone forms of subscription television. While these estimates are based on reports of self-estimates of expenditures for new movies, about the same estimates would have resulted if it were assumed that the would-be test volunteers among the probable subscribers would spend at the same rate as the test families did, while non-participants would spend only about two-thirds as much. From this alternative way of estimating expenditures, it seems likely that expenditures for carefully-selected older movies would also approach these estimates of expenditures for new movies.

The final set of estimates shown in Table 99 attempts to set an absolute lower limit by assuming that subscribers would average only $0.80 per family per week, regardless of program offering. This figure of $0.80 a week was adopted, because, as may be seen in Table 98, estimates of expenditures for older movies and sports events were at about this level.** On the basis of this absolute minimum estimate, receipts from a form of Phonevision requiring telephones in early 1951 would still have been $186,000 to $254,000 a week, and, from non-telephone subscription television, $214,000 to $286,000 a week. Increased ownership of television sets would raise these estimates to $259,000 to $335,000 and $346,000 to $424,000, respectively.

It should be emphasized again that estimates of this kind assume that all pertinent conditions other than the introduction of subscription television remain the same as at the time of the research. It should also be added that these estimates were arrived at in early spring, and may better be regarded as estimates of expenditures in late winter and early spring than as year-round averages.

It may also be well to repeat again the extremely conservative nature of these estimates, given the qualifications just stated. First, by omitting from consideration the 162,000 households represented by unobtained interviews and by excluding all of the 450,000 households classified as doubtful and non-subscribers, the estimated number of probable subscribers was held to a minimum. Second, by using probable subscribers' own estimates of their expenditures, although these rates were

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*The range is ± 2σ. The range for these estimates was approximated by applying the middle expenditure rate in Table 98 to the two extremes of the population estimates in Table 92, and then multiplying by 1.5. A complete derivation of this standard error for the combined estimate of population and rate of expenditure was performed in selected instances, and indicated that the shorter procedure followed here yielded a reasonable estimate of the error.

**While estimates of expenditures for other types of programs ran even lower, they may be discounted because of the fact that respondents had themselves to think of other types of programs they might like before they were asked to indicate their probable expenditures for such programs; it is almost certain that if respondents had been asked directly whether and how often they would pay for Broadway plays, concerts, educational features, etc., their self-estimates would have been substantially higher.

rather conclusively shown to be underestimates, the average rate of expenditure was held to a minimum. These minimum estimates of average rates of expenditure were then applied to the minimum estimates of the number of subscribers to yield an extremely conservative estimate of the dollar volume possible for subscription television. These estimates, thus, do not attempt to approximate or predict the actual levels, but rather to set a lower limit below which the actual levels would almost certainly not fall.

Finally, as estimates for the city of Chicago, these estimates are conservative in another way. The last Census indicated that fully a third of the households of the metropolitan area were outside the corporate city limits. Since a city sample was used, no attempt was made to generalize to these suburban families, although, in terms of family and socioeconomic characteristics and television ownership, the suburbs can be expected to have even more interest in subscription television than the city proper.

APPENDIX A

EVALUATION OF THE SAMPLE EMPLOYED IN THE POST-TEST SURVEY

Samples Used

Five separate samples were used for this field survey. These were:

1. A sample of the city, excluding Lakeview-Lincoln.
2. A sample of the Lakeview-Lincoln area.
3. A sample of partial volunteers for the Phonevision test.
4. A sample of full volunteers for the Phonevision test.
5. The three hundred participating Phonevision-test families.

1. The city sample, (exclusive of Lakeview-Lincoln):

The sample was a multi-stage probability sample. The preliminary sampling frame was a map of Chicago on which the total land area within the city was divided into segments. (In almost all cases the segments were single city blocks.)* The sample was selected by first classifying all segments into two groups, those with fewer than 100 dwelling units and those with 100 or more dwelling units, according to whatever information was available from Sanborn maps, aerial photographs, and special field surveys conducted by the Census Bureau. The blocks were listed in serpentine order geographically within the two groups. Every 110th block was selected systematically from the first group and every 55th block was selected systematically from the second group. A total of 224 segments were thus selected. Eight of the segments were in Lakeview-Lincoln and so were discarded, thus leaving 216 segments in the city sample.

All the dwelling units in these segments were pre-listed in the first two weeks of March, 1951. The listings of a sample of the segments handled by each lister were checked by a supervisor as a quality control measure, and the work of those listers who made appreciable listing errors was completely re-checked. The listing of dwelling units followed a systematic geographic order within each segment.

The instructions for listing dwelling units are presented in Exhibit IV, Appendix B. It should be noted that the definition of "dwelling unit" used for this study differs somewhat from the definition used by the Bureau of the Census. The Bureau of the Census defines a dwelling unit as:

> A group of rooms or a single room, occupied or intended for occupancy by a family or group of persons living together or by a person living alone, is a dwelling unit if it has:
>
> a. Separate cooking equipment,
> or
> b. Two or more rooms and separate entrance.
>
> Exception: A one-room apartment in a regular apartment house, or one room which is the only living quarters in the structure, is a dwelling unit even though it does not have separate cooking equipment.**

The definition used in the present survey, on the other hand, was:

> "A dwelling unit is a room or group of rooms which is occupied or intended as a separate permanent living quarters."

*The sample of segments was selected by the Bureau of the Census in 1948.

**Urban Enumerator's Reference Manual, 1950 Census of the United States, United States Department of Commerce, Washington, D. C., paragraph 290, p. 68.

Thus, in this survey, the individual rooms in a rooming house or single room units without cooking facilities in a residential hotel are each classified as individual dwelling units, while in the 1950 census they were generally classified as "non-dwelling unit quarters." This difference leads to some non-comparability between the Census tabulations of certain demographic characteristics and overall tabulations of those characteristics from the present survey.

The dwelling unit listings within each block-size stratum were arranged in geographic order, considered as one unit, and sampled systematically. One in every six dwelling units were taken from the small-block stratum; one in every twelve units were taken from the large-block stratum. Thus, the sampling ratio for the city sample was 1/660.

Twenty-seven of the 216 segments listed had no dwelling units in them. An additional five segments having very few dwelling units in them had no dwelling units drawn from them in the systematic sample of the listings. Thus, dwelling units in the city sample were assigned to 184 segments.

A total of 1669 dwelling units were assigned to the 184 segments in the city sample. Owing to the systematic sampling used at both stages of selection, the segments were well distributed throughout the city and the sample dwelling units were always well distributed throughout the segment.

2. The Lakeview-Lincoln sample:

This sample was also a multi-stage probability sample. The primary sampling frame was a list of all the city blocks in the Lakeview-Lincoln telephone exchange area. The Lakeview-Lincoln area covers sixty census-tracts in their entirety and parts of eight other tracts. There are 712 city blocks in the area.

The blocks were divided into three strata on a geographical basis. Lakeview-Lincoln has three distinct, relatively homogeneous zones, sociologically speaking. The eastern zone* (along Lincoln Park) is composed generally of large apartment buildings whose residents are of a high socio-economic status. The lowest 1940 median contract or estimated rent for any of the Census tracts in this stratum was $41.78 (the median for all of Chicago was only $32.56), while the median rent in five of the nine tracts in the stratum was over $60.00.

The second stratum, the central zone, is generally composed of blocks having large apartment buildings and rooming houses in the moderate rental range.** The median contract or estimated rentals for the Census tracts in this zone ranged from $22.60 to $40.48. Eleven of the fifteen tracts in this stratum had median rents in the $31.00 to $38.00 range.

The third stratum, the western zone, is composed mainly of blocks having attached structures with two, three, or four dwelling units of moderate to low rentals.*** The median contract or estimated rentals for the Census tracts in this zone ranged from $15.00 to $44.14. The median rent of 69% (29 out of 42) of the tracts fell below the median rent for Chicago as a whole ($32.56) in 1940.

There was considerable variation in the number of dwelling units per block in the

*The eastern zone (lake-front stratum) included all blocks east of Clarendon from Montrose to Sheridan Road; east of Broadway from Sheridan Road to Grace Street; east of Halsted from Grace Street to Cornelia Avenue; east of Broadway from Cornelia Avenue to Diversey Parkway; east of Clark Street from Diversey Parkway to Deming Place; east of Geneva Terrace from Deming Place to Fullerton Parkway; east of Sedgwick Street from Grant Place to Armitage Avenue and the block bounded by Lincoln, Armitage and Ogden.

**The central zone, included all blocks which were west of the lake-front stratum and: east of Clark Street from Montrose Avenue to Irving Park Road, east of North Sheridan Road from Irving Park Road to West Sheridan Road, east of Sheffield Avenue from West Sheridan Road to Wisconsin Street. The southern boundary of Lakeview-Lincoln is highly irregular in the central zone. The boundary is: Wisconsin Street from Sheffield to Halsted; Western Avenue from Halsted to Orchard; Dickens Avenue from Orchard to Mohawk; Armitage from Mohawk to Sedgwick.

***The western zone included all blocks west of the central zone and east of the North Branch of the Chicago River from Montrose Avenue to Wisconsin Street.

eastern and central zone. In order to increase the efficiency of the sample in those two zones, by having as nearly as possible an equal number of cases from each block, the blocks in these two strata were selected with probability porportionate to their 1940 population. Within each stratum, the blocks were listed in geographical order, the number of dwelling units in each block was cumulated, and a systematic sample was drawn with a sampling interval of 1 in 490 dwelling units. A special stratum of blocks having no dwelling units in 1940 was set up within each of the two major strata. In the eastern zone 1 out of every 4 of these vacant blocks was selected and in the central zone, 1 out of 2 was selected in order to give a chance for new dwelling units or for units that were defined as dwelling units for the purposes of this study but were not so defined by the Bureau of the Census to fall into the sample. Thirty-six of the 75 blocks in the eastern zone were selected. Fifty of the 143 blocks in the central zone were selected.

In the western zone, the variation in block size was not particularly marked except that there were a number of blocks which had either no or very few dwelling units in 1940. Two sub-strata were set up, one containing blocks with 11 or more dwelling units, the other containing blocks with 10 or fewer units. Within each sub-strata, the blocks were listed geographically and sampled systematically with equal probability. The sampling interval among the larger blocks was 5.5 (alternately, every fifth and every sixth block was selected) and among the smaller blocks, the sampling interval was ten. Eighty-six of the 494 blocks in the stratum were selected.

The dwelling units on the 172 blocks thus selected were then pre-listed by the same procedure as the city sample. Five blocks had no dwelling units in them at all.

The sampling intervals for the selection of dwelling units within the blocks were set so that the overall sampling ratio for Lakeview-Lincoln would be one in every 110 dwelling units. In the eastern and central zone the within-block sampling interval varied from block to block since the probability of a given block falling into the sample was proportionate to its size.* In the western zone, the sampling interval within the large blocks was 20 and in the small blocks was 11. Thus, every dwelling unit in Lakeview-Lincoln, regardless of its stratum, had an equal probability of falling into this sample.

For each block in the eastern and central zones, a random number between one and the sampling interval was selected and, starting at the random number, a systematic sample of the dwelling units in the block was taken. In the western zone, the blocks within each stratum were run together as in the city sample, and systematic samples were drawn from a random starting point. Only one of the blocks that contained dwelling units failed to have any of its dwelling units fall into the sample. Thus, dwelling units were assigned to 166 blocks.

A total of 896 dwelling units were assigned.

3. A sample of partial volunteers for the Phonevision test:

It was expected that the Lakeview-Lincoln sample would yield some cases of this kind, but to make certain of a large enough sample of volunteers, the area sample of Lakeview-Lincoln was supplemented with a sample of 130 partial volunteers drawn systematically from the alphabetical files of their postcard applications.

4. A sample of full volunteers for the Phonevision test:

As with the partial volunteers, it was anticipated that full volunteers would occur in the Lakeview-Lincoln sample, but an additional 80 cases, drawn systematically from the alphabetic files of their applications, were selected to increase the size of this group.

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*The within block sampling interval was determined as follows: Let "x" be the sampling interval; let "y" be the number of dwelling units on the block in 1940. Then:

$$\frac{1}{x}\frac{y}{490} = \frac{1}{110} \qquad \frac{1}{x} = \frac{4.45}{y} \qquad x = \frac{y}{4.45}$$

5. All of the three hundred participating families were included in the final sample of test participants.

Methods of Selecting Respondents

Within each of these five samples, the same systematic way of selecting one person per dwelling unit to act as informant for the household was used. Within each sample, all dwelling units were assigned case numbers in serial order. The male head of the household was designated for interviewing in those dwelling units with even case numbers; the female head of the household, in those dwelling units with odd case numbers. In households with only one head, as defined for this survey, the household head was interviewed regardless of sex. In dwelling units with two families or two or more unrelated individuals, where the head of the household was not clearly defined, standard procedures were used to determine who should be interviewed.* This systematic selection of respondents ensured that any biases attributable to choice of informant were kept constant from sample to sample.

Extent of Completion of Samples

In an effort to complete the samples, calls were assigned in sets of three. After the first set of three calls, all residual cases in the sample were reassigned for three more calls; and all remaining incomplete cases after the sixth call were again reassigned; and so on, until the case was completed or twelve calls had been made. The only exception to this procedure was that any case for which the designated respondent had twice refused to be interviewed was dropped without further calls. Calls were spaced at the hours respondents were most likely to be found at home, as explained in the instructions in Exhibit IV, of Appendix B.

The final outcome on the various samples is shown in Table 100, page 181. As is apparent there, the net loss in the sample of the city, exclusive of Lakeview-Lincoln, was 14.1%, well over two-thirds of which consisted of refusals. In Lakeview-Lincoln, the loss was 13.4%, with about two-thirds of the loss again attributable to refusals. In the supplementary sample of partial volunteers, losses were 19.2% of assigned interviews, while for the full volunteer supplementary sample losses were negligible--2.5%, and for test families there was no loss at all.

Evaluation of Samples Interviewed

Because of the loss of about 14% of the interviews assigned in the combined city sample,** the question of the demographic representativeness of the sample of Chicago used in this study may be raised. As a test of this point, comparisons may be made between the distribution of various demographic characteristics in the present sample and the distributions based on a large sample of the returns from the 1950 Censuses of housing and population for Chicago.***

The distributions are not exactly comparable for several reasons. First, these two sets of data refer to dates about one year apart, and small changes in the population and housing distributions could have taken place in the year. Second, the institutional population (i.e., in jails, college dormitories, homes for the aged, mental institutions, hospitals, military installations, etc.) was completely excluded from the universe of the present study, but is included in the Census; thus, certain of the population distributions are bound to differ somewhat. Then, as was mentioned earlier, the definitions of dwelling units used for this study and for the Census differed somewhat, so that, although some correction can be made for the

*See the instructions for the survey in Exhibit IV, Appendix B.

**The two samples--city, exclusive of Lakeview-Lincoln, and Lakeview-Lincoln--are weighed and combined to represent the entire city. The weights applied to percentages based on the groups interviewed are 0.92 and 0.08, respectively. For whole numbers, the corresponding weights are 1.000 and 0.166.

***All comparisons in this section are made with the data for the city proper published in 1950 Census of Population, Preliminary Reports, "Characteristics of the Chicago, Ill., Standard Metropolitan Area, April 1, 1950," Series PC-5, No. 10; and "Housing Characteristics of the Chicago, Ill., Standard Metropolitan Area, April 1, 1950," Series HC-3, No. 10. At the time of writing, final reports were not available.

TABLE 100

INTERVIEWS ASSIGNED AND COMPLETED IN THE VARIOUS SAMPLES

Outcome	Number or Per Cent of Each Sample with Given Outcome				
	City Sample	Lakeview-Lincoln Sample	Partial Volunteer Sample	Full Volunteer Sample	Test Family Sample
Dwelling units originally assigned. .	1669	896	130	80	300
Dwelling units added because of underlisting	11	32	-	-	-
Dwelling units dropped because of:					
Overlisting	18	32	-	-	-
Vacancy	28	38	-	-	-
Duplication of test family sample	-	7	-	-	-
Net sample of dwelling units to which interviews were assigned . . .	1634	851	130	80	300
Proportion of net sample:					
Interviewed	85.9	86.6	80.8	97.5	100.0
Refused interview	10.2	8.8	6.9	1.3	-
Never found at home	2.6	3.3	5.4	-	-
Dropped because:					
There were language difficulties.	0.7	0.8	-	-	-
Designated respondent was out of town for study period.	0.4	0.4	-	-	-
Designated respondent was too ill to interview	0.2	0.1	1.5	-	-
Family moved and could not be traced	-	-	5.4	1.2	-
Total per cent.	100.0	100.0	100.0	100.0	100.0

difference in the concept of dwelling unit when comparisons are made, this correction may not be complete and some of the housing and household distributions may still be affected by this difference.

It should also be remembered that the Census data presented here are based on a sample of returns and are, therefore, subject to sampling error. Of course, the survey sample is much smaller than the Census sample, and results derived from it are subject to larger sampling error. It is likely that any difference between the distributions in the samples used in this survey and the Census distributions is at least partially attributable to the sampling error in the former sample, and not alone to possible bias resulting from non-random loss of cases because of "not-at-home's" or refusals.

In Table 101, page 182, selected housing characteristics derived from the Census and from the survey sample are compared. It may be noted there that differences are relatively small, although the adjusted survey sample tended to have too few rented, one-room, single-person dwelling units in multiple dwelling-unit structures. The overall survey sample for the city, however, deviated less in these respects, with, because of the dwelling-unit definition, too many one-room, single-person dwelling units.

This tendency may well be due to a larger loss rate among respondents living in such dwelling units than among respondents living in larger dwelling units--particularly those in detached, owner-occupied, single dwelling-unit structures. This differential loss rate between large and small dwelling units may be seen in the tendency to lose cases disproportionately from multiple dwelling-unit structures, which tend to have smaller dwelling units:

	Interviews Obtained	Interviews Not Obtained
Type of structure dwelling-unit was located in:		
Single dwelling-unit	19.7%	10.8%
Two dwelling-unit	21.3	13.2
Three or more dwelling-unit	59.0	76.0

TABLE 101

COMPARISON OF CENSUS AND PHONEVISION SAMPLE ESTIMATES OF SELECTED HOUSING CHARACTERISTICS FOR CHICAGO

Characteristic	Census April 1, 1950	Phonevision Survey Sample, April-May, 1951	
		Adjusted for Census Sample Dwelling-Unit Definition[a]	Unadjusted Sample
Proportion of dwelling units:			
Owner-occupied	31.0	34.5	32.7
Single-family structure	16.2	20.7	19.7
Headed by a married couple	74.0	75.8	71.9
Size of dwelling unit (per cent):			
One room	7.4	5.1	10.2
Two room	9.8	8.8	8.3
Three room	11.5	10.1	9.6
Four room	24.3	24.0	22.7
Five or more rooms	47.0	52.0	49.2
Number of persons in dwelling unit (per cent):			
One	11.2	9.3	13.6
Two	29.7	28.2	27.0
Three	23.8	22.4	21.3
Four	18.2	20.9	19.9
Five	9.5	9.7	9.2
Six	4.4	5.0	4.7
Seven or more	3.2	4.5	4.3
Average number of persons per dwelling unit:			
Mean	3.2	3.3	3.2
Median	2.9	3.1	2.9
Number of cases		1439[b]	1526[b]

[a]The adjustment was made by discarding from the sample all dwelling units which were one-room units without separate kitchen facilities.

[b]The number of cases shown for the combined city sample is always the weighted total of the two component samples. Thus, for the adjusted sample it is 1321 + 0.166 (709), and for the entire sample it is 1404 + 0.166 (735).

An examination of the addresses of assigned dwelling units in which interviews were not obtained indicated that at least 30.2% of these dwelling units were in apartment hotels, Y. M. C. A.'s, rooming houses, and similar dwelling units, most of which would not fall under the Census definition of dwelling unit. Since only 5.7% of the interviews obtained were not dwelling units, by the Census definition, the loss rate among these small dwelling units must have been particularly high, probably between 40 and 50%. Nevertheless, this bias seems rather small. The overall sample does approximate the Census more closely because of the inclusion of single-room dwelling units excluded by the Census. Thus, if the Census enumeration is considered as the total number of dwelling units in the universe, and, if it is assumed that persons living in one-room dwelling units with cooking facilities differ rather little in their behavior with respect to Phonevision from persons living in one-room units without cooking facilities, the slight bias due to the differential loss rate between the respondents living in small and large dwelling units is probably largely compensated. If the universe is regarded as the total number of dwelling units including the one-room dwelling units without cooking facilities, the bias is more serious but still rather small.

The representativeness of the Phonevision sample can also be checked with several population variables. The variables compared in Table 102, below, are those least affected by the fact that institutional population is included in the Census but excluded in the Phonevision sample. Unquestionably, the Phonevision sample of

TABLE 102

COMPARISON OF CENSUS AND PHONEVISION SAMPLE ESTIMATES OF SELECTED POPULATION CHARACTERISTICS FOR CHICAGO

Characteristic	Census April 1, 1950	Phonevision Survey Sample, April-May, 1951	
		Adjusted for Census Sample Family Definition[a]	Unadjusted Sample
Proportion of population:			
Male	48.7	[b]	49.0
Living at same address as one year earlier	85.5	[b]	83.8
Age of population (per cent):			
Under 5 years	9.0	[b]	10.5
5-9 years	6.8		7.9
10-34 years	36.1		35.6
35-64 years	40.5		39.5
65 years and over	7.6		6.5
Annual family income (per cent):			
Under $2,500	20.0	13.8	18.0
$2,500 - $4,999	42.6	44.8	43.5
$5,000 - $9,999	27.5	25.0	22.7
$10,000 and over	4.0	3.3	2.8
Not reported	5.9	13.1	13.0
Number of cases		1286	1526

[a]The adjustment was made by discarding from the sample all dwelling units which were occupied by one person or by two or more unrelated persons.

[b]Since the Census reports this characteristic for the entire population rather than for the population living in their universe of family dwelling units, there is no need to adjust the survey results to the Census definition of family.

"unrelated individuals" or "married couples" without households does not represent the institutional population, but since this latter group is not regarded as part of the universe of families whose reactions to subscription television were being studied, their exclusion from the sample should not in any way affect the results.

The population distributions in the Phonevision sample are also quite close to the Census distributions. The slightly lower age of population in the households in the Phonevision sample is probably primarily due to the exclusion of institutional population, although it may also be in part due to differential loss of one-person, adult households. The smaller proportion of families in the Phonevision sample than in the Census sample with incomes under $2,500 is probably partially attributable to the fact that the Census data refer to 1949 income while the Phonevision question asked about "present" income, essentially the rate of income during April-May, 1951. There has almost unquestionably been a decrease in the proportion of families with incomes under $2,500 since 1949.* It is also likely that the relatively large group that did not report income in the Phonevision survey came disproportionately from the very high and very low income groups. When these factors are taken into account along with the apparent representativeness of the sample with respect to other demographic characteristics, there is little reason to assume more than a very negligible bias in income distribution, if there is any at all, in the Phonevision sample.

While there is fairly close correspondence of the survey sample to the universe with respect to those demographic characteristics investigated, this result does not ensure that the sample is equally representative for other variables which were not examined or, more especially, for attitudinal data. It does seem likely, however, that one major portion of any bias there may be in the opinion data would result from the underrepresentation in the sample of one-person, one-room, multiple-unit structure dwelling units. In the main text, crucial items are frequently presented separately for each major family size group, and it appears that one-person families in the sample had far lower rates of television ownership or intention to become television owners, with concomitant differences in attitudes--somewhat less approval of subscription television and less interest in becoming subscribers to Phonevision. If the one-person families in the sample are taken as an approximation of the entire group of small dwelling units which are underrepresented, and if it is assumed that other types of sample losses would also have had attitudes less favorable than those of families interviewed to about the same extent as the one-person families were less favorably disposed, then, the general tendency in the main text is somewhat to overstate the favorableness of attitudes in the city as a whole. For example, since one-person families were far less likely to own television sets, and since they are underrepresented, while other differential losses would probably be closer to one-person families in television ownership than they would be to the entire sample interviewed, the sample estimate of television ownership in Chicago is probably somewhat exaggerated. Since the text does frequently provide separate tabulations for the one-person family group, any reader who wishes to do so may make more exact allowance for the differential tendencies in the portion of the sample not interviewed.

It should be pointed out that, in the final section of this report, where the problem is one of estimating the number of subscribers and the amount they would spend for subscription television, all assigned dwelling units where interviews were not obtained are treated as non-subscribers and zero expenders. While this assumption is probably too extreme, its use makes certain that estimates of subscribers and expenditures are not exaggerated because of any differential tendencies among the unobtained part of the sample.

---

*"Distribution of Consumer Income in 1950," Pt. III 1951 Survey of Consumer Finance, Federal Reserve Bulletin, August 1951. There was a definite decrease from 1949 to 1950 in the proportion of families in the lowest income groups over the country as a whole.

APPENDIX B

EXHIBITS OF MATERIALS USED IN THE RESEARCH

I

MATERIALS USED IN SELECTING PARTICIPANTS

TELEVISION SETS WILL BE LOANED TO 300 CHICAGO FAMILIES FOR A 90-DAY PUBLIC TEST OF PHONEVISION

(Use Coupon at Bottom of Page)

In the public interest—the Federal Communications Commission has authorized a limited test of Zenith Phonevision by 300 typical Chicago families—to determine the extent to which people want to receive good movies in their homes over their television sets for a fee.

WOULD YOU HAVE HELPED THOMAS EDISON TEST THE ELECTRIC LIGHT?

OR—GONE WITH HENRY FORD ON A TRIAL RUN IN HIS FIRST CAR?

(Incidentally, Messrs. Edison and Ford were right—the public decided that the electric light and automobile were useful things)

• • •

YOU MAY HELP MAKE HISTORY NOW—HERE'S HOW

You can help us test a new kind of television which may prove as important to the American family as the automobile.

Phonevision is just what it sounds like—television delivered (in part) via your telephone wire making it possible for you to see good movies in your home.

Zenith Radio Corporation needs 300 typical Chicago families to help make the Phonevision test authorized by the Federal Communications Commission. The sole purpose of this test is to determine public desire for and use of Phonevision. The test as now planned will be made some time this fall.

In each home selected, Zenith will install without charge, a television set capable of receiving Phonevision.

If your home is selected, the TV set will be yours to use as you wish for 90 days after which it will be removed at Zenith's expense.

This set will receive all the regular broadcasts from Chicago television stations in addition to Phonevision broadcasts on Zenith TV Station Channel No. 2.

Over Channel No. 2—each day for three months, a different feature moving picture will be telecast. The name of the movie and time of broadcast will be announced in advance.

If you decide to "go to the movies at home" any evening, you just call the Phonevision telephone operator and say so. Phonevision will then bring a complete movie to your living-room (without any advertising content), partly over the telephone wire and partly over the air—the kind of entertainment you now find at only the best neighborhood movie theatres. At the end of the month a family "admission fee" will be billed ($1.00 for each show). You pay only for the shows you ask to see.

Remember—your test set (which will be a Zenith or other make modified for Phonevision) will receive all regular TV programs at any time. Only when you order it will you receive clear Phonevision.

The purpose of this test is to find out—

1. **Whether the public would like to have such a service as "box-office television" whereby good movies and events that are too costly to be paid for by advertising sponsors can be viewed in the home.**
2. **How frequently a typical Chicago family will choose to pay an "admission charge" of $1.00 to see a feature motion picture in their own home on their television screen—the kind you won't get free.**

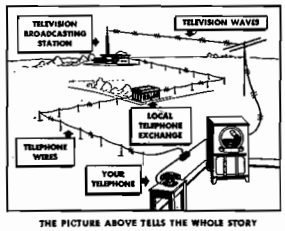
Send the coupon below if you would like to take part in the test. 300 families representing a true "cross section" of the Chicago public will be selected from those who apply by the National Opinion Research Center. If you are interested, send your coupon reply to Zenith Radio Corporation, P.O. Box 7510, Chicago 77. Whether you now own a television set or not, makes no difference.

Our sincere thanks to those who offer to help us test this challenging new type of television service.

E. F. McDonald Jr.
PRESIDENT
ZENITH RADIO CORPORATION
P. O. BOX 7510 • CHICAGO 77, ILLINOIS

• • •

Interesting Information About PHONEVISION



THE PICTURE ABOVE TELLS THE WHOLE STORY

- **Phonevision can be made to work on any make of television set—old or new—irrespective of make.**
- **The station broadcasting Phonevision "scrambles" the picture it sends over the air. The Phonevision "decoder" in your set uses a signal received over the telephone wire to "unscramble" and give you a clear picture.**
- **The addition of Phonevision to any make of television set does not interfere in any way with reception on usual commercial channels.**
- **Although Phonevision utilizes both the air and telephone wires, it does not interfere with telephone calls.**

SEND THE COUPON TODAY—HELP MAKE HISTORY

ZENITH
TELEVISION • RADIO
FM • HEARING AIDS

Phonevision Selection
ZENITH RADIO CORPORATION
P. O. Box 7510, Chicago 77, Illinois

Please Use the Enclosed Return Post Card No Postage Required

Dear Sirs:
Count me in for the PHONEVISION Test.

My address is .....

.....

My telephone number is .....

I understand that the final selection of the 300 test families will be made by the National Opinion Research Center. I will be glad to cooperate at no cost to me for the loan of the receiver if my family is one of those selected for the test.

Signature .....

A. Newspaper Advertisement
(Actual Size 17 x 22")

ZENITH RADIO CORPORATION

OFFICE OF
JOHN R. HOWLAND
ASSISTANT
TO THE PRESIDENT

6001 DICKENS AVENUE

CHICAGO

PHONE
BERKSHIRE 7500

May 16, 1950

Dear Friend:

It has now been decided that your telephone exchange will be one of those used on the Zenith Phonevision test.

We are, therefore, writing to ascertain whether you care to make application to have your home included among the 300 families that will make this 90-day test.

Each of the 300 families selected will receive from us the free loan of a 16-inch (165 square inch screen) television receiver which will be installed in their homes free of charge and removed without cost to them at the end of the 90-day test. These will be fine new television sets, PLUS Phonevision with which test families will be able to enjoy the finest of motion picture entertainment in their homes without advertising.

This is not a prize contest or slick sales scheme. It is, instead, a carefully planned scientific test to determine the extent of public interest in receiving top quality theatrical entertainment that advertisers can't afford to supply in the home by pay-as-you-see television. Participating families will be selected to form a true cross section of this community by National Opinion Research Center of the University of Chicago.

Because of limits on the maximum power permitted on our experimental television-Phonevision transmitter, it has now been decided that the majority of homes participating in the test will be located in the area of the following telephone exchanges:

Lakeview	Graceland 2	Lincoln
Diversey	Graceland 7	Bittersweet
Eastgate	Wellington	Buckingham

To make sure that every family in these areas will have an opportunity to be selected for the test, we are taking this means of calling it to your attention, and are including a copy of our advertisement.

If you are interested in participating -- in receiving the free 90-day loan of a new television receiver, in enjoying fine movies in your home, then fill in and mail the enclosed post card. Mail promptly, because final selection of the test families will begin next week.

Sincerely,

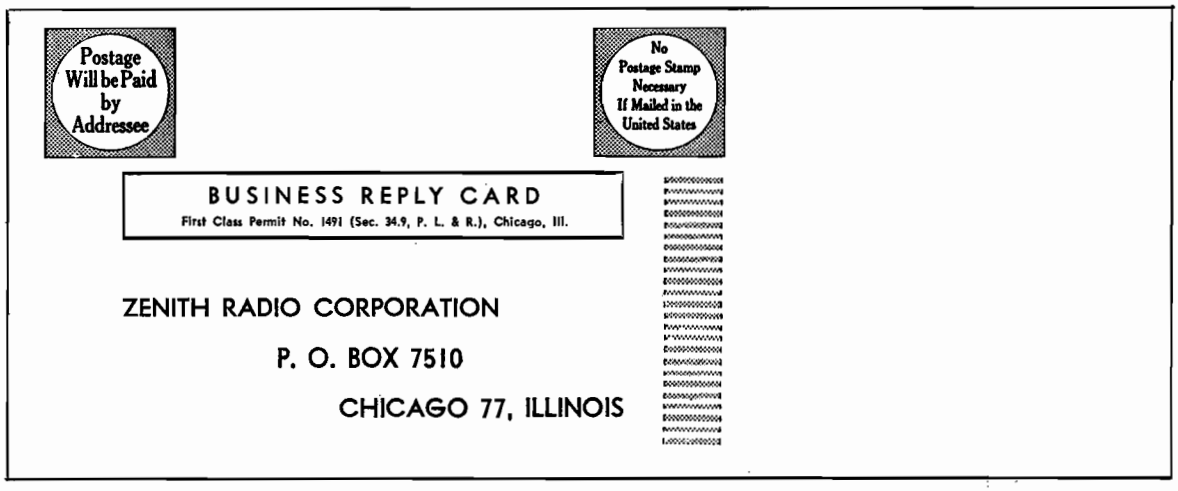
John R. Howland

JOHN R. HOWLAND.

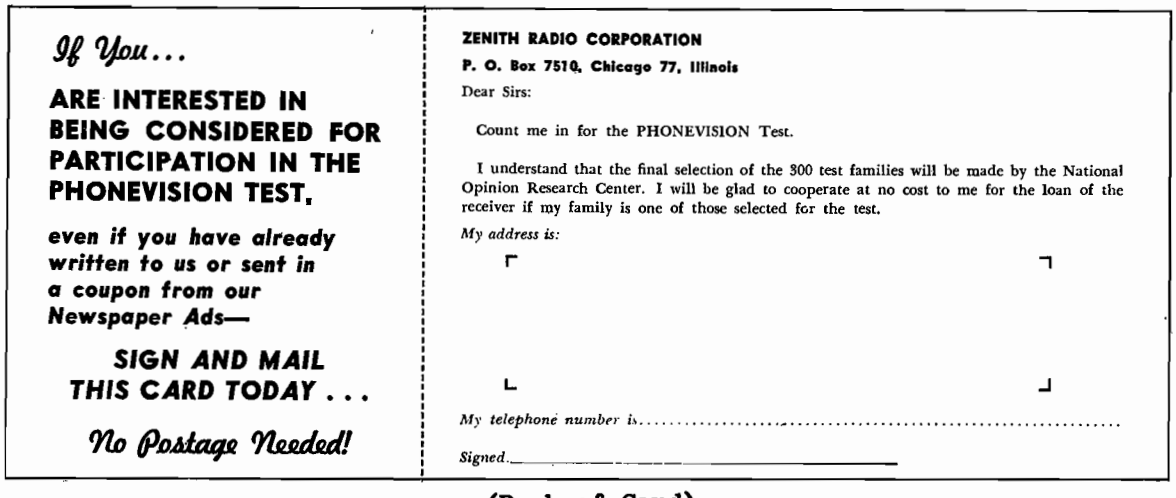
JRH:mw

Enc.

B. Letter of Invitation



(Front of Card)



(Back of Card)

C. Volunteer Postcard

D. Volunteer Questionnaire

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY ENVELOPE
First Class Permit No. 38802 (Sec. 34.9, P. L. & R.), Chicago, Ill.

NATIONAL OPINION RESEARCH CENTER
University of Chicago
4901 South Ellis Avenue
Chicago 15, Illinois

PASTE GUMMED FLAP HERE

(Page 4 of 4 page Folder)

NATIONAL OPINION RESEARCH CENTER

UNIVERSITY OF CHICAGO

4901 SOUTH ELLIS AVENUE — CHICAGO 15, ILLINOIS

Dear Sir:

The Zenith Radio Corporation has given us your name as one who is interested in participating in its PHONEVISION test next fall and has asked us to select, from the applicants, 300 families who, as a group, are representative of the people of Chicago who are interested in taking part. In order that we may do this on a scientific basis we need some detailed information about you and your family.

Very truly yours,

Clyde W. Hart

Clyde W. Hart, Director

P.S. When you have finished answering all questions on the inside of this folder, please fold this piece, seal the flap and drop it in the mail. NO POSTAGE IS REQUIRED! Thanks for your cooperation.

ALL ANSWERS WILL BE TREATED AS CONFIDENTIAL

(Page 1 of 4 page Folder)

D. Volunteer Questionnaire

PLEASE FILL OUT AND RETURN THIS QUESTIONNAIRE ON OR BEFORE JUNE 10, 1950

NAME: _____ HOME TELEPHONE NUMBER: _____

HOME ADDRESS: _____
(Number) (Street) (City) (Zone)

	Women and Girls	Men and Boys	Total Number
8-10. How many persons, altogether, live in your home? Write the numbers on these lines →			
11-13. How many of these are under 5 years of age? →			
14-16. How many are between 5 and 9 years of age? →			
17-19. How many are between 10 and 19 years of age? →			
20-22. How many are between 20 and 34 years of age? →			
23-25. How many are between 35 and 49 years of age? →			
26-28. How many are between 50 and 64 years of age? →			
29-31. How many are 65 years of age or older? →			

DO NOT WRITE IN THIS SPACE

32-34.			
35-37			

38. Do you now have a television set in your home? (1) ☐ Yes (2) ☐ No

IF YOU HAVE A TELEVISION SET, ANSWER THESE QUESTIONS

39. How long have you had a television set?
- (1) ☐ Less than one month
- (2) ☐ One month up to three months
- (3) ☐ Three months up to six months
- (4) ☐ Six months up to one year
- (5) ☐ One year up to 18 months
- (6) ☐ 18 months up to two years
- (7) ☐ Two years or more

40. What width picture tube does your set have?
- (1) ☐ 7 or 8-inch
- (2) ☐ 10-inch
- (3) ☐ 12-inch
- (4) ☐ 16-inch
- (5) ☐ Over 16-inch
- (6) ☐ Projection type

41. What is the make of your television set? _____

ANSWER ALL OF THE FOLLOWING QUESTIONS

42. If you are chosen to take part in the Phonevision test, will your landlord permit the installation of a special antenna for television on your roof?
- (1) ☐ Yes
- (2) ☐ No

43. Does your family own or rent the place where you live?
- (1) ☐ Own
- (2) ☐ Rent

44. What kind of a house do you live in?
- (1) ☐ Single-family house
- (2) ☐ Two-family house
- (3) ☐ Apartment building
- (4) ☐ Hotel
- (5) ☐ Other (Write it here):

45. What is your family's race?
- (1) ☐ White
- (2) ☐ Colored

46. What is your family's total yearly income—before taxes?
- (1) ☐ Under $2,500
- (2) ☐ $2,500 - $4,999
- (3) ☐ $5,000 - $7,499
- (4) ☐ $7,500 - $9,999
- (5) ☐ $10,000 and over

47. About how often do the *adults* in your family go to the movies?
- (1) ☐ Twice a week or more
- (2) ☐ Once a week
- (3) ☐ Two or three times a month
- (4) ☐ Once a month
- (5) ☐ Less than once a month

48. About how often do the *children* in your family—the ones who are old enough—go to the movies?
- (1) ☐ Twice a week or more
- (2) ☐ Once a week
- (3) ☐ Two or three times a month
- (4) ☐ Once a month
- (5) ☐ Less than once a month

49-50. *If you have a television set*, has the movie attendance of the *adults* in your family changed since you got your set?
- (1) ☐ Yes, increased by _____%
- (2) ☐ Yes, decreased by _____%
- (3) ☐ No, stayed the same

51-52. *If you have a television set*, has the movie attendance of the *children* in your family changed since you got your set?
- (1) ☐ Yes, increased by _____%
- (2) ☐ Yes, decreased by _____%
- (3) ☐ No, stayed the same

THESE QUESTIONS REFER TO THE HEAD OF THE FAMILY (THE MAIN EARNER) ONLY:

53. What kind of work does the *main earner* in your family do? (Please describe both his job and the kind of industry in which he works. For instance, don't just say "clerk," say, "clerk in a department store" or "clerk in an insurance office." Or if he's an engineer, say, "engineer on a railroad," or "mechanical engineer in a construction company," or whatever it is.)

JOB: _____

INDUSTRY: _____

54. How far did the head of the family (the main earner) go in school?
- (1) ☐ Some grammar school, but didn't finish
- (2) ☐ Graduated from grammar school
- (3) ☐ Some high school, but less than 4 years
- (4) ☐ Completed 4 years of high school
- (5) ☐ Some college, but less than 4 years
- (6) ☐ Graduated from 4-year college
- (7) ☐ Postgraduate work in university

55. In what country was the head of the family (main earner) born?

COUNTRY: _____

56. In what country was the father of the head of the family (main earner) born?

COUNTRY: _____

NATIONAL OPINION RESEARCH CENTER
University of Chicago
4901 South Ellis Avenue
Chicago 15, Illinois

Dear Friend:

You have expressed interest in taking part in the phonevision test, but up to now we have not received your questionnaire. Since only those who return questionnaires will be considered in selecting the 300 families who are to participate, we urge you to send in your questionnaire now, if you are still interested in being selected.

For your convenience we are enclosing another copy of the questionnaire. Because of the Memorial Day weekend, we are extending the date up to which the questionnaire can be returned to June 10th, so disregard the date on the questionnaire.

If you have already returned a questionnaire, please disregard this notice.

Very truly yours,

NATIONAL OPINION RESEARCH CENTER

E. Cover Letter for Second Mailing of Questionnaire

II

MATERIALS USED IN INTERVIEWING NON-VOLUNTEERS AND PARTIAL VOLUNTEERS

NORC - Survey 278A
June, 1950

A. Questionnaire for Non-volunteers

NAME: _____ ADDRESS: _____ TEL.: _____

RECORD OF CALLS

First Call	Second Call	Third Call	Fourth Call
Date:	Date:	Date:	Date:
Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	TIME: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3
Outcome: No Ans . . . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Ans . . . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Ans . . . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Ans . . . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5
Notes:	Notes:	Notes:	Notes:
Operator:	Operator:	Operator:	Operator:

1. HELLO. I'M WORKING ON A TELEVISION SURVEY. Do you have a television set in working order in your home?
   Yes ☐ No ☐

2. A FEW WEEKS AGO THE ZENITH RADIO CORPORATION ANNOUNCED THAT THEY WERE GOING TO TEST A NEW IDEA IN TELEVISION CALLED PHONEVISION. Did you or anyone in your home have any interest in taking part in the Phonevision test?
   Yes ☐ No ☐ Don't know, Never heard of it ☐

3a. (IF "YES) Why didn't you (they) send in an application to take part in the test?

3b. (IF "NO") Why weren't you (they) interested in taking part in the test?

NORC - Survey 278B
June, 1950

B. Questionnaire for Partial Volunteers

NAME: _____ ADDRESS: _____ TEL.: _____

RECORD OF CALLS

First Call	Second Call	Third Call	Fourth Call
Date:	Date:	Date:	Date:
Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3	Time: Before Noon . . . . .1 Noon to 6 PM. . . . .2 After 6 PM. 3
Outcome: No Answer. . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Answer. . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Answer. . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5	Outcome: No Answer. . . . .1 Busy . . . . . .2 Disconnected . . .3 Refused. . . . . .4 Completed. 5
Notes:	Notes:	Notes:	Notes:
Operator:	Operator:	Operator:	Operator:

1. HELLO: I'M WORKING ON A TELEVISION SURVEY. Do you have a television set in working order in your home?
   Yes ☐ No ☐

2. A FEW WEEKS AGO THE ZENITH RADIO CORPORATION ANNOUNCED THAT THEY WERE GOING TO TEST A NEW IDEA IN TELEVISION CALLED PHONEVISION. Did you or anyone in your home receive a questionnaire to fill out in order to be considered for selection for the Phonevision Test?
   Yes ☐ No ☐ Don't know, Never heard of it ☐

3a. (IF "YES") Why didn't you (they) send in the questionnaire?

C. Instructions for the Survey

NATIONAL OPINION RESEARCH CENTER
University of Chicago

INSTRUCTIONS FOR SURVEY 278A AND B
(Phonevision Telephone Check)

Purpose of the Survey

The purpose of this telephone survey is to determine people's reasons for not responding to our letters or questionnaires inviting their participation in the Phonevision Test. These non-respondents make it difficult to know what the original universe of people to whom participation was offered is like. Therefore a sample of them must be contacted in order to get this information. Form 278A is used with people who never responded to the original letter -- that is, they did not send in a postcard volunteering for the test. Form 278B is used with people who did volunteer by returning the postcard, but who did not return the questionnaire subsequently sent to them.

Procedure

The questionnaire forms you will be working from contain the name, address and telephone number of the household you are to call. You will call this number and enter the following types of information on the questionnaire:

I. Data about the telephone call.

a. Number of calls. Up to four calls will be made in an attempt to contact each household in the sample. Information about each call is to be entered in the column corresponding to the number of the call.

b. Date of call is entered in the first space by recording the month and date, as for example, 6/15.

c. The time at which the telephone call is attempted is entered in the second space by circling the number which corresponds to the time of day at which you make the call. In general, only the first call can be made during either the morning or afternoon hours on a weekday. Second and subsequent calls must be made either after 6 PM or Saturday afternoons or Sundays. The only exceptions to this rule are in a case where you receive definite instructions from someone answering the phone to call at a particular hour, or where you received a busy signal on the first call.

d. Outcome of call. Circle one number corresponding to what happened when you made the call:

(1) "No answer" applies to those calls where the phone rang six times without being answered. Always let the phone ring six times before hanging up and recording "no answer".

(2) If you receive a busy signal hang up immediately and circle the code number corresponding to busy. Put this questionnaire aside and call back on it for the second call ten to fifteen minutes later.

(3) If the operator cuts in on your call to tell you the phone is disconnected, circle the code for "Disconnected" and be sure to record in the "Notes" space whether this is a temporary or permanent disconnection, and any other information pertaining to the disconnection that the operator gives you.

The operator may inform you that the phone number has been changed. Record this just above the phone number on the questionnaire as "Changed to: (new number)". If the new number's prefix is one of the following complete your first call by calling this new number:

Bittersweet 8	Graceland 2
Buckingham 1	Graceland 7
Diversey 8	Lakeview 5
Eastgate 7	Lincoln 9
Wellington 5	

In other words, simply getting the information that the number has been changed does not complete your first call.

If the phone number is not one of the nine listed above, code this interview as "Completed" (5) and enter in the Notes space, "Moved out of area".

(4) The phone may be answered, and the person on the other end may refuse to supply the information. These cases are coded "Refused", and a full explanation is given in the "Notes" space. For instance, the person may refuse to give the information, but give you a time and person to call who will give you the information. The "Notes" here might then say, "Talked to mother who knew nothing about it but said her son would be home after seven." The notes then should try to specify both why the information was not given and how it might be obtained. Of course, if all you know is that the person at the other end hung up without saying a word, all you can enter in the notes is this fact. If any of the information in the interview is not given, code this call as a refusal, and explain in the notes the reasons why the missing information was not obtained.

Before accepting a refusal, make an attempt to talk to someone else in the house. If you find you are talking to someone on the phone who cannot understand or cooperate with you, ask to talk to someone else. For instance, if you recognize a child's voice, ask to talk to a parent. If you learn you are talking to a servant, ask for the lady (or some member) of the house. If you find the person you are talking to is unable to speak English, or so old or deaf that you cannot make yourself understood, ask, politely, if there is anyone else at home you could talk to.

If you have to accept the refusal, make every effort to learn, for your notes, when would be a good time to call back.

e. Notes: As explained above any information bearing on reasons why the interview was not successfully completed or which will aid the interviewer making the next call should be entered here.

f. Operator: Sign your last name here.

Obviously, the information pertaining to the call cannot all be entered at the same time. When you have dialed a number and are waiting for the phone to be answered you can fill in the date, time and operator. But the outcome and notes generally cannot be completed until you have hung up.

II. The interview.

a. Your introduction. In making your introduction you will say, "Hello. This is a television survey", and then immediately ask the first question. This introduction is different from the one printed on the questionnaire, but pretesting has shown that it is less likely to sound like a sales talk, so memorize this wording and use it.

Notice that in your introduction you do not use the family's name or the name of the research organization doing the survey. It is best to keep the introduction very brief and get right to your questions. If the respondent asks for any information, however, you will, of course, answer their questions. For instance, if they ask how you happened to call them, you will answer that phone numbers for this survey were picked at random from the telephone book and theirs just happened to be chosen. If they ask who is doing this survey, you will tell them it is the National Opinion Research Center, which does surveys of all kinds all the time.

b. The questions. As soon as you have made your introduction, ask the first question without pausing for any comments from the respondent. Ask the question exactly as printed on the questionnaire, and record the answer as soon as it is given to you. Question 1 is the same on both 278A and 278B and is a straightforward factual question which requires no interpretation on your part.

Then ask the second question. This will require that you give the explanation printed in capital letters before asking your question. Again read both the explanation and the question exactly as printed on the questionnaire, and record the answer as soon as you receive it.

On the 278A Form, Questions 2 and 3 are designed to find out why people did not return the post card, which indicated their interest and desire to volunteer. On the 278B Form, Questions 2 and 3 are intended to find out why people who did volunteer and received a questionnaire, did not return the questionnaire.

On either form, an answer of "Yes", or "No" to Question 2 is straightforward, and you can record it immediately. An answer of "Don't know" or "Never heard of it (Phonevision or the questionnaire)" requires some interpretation however. If the person giving this information means that he or she doesn't know because such decisions are made by someone else in the family, this answer should not be recorded as "Don't know, never heard of it." Instead you will code the call as a refusal, and indicate in the notes that the person you talked to was unable to give the information, specifying the reasons and indicating who should be contacted at what time in order to complete the questionnaire. If the person giving the information means that the family as a whole couldn't make up their minds or never heard about the phonevision test or the questionnaire, then this should be checked as a "Don't know" answer to Question 2, underlining the relevant part of the answer category, AND a full statement of what the respondent said in explanation of this answer should be written in the blank space at the bottom of the questionnaire.

If the respondent does not give you some clear indication of which way to interpret his "Don't know" answer, you can ask something like "Did anyone in your family receive a letter (a questionnaire) about phonevision?"

If the respondent says "Don't know" to this you are talking to the wrong person, and you should ask who in the family might be able to give you more information. Incidentally, if that person is home at the time, ask to talk to him or her then, instead of closing off your first call as a refusal.

If they say "Yes" to this new question, you can ask the original Question 2 again -- that is, "Were they interested or not?" and then if you get a "Don't know" you can code Question 2 this way, but put down the explanation of why the respondent still says "Don't know" in the answer space below. For instance, someone might say, "I don't know; I thought it might be good, but my husband didn't favor it, so we just decided to skip it." This would be an adequate explanation of the "Don't know" <u>if it contained the reasons why there was some opposition in the family.</u> If the person does not volunteer this information, just ask, for example, "Why didn't your husband favor it?"

If they say "No" to this new question, check the "Never heard of it" box, <u>underlining that part of the answer category</u>, and sign off the interview.

On both forms, Question 3a is asked of those who said "Yes" to Question 2. On the 278A Form only, there is a Question 3b to be asked of those who said "No" to Question 2. Do not fail to ask these dependent questions, for the interview must count as a refusal if this information is missing.

In asking Questions 3a and b, you will want to be careful not to imply by your tone of voice that you are criticising or arguing with the respondent for his decision. The easiest way to make sure of not seeming to imply these attitudes is to modify the question wording and ask, instead of the question printed, "<u>How did it happen that</u> (you didn't send in application to take part in the test?) (You weren't interested in taking part in the test?) (You didn't send in the questionnaire?)"

In recording answers to Questions 3a and b and the explanations of their answers given by "Don't know's" to

Question 2, be sure to write down the exact words that the person says -- that is, record the answers verbatim. If you feel more explanation is necessary, you can add your comment in parentheses.

Your telephone manner.

a. Always speak clearly and in a self-assured manner. Do not talk too rapidly, but avoid talking so slowly and hesitantly that the respondent keeps interrupting you. Ideally, you should never have to repeat anything you say, and you should always remain in control of the conversation.

b. Try to speak conversationally, however, and avoid an artificiality of manner. You should sound businesslike, but not stilted.

c. Politely discourage garrulousness on the part of your respondents. Get the information we need as quickly as possible.

d. Be sure to thank your respondent in closing your conversation.

Disposition of interviews.

As you complete your call, place your interviews in one of three piles:

a. In the first pile will be those which you have successfully completed. These will be turned over to your supervisor at the end of each day.

b. In the second pile, put those on which you got busy signals, since you will want to make the second call shortly.

c. Put all other cases in a third pile, which your supervisor will pick up for re-assignment and final disposition.

III

MATERIALS USED IN THE CITY-WIDE CHECK OF THE FIRST WEEK OF THE PHONEVISION TEST

A. Questionnaire

NORC--Survey 278C

January, 1951

NAME: _____

ADDRESS: _____

PHONE: _____ 5-6-

INFORMATION ON FIRST CALL:

Date: Jan. 9 7-1
Jan. 10. 2
Jan. 11. 3
Jan. 12 and after. 4

Time: Before Noon. 8-1
Noon to 6 P.M. 2
After 6 P.M. 3

Outcome: Completed. 9-1
Phone disconnected 2
No answer. 3
Busy signal. 4*
Refusal. 5*

*REPEAT CALL WITHIN HALF AN HOUR

FINAL OUTCOME:

Completed on first call. . 10-1
Completed on later call. . 2
Phone disconnected 3
Double refusal 4
Never reached. 5

1. Do you have a radio in your home?
Yes. 11-1*
No 2

*A. (IF "YES") Is it turned on now?
Yes. 12-1
No 2

2. Do you have a television set in your home?
Yes. 13-1
No 2*

*IF "NO", DISCONTINUE INTERVIEW

3. Is it turned on now?
Yes. 14-1*
No 2

*A. (IF "YES") What program are you viewing?

15-

4. In watching television on your own set, have you or anyone in your family ever happened to see the jittered phonevision picture on Channel 2--the Zenith experimental television station?
Yes 16-1
No. 2*
*IF "NO", SKIP TO QUESTION 10

5. About how often have you (he, she, they) looked at the jittered phonevision picture?
Just once 17-1
Two or three times. . . . 2
More frequently 3

6. When was the last time you, (he, she, they) looked at the jittered phonevision picture?

18-

7. About how long did you (he, she, they) look at it then?

19-

8. Were you (he, she, they) able to see the picture clearly enough to enjoy it?
Yes 20-1
No. 2

9. You know, people generally can't have Phonevision now, but if you could have it, would your family want to have their television set connected up with Phonevision, so you could see some of the movies being shown, at a dollar per picture?
Yes 21-1
No. 2
Not sure. 3

10. Have you or any other adult in your family been to the movies since last Friday?
Yes 22-1
No. 2

OPERATOR COMPLETING INTERVIEW:

23-4

B. Instructions for the Survey

NATIONAL OPINION RESEARCH CENTER
University of Chicago

INSTRUCTIONS FOR SURVEY 278C

Purpose of the Survey

This is a survey of a random sample of Chicago families who are telephone subscribers. Its purpose is to determine the extent to which families who are not participating in the Phonevision test are viewing the distorted Phonevisions pictures and what their reactions to these Phonevision tests are.

Procedure

The questionnaire forms from which you will be working contain the name, address, and telephone number of the household you are to call.

ON THE FIRST CALL TO A HOUSEHOLD:

(1) Circle the code numbers corresponding to the date and time of this first call.

(2) Circle the number(s) corresponding to the outcome of this first call.

(a) A completed call is one in which you get the entire interview.

(b) If the operator cuts in on your call to tell you that the phone has been disconnected, circle the code for "Disconnected".

If the operator should inform you that the phone number has been changed, cross out the old number and record this new number directly above the old one. Then start again by calling the new number for the first time. The "Information on First Call" should pertain to this new number, and the first call which yielded the information should NOT be counted as a call. In other words, simply getting the information that the number has been changed does not finish the first call.

(c) "No answer" applies to those calls where the phone rang SIX times without being answered. Always let the phone ring SIX times before hanging up and recording "No answer".

(d) If you receive a busy signal, hang up immediately and circle the code number corresponding to "Busy Signal". Put this questionnaire aside and return to it for another call in about ten to fifteen minutes. IN EVERY CASE, another call should be made to "busy" phones within the half-hour. When the next call is made to a busy number, it should be counted as part of the first call. For instance, if a line is busy on the first, second, and third tries, you are still working on the first call. If it were to be answered on the fourth try, and you obtain the interview, your form would show both "Busy signal" and "Completed" circled for the outcome of the first call, and the final outcome would be shown as "completed on first call".

(e) The phone may be answered and the person on the other end may refuse to supply the information. For these cases, circle the code number for "Refusal". Cases like these will be handled like "Busy Signals"--that is, they will be called back again within a half-hour--except that all refusals should be turned over to your supervisor for subsequent calling. Subsequent calls to a refusal by the supervisor will be handled as if they were first calls. For instance, if, on the next call the supervisor obtained the interview, both "Refusal" and "Completed" would be circled for the outcome of the first call. And the final outcome would be shown as "completed on first call".

If the supervisor also gets a refusal, the final outcome should then be recorded as "double refusal".

Before accepting a refusal, make an attempt to talk to someone else in the house. For instance, if you find you are talking to someone on the phone who cannot understand or cooperate with you, ask to talk to someone else--if you recognize a child's voice, ask to talk to a parent; or if you are talking to a servant, ask to talk to the lady (or some member) of the house; or if you find the person you are talking to is unable to speak English, or is so old or deaf that you cannot make yourself understood, ask, politely, if there is anyone else at home you could talk to.

If the person is just refusing--doesn't want to be bothered, etc. --try, tactfully, to persuade them. You can explain that this is a research survey being done to find out something about people's use of radio and television, that answers are anonymous, that NORC is a non-profit research organization affiliated with the University of Chicago, etc., etc., depending on the kind of persuasion that seem appropriate.

If you have to accept the refusal, note briefly in the margin what happened, so the supervisor will have some guiding information in making a call-back. For instance you might jot down, "Hung up before I finished introduction", or "Was very angry about being awakened", etc.

(3) For all first calls on which interviews were obtained and cases where the phone is disconnected, the final outcome is exactly the same as the outcome of the first call, and the code for interview obtained on first call (or phone disconnected) should be circled immediately. In all other cases--no answer, busy, refusal--the final outcome has not yet been determined and nothing should be circled until subsequent calls have been made.

ON SECOND AND LATER CALLS TO A HOUSEHOLD:

In general, bonafide second or later calls can be made only to cases classified as "no answer" on the first call. As explained above, repeat calls to "busy signals" and "refusals" are to be regarded as extensions of the first call.

Proceed as follows:

(a) If you get a busy signal, hang up. This case should be called again in ten or fifteen minutes, and, pending this repeat call, nothing should be recorded on your questionnaire.

(b) If you get a refusal, record this in the margin with a brief explanation, as above, and turn it over to your supervisor for a repeat call.

(c) If you still get no answer, record nothing and put it in the pile of incomplete cases for subsequent calls.

(d) If you complete the interview, record the final outcome as "completed on later call".

The Interview:

(1) Your telephone manner:

(a) Always speak clearly and in a self-assured manner. Do not talk too rapidly, but avoid talking so slowly and hesitantly that the respondent keeps interrupting you. Ideally, you should never have to repeat anything you say, and you should always remain in control of the conversation.

(b) Try to speak conversationally, however, and avoid an artificiality of manner. You should sound business-like, but never self-conscious or stilted.

(c) Politely discourage garrulousness on the part of your respondent. Get the information we need as quickly as you possibly can, without offending the respondent.

(d) Be sure to thank your respondent in closing your conversation.

(2) Your introduction:

In making your introduction, say, "Hello. This is the National Opinion

Research Center survey of radio and television." Then, ask the first question, IMMEDIATELY. Try to enunciate this mouthful distinctly, so you will not be asked to repeat it, but if you are asked for a repetition, shorten it to, "This is a survey of radio and television. I'd like to ask you if you have a radio in your home?", and continue with the interview.

Do not use the family's name in your introduction or later remarks, and do not volunteer any additional information. Of course, if the respondent asks questions, you should answer them briefly and honestly. For instance, if they ask how you happened to call them, you can say that phone numbers for this survey were picked at random from the telephone book and theirs just happened to be one that was chosen. If they want to know more about the organization doing the survey, you can explain that the National Opinion Research Center is a non-profit, opinion research organization, affiliated with the University of Chicago, which does surveys of all kinds all the time.

If you start getting beyond your depth, transfer the call to your supervisor. That is, you simply say, "I'm sorry, I don't know the answer to that, but I'll let you talk to my supervisor". Your supervisor will then take over the call and complete the interview.

(3) The questions:

Question 1: Self-explanatory. Note that Q. 1A is asked of those who own radios.

Question 2: Self-explanatory. Note that this question completes the interview in the case of people who do not own television sets.

Question 3: Self-explanatory. Note that Q. 3A is asked of those whose television set is turned on at the time of your call.

Question 3A: Record either the exact name of the program, the name of the station, or the channel number.

Question 4: If your respondent should say that they listen to the Phonevision programs, but don't look at the picture, circle "Yes", but put an "H" (hears) to the left of the answer category, thus:

H Yes. 16-①
No 2

Questions 5-7 should then be asked in terms of "listening" instead of "looking". Question 8 should be asked as "Did you enjoy the program just listening to it?"

If a respondent claims that he has one of the Phonevision sets in his home and is seeing the pictures without jitter, put a "P" in front of the "Yes". Ask Questions 5-8, as is, with reference to the times when they have looked at the jittered pictures.

Note that you should skip to Question 10, if a respondent has neither looked at nor listened to the jittered Phonevision programs.

Question 5: If your respondent makes a distinction between "listening" and "looking" practices--suppose she says she listens longer than she looks--record two answers to this question and to questions 6 and 7. Put an "H" (hears) before the answer pertaining to "listening" and an "S" (sees) before the answer pertaining to "looking". For instance if she says she looked only once, but has listened a couple of times, the answer would look like this:

S Just once. 17-①
H Two or three times ②
More frequently. . 3

Question 6: Try to get the exact day. Record it in terms of days of the week; that is, if a respondent says "yesterday", translate that to the appropriate day in recording. Remember to record "listening" and "looking" separately, if these are different.

Question 7: Get an estimate in seconds, minutes, parts of an hour

or hours. If the respondent says something vague--"just a little while", "not very long", etc.--try to get a more precise answer: "About how long would you say that was in minutes?" The exception to this is when a respondent says she watched the program all the way through. In such a case, just enter "Entire program". Be sure that, in recording numbers, you specify whether these are seconds, minutes or hours. Remember to record "listening" and "looking" separately, if these are different.

Question 8: Remember that, for persons who listen without looking, this question should be asked as: "Did you enjoy the program just listening to it?"

Question 9: A long, difficult question, so read it carefully and distinctly.

Question 10: If you are getting the interview from a sub-adult, ask this question as: "Has any adult in your family.....?"

(4) Signature of interviewer:

The interviewer who obtained the data from the respondent should sign the questionnaire, irrespective of who it was who may have made any of the earlier calls.

Disposition of Interviews:

As you complete your call, place your interviews in one of five piles:

(1) In the first pile will be those which are entirely finished--completed interviews.

(2) Place those cases which fall out of the sample--disconnected telephones--in a second pile.

(3) In a third pile will be your own "busy signals", which you are going to call back shortly. You should NEVER have any of these left at the end of your working day.

(4) In a fourth pile will be your refusals. These will be turned over to your supervisor at brief intervals.

(5) In the last pile should be the cases which will require second and further calls--the "no answers".

Remember that "Busy's" and "Refusals" must never carry over from one shift to another or from one day to another. They must be cleaned up within a half-hour from the time of the "Busy" or the refusal.

IV

MATERIALS USED IN POST-TEST SURVEY

A. Listing Instructions

NATIONAL OPINION RESEARCH CENTER

BASIC LISTING PROCEDURES

1. FIND YOUR ASSIGNED BLOCK AND TAKE A WALK AROUND IT.

You will be assigned a particular block by the supervisor. A sketch of the block will be given to you. The sketch will show the boundaries by giving the street names whenever they exist. In case you are not familier with the location of this block, look it up on the large office map. Then decide the best way to get there, and actually go and visit your block.

When you get there, please take an exploratory walk around the block before you start any work on the listings.

You must be absolutely sure that you are in the correct block. The general shape of the block and the bounding streets will guide you in knowing whether you are in the right block. But to be sure, please take the exploratory walk around the entire block before you start any work on the listings. In case there are any discrepancies between your sketch and what you actually find, which make you doubtful, please report this by telephone to your supervisor. These might indicate that you are in the wrong block, and by discussing it with the supervisor, any such error would be caught before valuable time is wasted in listing the wrong dwelling units. Any questions that you have about the block boundaries and what is legitimately included within the block should also be discussed with your supervisor, before you start the next step.

2. LIST ALL DWELLING UNITS ON YOUR ASSIGNED BLOCK ON THE "LISTING SHEET".

Once you have arrived at your block, walked all around it, are sure that you are in the correct block and have identified its boundaries, you must then begin listing every dwelling unit within the block. You will be given a special form for each block assigned to you which is called "Listing Form". You will also be given a supply of "continuation sheets" since some blocks will have more dwelling units than can be listed on the one sheet. If you need to use any continuation sheets, indicate the sequence number on each extra sheet used (i. e., sheet 2, sheet 3, etc.). Later you will record on each sheet used in a block the total number of sheets in the set needed for that block (e. g. sheet 1 of a total of 3 sheets, sheet 2 of a total of 3 sheets, etc.)

3. IN ORDER TO DO THE LISTING ACCURATELY, YOU MUST FOLLOW THESE RULES EXACTLY:

RULE I. LEARN THIS DEFINITION OF A DWELLING UNIT:

1. The general definition:

A dwelling unit is a room or group of rooms which is occupied or intended as separate permanent living quarters. Generally, a dwelling unit is occupied, but a vacant unit also qualifies if it could be lived in. Nowadays you will find practically no such vacancies, but if you should run into such a rarity, it, of course, should be listed.

A dwelling unit may be a whole house or only part of a house; it may be a flat or an apartment in a structure containing several dwelling units.

It may be a basement or attic apartment, a trailer parked in the back or on a lot, etc., if such places are regarded as the occupant's permanent living quarters at that time.

Those people living in a dwelling unit may be either one person living alone, a family, or unrelated persons, such as several working girls.

2. Do not consider the following as dwelling units:

a. Institutional units such as cells in a prison, rooms or wards in a hospital, dormitory quarters in a college, student rooms in a fraternity, rooms in a nurses home, etc.

However, the permanent units within such institutions would be listed such as the warden's house, the janitor's quarters, etc.

b. Transient trailers or transient tourist cabins.

However, if a trailer or cabin were being used as a permanent residence it would be listed.

c. Buildings in the process of construction.

d. Unoccupied buildings in such disrepair that nobody can live in them, e. g., condemned buildings.

3. Places of business such as stores, factories, etc.

However, within such places of business you may occasionally find some part set aside as permanent living quarters, which would qualify to be listed.

3. Note the following distinction between apartment hotels and transient hotels:

People who live in an apartment or resident hotel are to be considered in the same way as people living in an apartment house. Their dwelling units would be listed, since they presumably maintain permanent residence there.

However, transient hotels should generally not be counted as buildings containing dwelling units. Presumably the occupants of these rooms maintain residences elsewhere, and therefore these rooms would not be listed. You may, however, find within a transient hotel, a floor or part of a floor, or one apartment set aside for a permanent guest or for the manager or other employees. These particular units would be considered in the same way as apartments and would, of course, be listed.

4. Note the following distinction between a Roomer and a Rooming House.

In general, you are not to consider a roomer living with a private family as having a separate dwelling unit. Only the one dwelling unit would be listed. However, you should consider a rooming house as if it were an apartment house; i. e., that is since each room or suite of rooms is permanently and separately occupied by a single person or family, it would be counted as a separate dwelling unit.

There may be instances where you are not sure whether to count a particular place as a rooming house with several separate dwelling units, or as one dwelling unit containing some roomers. Wherever you find a place where four or more roomers live, consider it as a rooming house and list each dwelling unit (room or suite of rooms) separately. If less than four roomers, count them as part of the one dwelling unit in which they room.

RULE II. LIST BY INSPECTION BUT ASK QUESTIONS WHERE IN DOUBT:

Many structures are one-family houses and count as single dwelling units. These can sometimes be spotted by just looking at the outside of the house. This is especially true in the better residential areas where you have large one-family houses on a big plot of ground. But in neighborhoods that are deteriorating a little, sometimes a former one family house has been converted into a two or three family house and it is not always possible to tell this fact by looking at the exterior of the house. Therefore, it is essential that you not only inspect the outside of each apparent one-family house as thoroughly as you can for signs of it being a multiple dwelling unit (more than one mailbox, for example) but also ask a few people whom you happen to see on the block whether any of these houses (other than the more obvious ones) have more than one family living in them.

Many two-family houses are easy to detect; especially the conventional side-by-side type or the kind where the structure has two floors with identical apartments on each.

It is the one-family houses that have been converted into two separate dwelling units that you have to be

careful of. You also have to watch for former two-family houses in which one or both flats have in turn been subdivided into several separate dwelling units. Where you are in doubt, ask a storekeeper or one of the neighbors.

Structures with Multiple Dwelling Units (3 or more units), especially apartment houses, are often easily detectable. If it is obviously an apartment house, you will have to walk into the building and check the bells or mailboxes, or in cases where there are no bells or mailboxes you will have to walk around the floors to make sure you include all the units within the building. Sometimes, the information can be obtained by asking someone, the superintendent or a tenant.

Be sure not to miss units reached by side or rear entrances, or the units occupied by managers, janitors, night watchmen, or other employees which do not always have a separate doorbell or mailbox. You may also have to inquire in some stores, office and factory buildings, warehouses, etc., to find out whether there are unseen dwelling units in the structure. Such units are common now-a-days in congested areas.

RULE III. LIST ALL DWELLING UNITS IN THE FOLLOWING SYSTEMATIC ORDER:

We have provided a system which all listers should follow. This is to insure thoroughness in the listing process, and to help in identifying the dwelling units when we return to these blocks at a future time.

It is necessary that you always start your listing of each block at a designated corner. In the sketch of your block, this designated corner or starting point is indicated by an "X" and an arrow shows the direction in which you should walk as you list. Following the arrow means that you will be going in a clockwise direction during the listing. For one-family structures, this will be from right to left as you face the buildings. If you always walk from right to left as you face the building you will be following the clockwise direction.

Whenever there is more than one dwelling unit at the same address, there is a problem of the order in which you list each dwelling unit.

1. For those units using the same address, the order of listing will be by apartment number of flat number if such numbers appear on bells, mail boxes, or on the doors of individual apartments. Record the lowest number and lowest letter of alphabet first; (e. g., a, b, c, etc. or 1, 2, 3, etc., or 1-a, 1-b, 1-c, 2-a, 2-b, 2-c, etc.)
2. When there is no numerical or alphabetical identification of individual rooms, apartments, or flats, you should list in the following order:
   a. Bottom to top, e. g., basement to ground floor to second floor, etc.
   b. Right to left.
   c. Front to the back on any given floor.

This three-dimensional instruction bottom to top, right to left, front to back should permit you to handle all units systematically.

To avoid confusion, do not use the term first floor, because some people think of the first floor as being one flight up and others think of it as the equivalent of the ground floor. Call the street floor the "ground floor"; use "second floor" for dwellings one flight up.

RULE IV. BE SURE TO COVER THE ENTIRE AREA:

Every alley, court or passageway in your block should be covered, because there may be dwelling units hidden in them that you might otherwise miss. It will naturally be more likely for one to overlook such units, so for this reason extreme care is all the more essential. Residents of remote units may well have some different characteristics from residents of the more conventional or easily accessible units. Enter every alley or street within your block as you come to it, going down one side of it first and back up the other side.

Besides being hidden in alleys and backyards, dwelling units may be situated in such other unusual places as: Converted stores, behind other units that face the street, behind the business front of a store building, over garages or stores, in factory yards, etc. It is important to include the dwelling units found in all such places.

RULE V. KEEP STRICTLY WITHIN THE BOUNDARIES OF YOUR BLOCK:

Where the boundary line follows a street, it is intended to run down the middle of that street, so that you list all dwelling units on the side which falls inside your block, but not those on the other side of the street.

RULE VI. ONE LINE AND ONE LINE ONLY SHOULD BE USED FOR LISTING EACH DWELLING UNIT:

Do not use two lines for one dwelling unit. Never skip a line.

RULE VII. LIST THE ADDRESS OF EACH DWELLING UNIT IN FULL DETAIL:

As you list each individual dwelling unit, describe it in such a complete way that you or anyone else could find it in the future. If there is a house number, use it, plus any additional description which may be necessary. Where there are no numbers, describe the house as clearly as possible, e. g., "Spruce Street, large house, second from corner, red brick", "Spruce Street, near alley, small white house with uncovered porch", etc.

Complete street names should always be used. Do not leave out the words "street", "place", "boulevard", etc. When the same address applies on succeeding lines to several dwelling units, ditto marks should be used rather than writing the numbers or words over again. Do not leave the space blank in such a case since this might be taken for an omission.

Always give apartment or room number in multi-dwelling structures. Where apartments are not numbered or lettered, write in floor and exact location of room or apartment (right, left, front, back, etc.) If a dwelling unit is in an alley with no name, describe the alley in some way so that there can be no mistake in locating it in the future (e. g., off 15th Street, running North East).

RULE VIII. WRITE CLEARLY, MAKE ALL YOUR ENTRIES UNIFORM AND ACCURATE:

The listing forms constitute a permanent record from which this sample and future samples of dwelling units will be drawn. If the entries are not written clearly and accurately, we will not be able to identify the dwelling units drawn from the lists.

e. g., When the writing is hasty, it is easy to confuse the figure "2" with "3", or "6" with "0", or "3" with "5", and it will be difficult for an interviewer to find the address in question.

EVEN THOUGH THESE INSTRUCTIONS ARE VERY DETAILED, YOU MAY RUN INTO SPECIFIC PROBLEMS WHICH HAVE NOT BEEN EXPLAINED. THESE SPECIAL PROBLEMS SHOULD BE BROUGHT TO THE ATTENTION OF YOUR SUPERVISOR TO BE SURE THAT YOU HANDLE THEM CORRECTLY.

B. Questionnaire for General Public

In the actual survey the fare sheets were printed in different colors to identify the separate samples.

NATIONAL OPINION RESEARCH CENTER
4901 South Ellis Avenue
Chicago 15, Illinois

Face Sheet
Survey 299
March, 1951

Sample #_____ 5

Case #_____

Segment #_____ 6-8

Name:_____

Applic. #_____ 9-12

Address of DU:_____

I. Would you please tell me how many adults, 20 years of age or over, live in this household? (LIST AGE, SEX AND RELATION TO FAMILY HEAD FOR EACH ADULT.)

Relation to Head	Sex: M or F	Age	✓R

II. Are there any children or persons under twenty years of age living here with you? (LIST SAME DATA FOR EACH SUB-ADULT.)

Relation to Head	Sex: M or F	Age

FOR OFFICE USE:
DO NOT WRITE IN THIS SPACE

13-

14-

15-

	Male	Female	Total	
Total.				16-18
Children				19-21
Adults				22-24
Under 5.				25-27
5-9.				28-30
10-19.				31-33
20-34.				34-36
35-49.				37-39
50-64.				40-42
65 plus.				43-45

46-

Appointment or when usually home:_____

Call	Date	Time, inc. A.M. or P.M.	Interviewer	Result	Remarks
1st					
2nd					
3rd					
4th					
5th					
6th					

NATIONAL OPINION RESEARCH CENTER
4901 South Ellis Avenue
Chicago 15, Illinois

Survey 299
March, 1951

1. What is your favorite way of spending an evening?

Reading	6-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

2. What are some of the other things you enjoy doing when you have the free time? (Any others?)

Reading	7-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

3. How about (the other adults, 20 and over, in your household)? Would you say that, in general, (they) enjoy doing the same things that you do, or are there other things that (they) would rather do?

Same things	8-1
Other things	2*
Don't know	3

*A. (IF "OTHER THINGS") What are some of the things (they) would rather do? (Any others?)

Reading	9-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

4. (IF ANY CHILDREN 5-19) How about (the children)? Do (they) usually enjoy doing the same things the grown-ups do or are there other things that they would rather do?

Same things	10-1
Other things	2*
Don't know	3

*A. (IF "OTHER THINGS")? What are some of the things (they) would rather do? (Any others?)

Reading	11-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

5. In general, when you have a free evening, would you rather stay home, or would you rather go out somewhere?

Rather stay home	12-1
Rather go out	2
Don't know	3

6. How about (the other adults, 20 and over, in your household)? Would (they) rather stay home, or would (they) rather go out somewhere?

Rather stay home	13-1
Rather go out	2
Some one way, some the other	3
Don't know	4

7. About how often do the adults (20 and over) in your family--including yourself--go to the movies?

Twice a week or more	14-1
Once a week	2
Two or three times a month	3
Once a month	4
Less than once a month	5
Never	6

8. (IF ANY CHILDREN 5-19) About how often do the children in your family go to the movies?

Twice a week or more	15-1
Once a week	2
Two or three times a month	3
Once a month	4
Less than once a month	5
Never	6

9. Speaking for yourself, which would you rather do--go to a movie, or watch a television program?

Go to a movie	16-1
Watch television	2
Don't like either	3
Don't know	4

10. How about (the other adults, 20 and over, in your household)? Which would (they) rather do--go to a movie, or watch a television program?

Go to a movie	17-1
Watch television	2
Some one way, some the other	3
Don't like either	4
Don't know	5

11. (IF ANY CHILDREN 5-19) And (the children)? Which would (they) rather do--go to a movie, or watch a television program?

Go to a movie	18-1
Watch television	2
Some one way, some the other	3
Don't like either	4
Don't know	5

12. On the whole, do you like or dislike television?

Like	19-1*
Dislike	2*
Don't know	3

*A. (IF "LIKE" OR "DISLIKE") Would you say you like (dislike) television very much, or a good deal, or only a little?

Very much	20-1
A good deal	2
Only a little	3
Don't know	4

13. What is there about television that you like? (What else?)

21-

14. What is there about television that you dislike? (What else?)

22-

15. Do you think you would like television any better if certain changes were made? (What changes?) (Any others?)

23-

16. What are some of the (other) kinds of television programs you especially <u>like</u>? (Any others?)

24-

25-

17. What are some of the (other) kinds of television programs you especially <u>dislike</u>? (Any others?)

26-

27-

18. Are there any (other) kinds of programs you would like to have more of on television? (What kinds?) (Any others?)

28-

29-

19. Do (the other adults, 20 and over, in your household) feel the same way you do about television, or do (they) like it more, or less, that you do?

Feel the same.	30-1
Like more than R	2
Like less than R	3
Some agree, some don't	4
Don't know	5

20. (<u>IF ANY CHILDREN 5-19</u>) How about (the children)? Do (they) feel the same way you do about television, or do they like it more, or less, than you do?

Feel the same.	31-1
Like more than R	2
Like less than R	3
Some agree, some don't	4
Don't know	5

21. Do you have a television set in your home?

Yes.	32-1*
No	2**

*IF "YES, OWN TELEVISION", ASK <u>LEFT-HAND</u> COLUMN ON NEXT PAGE.

**IF "NO",DON'T OWN TELEVISION", ASK <u>RIGHT-HAND</u> COLUMN ON NEXT PAGE.

ASK TELEVISION OWNERS ONLY

22. About how long have you had a television set?

Less than one month	33-1
One month up to 3 months	2
Three months up to 6 months	3
Six months up to 9 months	4
Nine months up to 10 months	5
Ten months up to 11 months	6
Eleven months up to 1 year	7
One year up to 18 months	8
18 months up to 2 years	9
Two years and over	0

23. On an average weekday, about how many hours is your television set on....

A. In the morning--from 6 A.M. to noon?

_____hours 34-

B. In the afternoon--from noon to 6 P.M.?

_____hours 35-

C. In the evening--after 6 P.M.?

_____hours 36-

37-

24. Has the movie attendance of the adults (20 and over) in your family--including yourself--changed since you got your television set? (How?)

Yes, increased	38-1
Yes, decreased	2
No, stayed the same	3
Don't know	4

25. (IF ANY CHILDREN 5-19) Has the movie attendance of the children in your family changed since you got your television set? (How?)

Yes, increased	39-1
Yes, decreased	2
No, stayed the same	3
Don't know	4

SKIP TO QUESTION 27.

ASK NON-OWNERS ONLY

22. Would you and your family like to have a television set?

Yes	33-1
No	2
Not sure	3

23. Have you and your family thought at all about getting a television set?

Yes	34-1*
No	2**

*A. (IF "YES") Have you made up your minds yet whether you will get a television set or not? (What did you decide?)

Will get	35-1***
Will not get	2**
Depends (SPECIFY ON WHAT)	3***
Not sure yet	4**

**B. (IF "NO" TO Q. 23, OR "WILL NOT GET" OR "NOT SURE YET" TO Q. 23 A) Do you think you ever will get a television set?

Yes, will get	36-1***
No, will not get	2
Depends (SPECIFY ON WHAT)	3***
Don't know	4

***IF "WILL GET" OR "DEPENDS" TO Q. 23 A or B, ASK C AND D.

C. About how long do you think it will be before you get a television set?

Less than one month	37-1
One month up to 3 months	2
Three months up to 6 months	3
Six months up to 9 months	4
Nine months up to 1 year	5
One year up to 2 years	6
Two years up to 5 years	7
Five years and over	8
Don't know	9

D. Do you have any idea what kind of set you'll get when you do buy?

Yes	38-R#
No	1

#(1) (IF "YES" TO D) What kind of set do you have in mind? (Anything else you've decided about the set you'll get?)

ASK NON-OWNERS ONLY

24. About how often do you see television?

Every day	39-1
Two to 6 times a week	2
Once a week	3
Two to 3 times a month	4
Once a month	5
Less than once a month	6
Never	7

25. About how often do (the other adults, 20 and over, in your household) see television?

40-R

Every day	40-1
Two to 6 times a week	2
Once a week	3
Two to 3 times a month	4
Once a month	5
Less than once a month	6
Never	7

26. (IF ANY CHILDREN 5-19) About how often do (the children) see television?

41-R

Every day	41-1
Two to 6 times a week	2
Once a week	3
Two to 3 times a month	4
Once a month	5
Less than once a month	6
Never	7

ASK EVERYONE

27. Do you have a telephone in your home?

Yes	42-1*
No	2**

*IF TELEPHONE SUBSCRIBER, ASK LEFT-HAND COLUMN.

**IF NON-SUBSCRIBER, ASK RIGHT-HAND COLUMN.

ASK TELEPHONE SUBSCRIBERS ONLY

28. What type of telephone service do you have?

One-party (private) line	43-1
Two-party line	2
Three-party line	3
Four or more party line	4
Hotel switchboard	5
Other (SPECIFY BELOW)	6
Don't know	7

CONTINUE WITH LEFT-HAND COLUMN ON NEXT PAGE

ASK NON-SUBSCRIBERS ONLY

28. Of course, having a telephone is always a convenience, but would you say that you and your family are particularly interested in getting a telephone or not?

Yes, interested	43-1
No, not interested	2
Not sure	3

CONTINUE WITH RIGHT-HAND COLUMN ON NEXT PAGE

ASK TELEPHONE SUBSCRIBERS ONLY

29. Have you and your family been thinking at all about giving up your telephone, or changing the kind of telephone service you now have?

Yes, discontinuing.	44-1
Yes, changing service	2*
No.	3

*A. (IF "YES, CHANGING SERVICE") What kind of telephone service do you think you might change to?

One-party (private line).	45-1
Two-party line.	2
Three-party line.	3
Four or more party line	4
Hotel switchboard	5
Other (SPECIFY BELOW)	6
Don't know.	7

46-R

ASK NON-SUBSCRIBERS ONLY

29. Do you think you will get a telephone sometime?

Yes	44-1*
No.	2
Depends (SPECIFY ON WHAT)	3*
Don't know.	4

*IF "YES" OR "DEPENDS", ASK A AND B.

A. About how long do you think it will be before you get a telephone?

Less than a one month..	45-1
One month up to 3 months.	2
Three months up to 6 months . . .	3
Six months up to 9 months	4
Nine months up to 1 year.	5
One year up to 2 years.	6
Two years up to 5 years	7
Five years and over	8
Don't know.	9

B. If you got a telephone, what kind of service do you think you would get?

One-party (private) line.	46-1
Two-party line.	2
Three-party line.	3
Four or more party line	4
Hotel switchboard	5
Other (SPECIFY BELOW)	6
Don't know.	7

ASK EVERYONE

30. Have you ever heard anything about phonevision?

Yes	47-1*
No.	2
Don't know.	3

*IF "YES", ASK A, B, AND C.

A. As far as you know, what is phonevision? (How does it work?) (Do you know anything else about it?)

48-

B. Where did you hear or find out about phonevision? (Where? When? What did it say?) (Any other way or place?)

49-

30. (CONTINUED)

C. (IF "HEARD OF PHONEVISION") Did you or anyone in your family ever apply to take part in the phonevision test that (is going on) (just finished)?

Yes	6-4**
No	5
Don't know	6

**IF "YES, APPLIED", ASK (1) AND (2).

(1) Just what did (you) do?

Wrote in to WEFM	7-8
Sent newspaper coupon	9
Sent return postcard	0
Sent dealer card	X
Other (SPECIFY AT SIDE)	y

(2) Did (you) receive a questionnaire?

Yes, and returned it	8-0
Yes, but didn't return it	X
No, didn't receive	y

---

31. Well (as you know), phonevision is a system of charging people to see television programs by sending the programs out in scrambled form. If people pay for it, they can get the picture unscrambled, through a special device installed in their television set. They've been testing phonevision, for the last three months, with three hundred families who were loaned a television set which could receive the jittered programs clearly, if the family called up and ordered the program. Then the family saw a regular full-length movie on their television set and was charged a dollar for each movie they saw. Of course, the families didn't have to buy any movies unless they wanted them, and they could use the television set they were loaned to see regular television programs any time they wanted to....

If the phonevision test were beginning now (just as I described it), do you think your family would want to take part in the test or not?

Would want to	9-4*
Would not	5**
Depends (SPECIFY ON WHAT)	6*
Don't know	7

*IF "WOULD WANT TO" OR "DEPENDS", ASK A.

**IF "WOULD NOT WANT TO", ASK B.

A. What would interest you about taking part in the phonevision test? (What other reasons would you have for taking part?)

10-

B. What makes you feel that you wouldn't be interested in taking part in the phonevision test? (What other reasons would you have for not taking part?)

11-

32. Have you, or anyone in your family, ever happened to see those jittered phonevision pictures on Channel 2--the Zenith experimental television station?

Yes	12-0*
No	X
Don't know	y

*IF "YES", ASK A, B AND C.

A. About how often has your family looked at the jittered phonevision programs?

13-

B. What was the longest, at any one time, that anyone in your family looked at the jittered phonevision programs?

14-

C. Has anyone in your family seen the phonevision programs in clear form, or have you only seen them jittered?

Only jittered	15-4
Clear, coming attractions	5
Clear, guest of test family	6
Clear, other (SPECIFY)	7

---

33. In general, do you think it is a good idea, or a bad idea, to have some television programs that people have to pay to see, if they want to see them?

Good idea	16-8*
Bad idea	9**
Don't know	0

*IF "GOOD IDEA", ASK A AND B.

**IF "BAD IDEA", ASK A, B AND C.

A. How strongly do you favor (oppose) the idea of charging people to see some television programs?

Very strongly	17-5
Pretty strongly	6
Not so strongly	7
Not strongly at all	8
Don't know	9

B. What are your reasons for favoring (opposing) the idea of charging people to see some television programs? (What other reasons do you have?)

18-

C. Suppose the television programs that people were charged to see were programs that wouldn't be on television at all, otherwise.... In that case, would you favor or oppose having some television programs which people would have to pay to see, if they wanted to see them?

Favor	19-0
Oppose	X
Don't know	y

---

34. If there actually were some television programs that people had to pay to see (and you had a television set), do you think your family ever would pay for any of them that you wanted to see and couldn't get on television any other way?

Yes, might pay	20-0
No, would never pay	X
Not sure	y

35. During the phonevision test, they were showing movies that were a couple of years old, but which had never been seen on television before....If phonevision were available now, and they were showing only movies that were one or two years old, do you think your family would pay to see some of these movies on television (assuming you had a television set that could get the phonevision programs), at a dollar per picture?

Yes, would pay.	21-7*
No, would not	8
Not sure.	9

*IF "YES, ASK A AND B.

A. If these were the only programs on phonevision, about how many pictures a month do you think your family would take at one dollar per picture? (Just your guess....)

22-

B. How sure do you feel that your family actually would take this many movies?

Very sure	23-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know.	y

---

36. Suppose they were showing only new movies on phonevision....Do you think your family would pay to see some of these movies on television, at a dollar per picture?

Yes, would pay.	24-0*
No, would not	X
Not sure.	y

*IF "YES", ASK A AND B.

A. If these were the only programs on phonevision, about how many pictures a month do you think your family would take at one dollar per picture? (Just your guess....)

25-

B. How sure do you feel that your family actually would take this many movies?

Very sure	26-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know.	y

---

37. Now, suppose your family had a television set that could get the phonevision programs.... Which do you think you would do:

	See PV Movie	Other Choice	Neither	D.K.
A. IF there were two movies you wanted to see being shown--one on phonevision and the other at a regular movie theater? (Would you stay home and see the phonevision movie or go to the movie theater?)	27-6	7	8	9
B. IF a movie you wanted to see was being shown on phonevision at the same time as your favorite radio program? (Would you see the phonevision movie or listen to the radio program?).	28-6	7	8	9
C. IF a movie you wanted to see was being shown on phonevision at the same time as your favorite regular television program? (Would you see the phonevision movie or watch the regular television program?)	29-6	7	8	9
D. IF the movie being shown on phonevision sounded all right to you, and there was nothing on regular television that you particularly wanted to see? (Would you see the phonevision movie or watch regular television?).	30-6	7	8	9

38. If phonevision were available now, and they were showing only sports events that weren't on television anywhere else, do you think your family would pay to see some of these sports events on television, at a dollar per program?

Yes, would pay.	31-7*
No, would not	8
Not sure.	9

*IF "YES", ASK A, B, AND C.

A. Which sports events would your family be interested in seeing on phonevision? (Any others?)

32-

B. If these were the only programs on phonevision, about how many of these sports programs a month do you think your family would take, at one dollar per program? (Just your guess....)

33-

C. How sure do you feel that your family actually would take this many sports programs?

Very sure	34-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know.	y

---

39. Are there any other kinds of programs (besides movies and sports events) that your family would be interested in seeing on phonevision--that is, programs that you would be willing to pay to see?

Yes	35-0*
No.	X
Don't know.	y

*IF "YES", ASK A, B, AND C.

A. What other kinds of programs would your family like to have on phonevision? (Any others?)

36-

B. If these were the only programs on phonevision, about how many of these programs a month do you think your family would take, at one dollar per program? (Just your guess....)

37-

C. How sure do you feel that your family actually would take this many of these programs?

Very sure	38-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know.	y

40. All in all, if phonevision were on the market today (and you had a television set), do you think you would have your television set connected up with it, so you could sometimes see some of these programs at a dollar per program, or wouldn't you want your set connected up with phonevision?

Would want.	39-5*
Would not want.	6
Not sure.	7

*A. (IF "WOULD WANT") Suppose all the different kinds of programs that you are interested in having were on phonevision....About how many programs of all kinds a month do you think your family would take, at one dollar per program? (Just your guess....)

40-

41. Do you think a dollar per program is about the right charge for a family to pay for a phonevision program, or should the charge be more, or less?

About right.	41-8
Should be more.	9*
Should be less.	0*
Depends on the program.	X*
Don't know.	y

*A. (IF "SHOULD BE MORE", "SHOULD BE LESS", OR "DEPENDS ON THE PROGRAM") About what should the charge per program be?

42-

42. (IF NO TELEVISION SET AND SOME INTEREST IN PHONEVISION) If phonevision were available, do you think that you would be any more interested in getting a television set than you are now?

Yes, more interested.	43-0*
No, no difference	X
Don't know.	y

*A. (IF "YES, MORE INTERESTED") If phonevision were available right now, about how long do you think it would be before you got a television set?

Less than one month	44-4
One month up to 3 months.	5
Three months up to 6 months . . .	6
Six months up to 9 months	7
Nine months up to 1 year.	8
One year up to 2 years.	9
Two years up to 5 years	0
Five years and over	X
Don't know.	y

43. (IF NO TELEPHONE, AND SOME INTEREST IN PHONEVISION) You know, phonevision works through telephone wires so people have to have a telephone in order to get phonevision....If phonevision were available, do you think that you would be any more interested in getting a telephone than you are now?

Yes, more interested.	45-0*
No, no difference	X
Don't know.	y

*A. (IF "YES, MORE INTERESTED") If phonevision were available right now, about how long do you think it would be before you got a telephone?

Less than one month	46-4
One month up to 3 months.	5
Three months up to 6 months . . .	6
Six months up to 9 months	7
Nine months up to 1 year.	8
One year up to 2 years.	9
Two years up to 5 years	0
Five years and over	X
Don't know.	y

FACTUAL DATA

1. What kind of work does (the head of the family) do?

   Job: _____

   Industry: _____ 47-

2. How far did (the head of the family) go in school?

Some grammar school, but didn't finish	48-3
Graduated from grammar school	4
Some high school, but less than four years	5
Completed four years of high school	6
Some college, but less than four years	7
Graduated from four-year college	8
Post-graduate work in university	9

3. A. In what country was (the head of the family) born?

   49-50-

   B. In what country was the father of (the head of the family) born?

   51-52-

4. About how long have you been living at this address?

Under three months	53-3
Three months up to 6 months	4
Six months up to 9 months	5
Nine months up to 1 year	6
One year up to 5 years	7
Five years up to 10 years	8
Ten years and over	9

5. Does your family own or rent your home?

Own	54-X
Rent	y

6. How many rooms do you have here?

One	55-5*
Two	6
Three	7
Four	8
Five and over	9

*A. (IF "ONE ROOM") Do you have your own cooking facilities?

Yes	56-X
No	y

7. Would you tell me in which one of these general groups your total yearly family income falls--before taxes? (HAND RESPONDENT CARD) (We need this information just to make sure that we are getting a good sample.)

A. Under $2,500 a year	57-7
B. $2,500 to $4,999	8
C. $5,000 to $7,499	9
D. $7,500 to $10,000	0
E. $10,000 and over	X
Refused	y

8. TYPE OF DWELLING UNIT

Single-family house	58-8
Two-family house	9
Apt. in bldg. with 3 or more apts.	0
Hotel	X
Other (SPECIFY BELOW)	y

7. RACE OF HOUSEHOLD

White	59-0
Negro	X
Other non-white	y

10. TIME OF INTERVIEW

Before 12 noon	60-0
Noon to 6 P.M.	X
After 6 P.M.	y

11. DATE OF INTERVIEW

61-

12. SIGNATURE OF INTERVIEWER

62-63-

C. Questionnaire for Test Families

Face Sheet
Survey 299
March, 1951

NATIONAL OPINION RESEARCH CENTER
4901 South Ellis Avenue
Chicago 15, Illinois

Case #_____

Sample #_____5
Segment #_____6-8
Applic. #_____9-12

Name:_____

Address of DU:_____

I. Would you please tell me how many adults, 20 years of age or over, live in this household? (LIST AGE, SEX AND RELATION TO FAMILY HEAD FOR EACH ADULT.)

Relation to Head	Sex: M or F	Age	✓R

II. Are there any children or persons under twenty years of age living here with you? (LIST SAME DATA FOR EACH SUB-ADULT.)

Relation to Head	Sex: M or F	Age

FOR OFFICE USE!
DO NOT WRITE IN THIS SPACE

13-
14-
15-

	Male	Female	Total	
Total.				16-18
Children				19-21
Adults				22-24
Under 5.				25-27
5-9.				28-30
10-19.				31-33
20-34.				34-36
35-49.				37-39
50-64.				40-42
65 plus.				43-45

46-

Appointment or when usually home:_____

Call	Date	Time, inc. A.M. or P.M.	Interviewer	Result	Remarks
1st					
2nd					
3rd					
4th					
5th					
6th					

NATIONAL OPINION RESEARCH CENTER
4901 South Ellis Avenue
Chicago 15, Illinois

(Final)
Survey 299A
April, 1951

1. What is your favorite way of spending an evening?

Reading	6-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

2. What are some of the other things you enjoy doing when you have the free time? (Any others?)

Reading	7-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

3. How about (the other adults, 20 and over, in your household)? Would you say that, in general, (they) enjoy doing the same things that you do, or are there other things that (they) would rather do?

Same things	8-1
Other things	2*
Don't know	3

*A. (IF "OTHER THINGS") What are some of the things (they) would rather do? (Any others?)

Reading	9-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

4. (IF ANY CHILDREN 5-19) How about (the children)? Do (they) usually enjoy doing the same things the grown-ups do or are there other things that they would rather do?

Same things	10-1
Other things	2*
Don't know	3

*A. (IF "OTHER THINGS")? What are some of the things (they) would rather do? (Any others?)

Reading	11-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

5. Are there any things that anyone in your family--including yourself--now enjoys doing in their free time, that they didn't use to care for, before the phonevision test?

Yes	12-1*
No	2
Don't know	3

*IF "YES", ASK A AND B.

A. Which members of your family now enjoy doing different things than they did before the phonevision test?

Respondent	13-1
Other (adult(s)	2
Child(ren)	3

B. What are some of the things that (they) now enjoy doing, that (they) didn't use to enjoy before the phonevision test? (Any others?)

Reading	14-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

6. Are there any things that anyone in your family--including yourself--used to enjoy doing in their free time, before the phonevision test, that they don't care for any more?

Yes	15-1*
No	2
Don't know	3

*IF "YES", ASK A AND B.

A. Which members of your family no longer enjoy doing some of the things that they used to like, before the phonevision test?

Respondent	16-1
Other adult(s)	2
Child(ren)	3

B. What are some of the things that (they) used to enjoy doing before the phonevision test, that (they) don't enjoy anymore? (Any others?)

Reading	17-1
Listening to the radio	2
Watching television	3
Going to the movies	4
Going to a stage play	5
Playing cards, games	6
Visiting with friends	7
Taking part in sports	8
Going to sports events	9
Dancing, nightclubbing	0
"Homemaking" activities	X
Other (SPECIFY BELOW)	y
Don't know	R

7. In general, when you have a free evening, would you rather stay home, or would you rather go out somewhere?

Rather stay home	18-1
Rather go out	2
Don't know	3

8. How about (the other adults, 20 and over, in your household)? Would (they) rather stay home, or would (they) rather go out somewhere?

Rather stay home	19-1
Rather go out	2
Some one, some the other	3
Don't know	4

9. Did the adults in your family--including yourself--feel the same way about staying home or going out, before the phonevision test, as they do now, or have any of them changed?

All adults feel same	20-1
All adults changed	2
Some same, some changed	3
Don't know	4

10. During the phonevision test, did the adults (20 and over) in your family--including yourself--go to the movies more often, or less often, than they usually did before the test?

More often	21-1*
Less often	2*
Same	3
Some one, some another	4*
Don't know	5

*A. (IF "MORE OFTEN", "LESS OFTEN", OR "SOME ONE, SOME ANOTHER") About how often did the adults go to the movies, during the phonevision test?

Twice a week or more	22-1
Once a week	2
Two or 3 times a month	3
Once a month	4
Less than once a month	5
Never	6

11. About how often do the adults usually go to the movies?

Twice a week or more	23-1
Once a week	2
Two or 3 times a month	3
Once a month	4
Less than once a month	5
Never	6

12. (IF ANY CHILDREN 5-19) During the phonevision test, did the children in your family go to the movies more often, or less often, than they usually did before the test?

More often	24-1*
Less often	2*
Same	3
Some one, some another	4*
Don't know	5

*A. (IF "MORE OFTEN", "LESS OFTEN", OR "SOME ONE, SOME ANOTHER") About how often did the children go to the movies, during the phonevision test?

Twice a week or more	25-1
Once a week	2
Two or 3 times a month	3
Once a month	4
Less than once a month	5
Never	6

13. (IF ANY CHILDREN 5-19) About how often do the children usually go to the movies?

Twice a week or more	26-1
Once a week	2
Two or 3 times a month	3
Once a month	4
Less than once a month	5
Never	6

14. Speaking for yourself, which would you rather do--go to a movie, or watch a television program?

Go to a movie	27-1
Watch television.	2
Don't like either	3
Don't know.	4

15. How about (the other adults, 20 and over, in your household)? Which would (they) rather do--go to a movie, or watch a television program?

Go to a movie	28-1
Watch television.	2
Some one, some the other.	3
Don't like either	4
Don't know.	5

16. (IF ANY CHILDREN 5-19) And (the children)? Which would (they) rather do --go to a movie, or watch a television program?

Go to a movie	29-1
Watch television.	2
Some one, some the other.	3
Don't like either	4
Don't know.	5

17. Before you took part in the phonevision test, which would you rather have done--gone to a movie, or watched a television program?

Gone to a movie	30-1
Watched television.	2
Didn't like either.	3
Don't know.	4

18. And (the other adults)? Which would they rather have done before the phonevision test--gone to a movie, or watched a television program?

Gone to a movie	31-1
Watched television.	2
Some one, some the other.	3
Didn't like either.	4
Don't know.	5

19. (IF ANY CHILDREN 5-19) And (the children)? Which would (they) rather have done before the phonevision test --gone to a movie or watched a television program?

Gone to a movie	32-1
Watched television.	2
Some one, some the other.	3
Didn't like either.	4
Don't know.	5

20. Now that you've seen phonevision, do you like regular television more, or less, than you did before the test?

More	33-1*
Less	2*
Same	3
Don't know	4

*A. (IF "MORE" OR "LESS") On the whole, before the phonevision test, did you like or dislike television?

Liked.	34-1**
Disliked	2**
Don't know	3

**(1) (IF "LIKED" OR "DISLIKED")--Would you say that, before the phonevision test, you liked (disliked) television very much, or a good deal, or only a little?

Very much.	35-1
A good deal.	2
Only a little.	3

21. How about (the other adults in your household)? Do (they) like regular television more, or less, now, than (they) did before the phonevision test?

More	36-1
Less	2
Same	3
Some one, some the other	4
Don't know	5

22. (IF ANY CHILDREN 5-19) And (the children)? Do they like regular television more, or less, now, than they did before the phonevision test?

More	37-1
Less	2
Same	3
Some one, some the other	4
Don't know	5

23. On the whole, do you like, or dislike, television, now?

Like	38-1*
Dislike.	2*
Don't know	3

*A. (IF "LIKE" OR "DISLIKE") Would you say that you now like (dislike) television very much, or a good deal, or only a little?

Very much.	39-1
A good deal.	2
Only a little.	3
Don't know	4

24. What is there about television that you <u>like?</u> (What else?)

40-

25. What is there about television that you <u>dislike?</u> (What else?)

41-

26. Do you think you would like television any better if certain changes were made? (What changes?) (Any others?)

42-

27. What are some of the (other) kinds of television programs you especially <u>like?</u> (Any others?)

43-

44-

28. What are some of the (other) kinds of television programs you especially dislike? (Any others?)

45-

46-

29. Are there any (other) kinds of programs you would like to have more of on television? (What kinds?) (Any others?)

47-

48-

30. Do (the other adults, 20 and over, in your household) feel the same way you do about television, or do (they) like it more, or less, than you do?

Feel the same	49-4
Like more than R	5
Like less than R	6
Some agree, some don't	7
Don't know	8

31. (IF ANY CHILDREN 5-19) How about (the children)? Do (they) feel the same way you do about television, or do they like it more, or less, than you do?

Feel the same	50-4
Like more than R	5
Like less than R	6
Some agree, some don't	7
Don't know	8

32. Do you have a television set in your home, besides the phonevision test set?

Yes	51-X*
No	y**

*IF "YES, OWN TELEVISION", ASK LEFT-HAND COLUMN OF THIS PAGE.

**IF "NO, DON'T OWN TELEVISION", ASK RIGHT-HAND COLUMN OF THIS PAGE.

ASK TELEVISION OWNERS ONLY

33. About how long have you had your television set?

Less than one month	52-4
Once a month up to 6 months	5
Six months up to 9 months	6*
Nine months up to 10 months	7*
Ten months up to 11 months	8*
Eleven months up to 1 year	9*
One year up to 18 months	0
18 months up to 2 years	X
Two years and over	y

*A. (IF SIX MONTHS TO ONE YEAR) Did you get your television set before or after you applied to take part in the phonevision test?

Before	53-6
After	7
Don't remember	8

ASK NON-OWNERS ONLY

33. Before the phonevision test, about how often did you see television?

Every day	52-4
Two to 6 times a week	5
Once a week	6
Two to 3 times a month	7
Once a month	8
Less than once a month	9
Never	0

34. Before the phonevision test, about how often did (the other adults, 20 and over, in your household) see television?

Every day	53-6
Two to 6 times a week	7
Once a week	8
Two to 3 times a month	9
Once a month	0
Less than once a month	X
Never	y

ASK TELEVISION OWNERS ONLY

34. During the phonevision test, did your family watch regular television more often, or less often, than you did before the test?

More often	6-6*
Less often	7*
About the same	8
Don't know	9

*A. (IF "MORE OFTEN" OR "LESS OFTEN") On an average weekday during the phonevision test, about how many hours was your television set used for watching regular television....

(1) In the morning-- from 6 A.M. to noon?

_____hours 7-

(2) In the afternoon-- from noon to 6 P.M.?

_____hours 8-

(3) In the evening-- after 6 P.M.?

_____hours 9-

10-

35. On an average weekday before the phonevision test, about how many hours was your television set on....

A. In the morning-- from 6 A.M. to noon?

_____hours 11-

B. In the afternoon-- from noon to 6 P.M.?

_____hours 12-

C. In the evening-- after 6 P.M.?

_____hours 13-

14-

36. Now that the phonevision test is over, does your family watch regular television more often, or less often, than they did before the test?

More often	15-9
Less often	0
Same	X
Don't know	y

ASK NON-OWNERS ONLY

35. (IF ANY CHILDREN 5-19) Before the phonevision test, about how often did (the children) see television?

Every day	6-6
Two to 6 times a week	7
Once a week	8
Two to 3 times a month	9
Once a month	0
Less than once a month	X
Never	y

36. On an average weekday during the phonevision test, about how many hours was your television set used for watching regular television....

A. In the morning-- from 6 A.M. to noon?

_____hours 7-

B. In the afternoon-- from noon to 6 P.M.?

_____hours 8-

C. In the evening-- after 6 P.M.?

_____hours 9-

10-

37. Before the phonevision test, did you and your family want a television set?

Yes	11-1
No	2
Not sure	3

38. How do you feel about it now--would you and your family like to have your own television set or not?

Yes, would like	12-1
No, would not	2
Not sure	3

ASK TELEVISION OWNERS ONLY

37. During the phonevision test, did your family use both television sets in your home, or did you only use one of them?

Both	16-X*
One	y

*IF "BOTH", ASK A AND B.

A. How did you happen to use both of them? (Did you have any other reasons for using both?)

17-

B. Did it ever happen that part of the family saw a phonevision movie on one set, while the rest of the family watched some other program on the other set?

Yes	18-X
No	y

38. If you had had only the phonevision test television set in your home during the test, do you think your family would have bought about the same number of phonevision programs as you did, or do you think you might have bought more programs or fewer programs?

More	19-4*
Fewer	5*
Same	6*
Don't know	7

*A. (IF "MORE", "FEWER", OR "SAME") How certain are you that you would have bought more (fewer) (about as many) phonevision programs?

Very certain	20-4
Pretty certain	5
Not so certain	6
Not certain at all	7
Don't know	8

SKIP TO QUESTION 41.

ASK NON-OWNERS ONLY

39. Have you and your family thought at all about getting a television set?

Yes	13-1*
No	2**

*A. (IF "YES") Have you made up your minds yet whether you will get a television set or not? (What did you decide?)

Will get	14-1***
Will not get	2**
Depends (SPECIFY ON WHAT)	3***
Not sure yet	4**

**B. (IF "NO" TO Q. 39, OR "WILL NOT GET" OR "NOT SURE YET" TO Q. 39 A) Do you think you ever will get a television set?)

Yes, will get	15-9***
No, will not get	0
Depends (SPECIFY ON WHAT)	X***
Don't know	y

***IF "WILL GET" OR "DEPENDS" TO Q. 39 A OR B, ASK C AND D.

C. About how long do you think it will be before you get a television set?

Less than one month	16-4
One month up to 3 months	5
Three months up to 6 months	6
Six months up to 9 months	7
Nine months up to 1 year	8
One year up to 2 years	9
Two years up to 5 years	0
Five years and over	X
Don't know	y

D. Do you have any idea what kind of set you'll get when you do buy?

Yes	17-R#
No	1

#(1) (IF "YES" TO D) What kind of set do you have in mind? (Anything else you've decided about the set you'll get?)

ASK NON-OWNERS ONLY

40. If you hadn't been taking part in the phonevision test, do you think you would have gotten your own television set by now, or not? 18-R

Would have gotten	19-0*
Would not.	X
Don't know	y

*A. (IF "WOULD HAVE GOTTEN") How sure are you that you would have gotten your own television set by now?

Very sure.	20-4
Pretty sure.	5
Not so sure.	6
Not sure at all.	7
Don't know	8

20-R

ASK EVERYONE

41. Do you happen to remember now what you thought about the phonevision test, when you first heard about it? I mean....

A. What were your reasons for applying to take part in the test, as far as you remember? (What other reasons did you have?)

21-

B. When you first applied for the test, what did you expect phonevision would be like? (What else did you expect?)

22-

42. Did phonevision turn out to be as good as your family expected it to be, or didn't you like it as well as you thought you would?

As good as expected.	23-9*
Didn't like as well.	0**
Liked it better than expected.	X*
Don't know	y

*IF "AS GOOD AS EXPECTED" OR "LIKED IT BETTER", ASK B ON NEXT PAGE FIRST THEN ASK A.

**IF "DIDN'T LIKE AS WELL", ASK A AND B ON NEXT PAGE, IN THAT ORDER.

42. (CONTINUED)

A. What was (Was there anything) disappointing about phonevision? (What else was disappointing?)

24-

B. What did you like (Was there anything you liked) about phonevision? (What else did you like?)

25-

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43. Knowing what you do about it now, if your family were just deciding now whether to take part in the phonevision test or not, what do you think you would decide to do?

Would take part.	26-4
Would not.	5*
Not sure	6*

*A. (IF "WOULD NOT" OR "NOT SURE") What would keep you from wanting to take part in the test? (What else?)

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44. Were there any movies shown on phonevision that someone in your family had seen before?

Yes.	79-A*
No	1

*IF "YES", ASK A AND B.

A. About how many of the movies shown on phonevision had someone in your family seen before?

B. If all the movies shown on phonevision had been movies that no one in your family had seen before, do you think your family would have bought about the same number of phonevision programs as you did, or do you think you might have bought more programs, or fewer programs?

More	80-9
Fewer.	0
Same	X
Don't know	y

45. During the phonevision test, did you ever get any feeling that you <u>had</u> to buy phonevision programs, when you didn't particularly want to?

Yes	28-7*
No	8
Not sure	9

*A. (<u>IF "YES"</u>) What gave you that feeling? (What else?)

29-

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46. Do you think your family actually <u>did</u> buy either <u>more</u> or <u>fewer</u> phonevision programs than you really wanted to?

Yes, more	30-6*
Yes, fewer	7*
No	8
Not sure	9

*<u>IF "YES", ASK A AND B.</u>

A. How did that happen? (What else caused you to buy more (fewer) programs than you really wanted to?

31-

B. Did you buy more (fewer) phonevision programs than you really wanted to <u>all through the test,</u> or only at the beginning of test, or what?

All through	32-0
Only at beginning	X
Other (SPECIFY AT SIDE)	y

46X. In general, do you think it is a good idea, or a bad idea, to have some television programs that people have to pay to see, if they want to see them?

Good idea	33-0*
Bad idea	X**
Don't know	y

*<u>IF "GOOD IDEA", ASK A AND B.</u>
**<u>IF "BAD IDEA", ASK A, B, AND C.</u>

A. How strongly do you favor (oppose) the idea of charging people to see some television programs?

Very strongly	34-6
Pretty strongly	7
Not so strongly	8
Not strongly at all	9
Don't know	0

B. What are your reasons for favoring (opposing) the idea of charging people to see some television programs? (What other reasons do you have?)

35-

C. Suppose the television programs that people were charged to see were programs that wouldn't be on television at all, otherwise....In that case, would you favor or oppose having some television programs which people would have to pay to see, if they wanted to see them?

Favor	36-0
Oppose	X
Don't know	y

47. As you know, during the phonevision test, they were showing movies that were a couple of years old, but which had never been seen on television before....If phonevision were available now, and they were showing only movies that were one or two years old, do you think your family would pay to see some of these movies on television (assuming you had a television set that could get the phonevision programs), at a dollar per picture?

Yes, would pay	37-5*
No, would not	6
Not sure	7

*IF "YES", ASK A AND B.

A. If these were the only programs on phonevision, about how many pictures a month do you think your family would take at one dollar per picture? (Just your guess....)

38-

B. How sure do you feel that your family actually would take this many movies?

Very sure	39-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know	y

48. Suppose they were showing only new movies on phonevision....Do you think your family would pay to see some of these movies on television, at a dollar per picture?

Yes, would pay	40-5*
No, would not	6
Not sure	7

*IF "YES", ASK A AND B.

A. If these were the only programs on phonevision, about how many pictures a month do you think your family would take at one dollar per picture? (Just your guess....)

41-

B. How sure do you feel that your family actually would take this many movies?

Very sure	42-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know	y

49. Now, suppose your family had a television set that could get the phonevision programs.... Which do you think you would do:

	See PV Movie	Other Choice	Neither	D.K.
A. IF there were two movies you wanted to see being shown--one on phonevision and the other at a regular movie theater? (Would you stay home and see the phonevision movie or go to the movie theater?)	43-6	7	8	9
B. IF a movie you wanted to see was being shown on phonevision at the same time as your favorite radio program? (Would you see the phonevision movie or listen to the radio program?)	44-6	7	8	9
C. IF a movie you wanted to see was being shown on phonevision at the same time as your favorite regular television program? (Would you see the phonevision movie or watch the regular television program?)	45-6	7	8	9
D. IF the movie being shown on phonevision sounded all right to you, and there was nothing on regular television that you particularly wanted to see? (Would you see the phonevision movie or watch regular television?)	46-6	7	8	9

50. If phonevision were available now, and they were showing only sports events that weren't on television anywhere else, do you think your family would pay to see some of these sports events on television, at a dollar per program?

Yes, would pay	47-5*
No, would not	6
Not sure	7

*IF "YES", ASK A, B, AND C.

A. Which sports events would your family be interested in seeing on phonevision? (Any others?)

48-

B. If these were the only programs on phonevision, about how many of these sports programs a month do you think your family would take, at one dollar per program? (Just your guess....)

49-

C. How sure do you feel that your family actually would take this many sports programs?

Very sure	50-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know	y

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51. Are there any other kinds of programs (besides movies and sports events) that your family would be interested in seeing on phonevision--that is, programs that you would be willing to pay to see?

Yes	51-5*
No	6
Don't know	7

*IF "YES", ASK A, B, AND C.

A. What other kinds of programs would your family like to have on phonevision? (Any others?)

52-

B. If these were the only programs on phonevision, about how many of these programs a month do you think your family would take, at one dollar per program? (Just your guess....)

53-

C. How sure do you feel that your family actually would take this many of these programs?

Very sure	54-8
Pretty sure	9
Not so sure	0
Not sure at all	X
Don't know	y

52. All in all, if phonevision were on the market today (and you had a television set), do you think you would have your television set connected up with it, so you could sometimes see some of these programs at a dollar per program, or wouldn't you want your set connected up with phonevision?

Would want	55-5*
Would not want	6
Not sure	7

*A. (IF "WOULD WANT") Suppose all the different kinds of programs that you are interested in having were on phonevision....About how many programs of all kinds a month do you think your family would take, at one dollar per program? (Just your guess....)

56-

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53. Do you think a dollar per program is about the right charge for a family to pay for a phonevision program, or should the charge be more, or less?

About right	57-8
Should be more	9*
Should be less	0*
Depends on the program	X*
Don't know	y

*A. (IF "SHOULD BE MORE", "SHOULD BE LESS", OR "DEPENDS ON THE PROGRAM") About what should the charge per program be?

58-

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54. (IF NO TELEVISION SET AND SOME INTEREST IN PHONEVISION) If phonevision were available, do you think that you would be any more interested in getting a television set than you are now?

Yes, more interested	59-0*
No, no difference	X
Don't know	y

*A. (IF "YES, MORE INTERESTED") If phonevision were available right now, about how long do you think it would be before you got a television set?

Less than one month	60-4
One month up to 3 months	5
Three months up to 6 months	6
Six months up to 9 months	7
Nine months up to 1 year	8
One year up to 2 years	9
Two years up to 5 years	0
Five years and over	X
Don't know	y

FACTUAL DATA

1. What kind of work does (the head of the family) do?

   Job: _____

   Industry: _____ 61-

2. How far did (the head of the family) go in school?

Some grammar school, but didn't finish	62-4
Graduated from grammar school	5
Some high school, but less than four years	6
Completed four years of high school	7
Some college, but less than four years	8
Graduated from four-year college	9
Post-graduate work in university	0

3. A. In what country was (the head of the family) born?

   63-64-

   B. In what country was the father of (the head of the family) born?

   65-66-

4. About how long have you been living at this address?

Under three months	67-4
Three months up to 6 months	5
Six months up to 9 months	6
Nine months up to 1 year	7
One year up to 5 years	8
Five years up to 10 years	9
Ten years and over	0

5. Does your family own or rent your home?

Own	68-X
Rent	y

6. How many rooms do you have here?

One	69-8*
Two	9
Three	0
Four	X
Five and over	y

   *A. (IF "ONE ROOM") Do you have your own cooking facilities?

Yes	70-X
No	y

7. Would you tell me in which one of these general groups your total yearly family income falls--before taxes? (HAND RESPONDENT CARD) (We need this information just to make sure that we are getting a good sample.)

A. Under $2,500 a year	71-7
B. $2,500 to $4,999	8
C. $5,000 to $7,499	9
D. $7,500 to $10,000	0
E. $10,000 and over	X
Refused	y

8. What type of telephone service do you have?

One-party line	72-6
Two-party line	7
Three-party line	8
Four or more party line	9
Hotel switchboard	0
Other (SPECIFY BELOW)	X
Don't know	y

9. TYPE OF DWELLING UNIT

Single-family house	73-8
Two-family house	9
Apt. in bldg. with 3 or more apts	0
Hotel	X
Other (SPECIFY BELOW)	y

10. RACE OF HOUSEHOLD

White	74-0
Negro	X
Other non-white	y

11. TIME OF INTERVIEW

Before 12 noon	75-0
Noon to 6 P.M	X
After 6 P.M	y

12. DATE OF INTERVIEW

    76-

13. SIGNATURE OF INTERVIEWER

    77-78-

D. Instructions for the Survey

NATIONAL OPINION RESEARCH CENTER
4901 South Ellis Avenue
Chicago 15, Illinois

March, 1951

SPECIFICATIONS FOR SURVEY 299 AND 299A

ABOUT THIS SURVEY

This survey is being conducted in connection with the Zenith Phonevision test in order to determine city-wide interest in Phonevision and the likelihood that people would subscribe to Phonevision if it were offered commercially. The approach used is to ascertain people's recreational and leisure-time interests, their interest in movies and television, and their information about and reactions to Phonevision. All of this information, when combined and compared with similar information about the families taking part in the test, will be used as a basis for projecting the expenditures for Phonevision actually made by the test families to the city as a whole.

THE SAMPLES USED

Five separate samples are included in the survey. These may be identified by the color of the "Face Sheet" preceding the questionnaire:

Yellow: Area sample of the city, excluding Lakeview-Lincoln, the area in which the Phonevision test is being conducted.

Pink: Area sample of the Lakeview-Lincoln district.

White: A small list sample of families in Lakeview-Lincoln who originally applied to take part in the test, but did not complete their applications.

Green: A small list sample of families in Lakeview-Lincoln who applied to take part in the test, but were not chosen for the test.

Blue: The three hundred Phonevision test families.

The same questionnaire (Survey 299) is used with the first four samples; a special questionnaire (Survey 299A) has been prepared for the test families.

PROCEDURE FOR ARRANGING AN INTERVIEW

Follow these instructions carefully:

1. GO TO THE SPECIFIED DWELLING UNIT. Each of your interview forms is preceded by a "Face Sheet", which gives an address and a description of a dwelling unit at that address. (On white, green and blue Face Sheets, the name of the family also appears.) In occasional instances, where there was no numerical street address, a description of the location of the dwelling unit has been provided.

   If you are not familiar with this general location, look up the address on the large office map. Once you know the location of the dwelling units assigned to you visit each one. Be sure to call at the exact dwelling units prescribed on your Face Sheets. Where you are given a description rather than a numerical address, be absolutely sure that you have the correct apartment or house.

   With yellow and pink Face Sheets, the prescribed dwelling unit is the one which belongs in the sample, in all cases, and you are NEVER permitted to make any substitution for a prescribed dwelling unit.

With white, green and blue Face Sheets, the family named is the one which belongs in the sample. If they no longer live at the address shown on the Face Sheet, they should be followed to their new address. With these three samples, NEVER interview anyone but the family named on the Face Sheet.

IN CASE OF ANY DIFFICULTIES IN IDENTIFYING PARTICULAR DWELLING UNITS, OR TRACING FAMILIES TO THEIR NEW ADDRESSES, CONSULT YOUR SUPERVISOR.

2. INTRODUCE YOURSELF AS BRIEFLY AS POSSIBLE TO ANYONE WHO COMES TO THE DOOR. As an opening, you might say: "Good Evening, I'm working on an opinion survey. Would you kindly tell me how many adults, 20 years of age or over, live in this household?"

Most informants will be satisfied with this explanation, but, if an occasional person should wonder why you want this information, you can explain that it is needed in order to do an accurate survey of public opinion. You might say: "For this survey, 3000 homes have been scientifically selected to represent all the people in Chicago. From the people living in these homes, we pick certain ones, just by chance. So, in your home, from all the people 20 and over, I'll pick one, and he or she will have a chance to express his opinions on some questions."

If no one is home at the time of your first call, you will have to call back at the dwelling unit at another time to get this basic enumeration of the household. Ask a neighbor when this family is likely to be at home, in order to determine the best time to make your next call.

3. ENUMERATE THE ENTIRE HOUSEHOLD. Questions I and II on the Face Sheet are the first things you ask. You need this information in order to determine whom to interview, and we need the information in order to know the type and size of family, etc.

Make clear to your informants that all adults living in the dwelling unit are to be included. You will, therefore, include maids and other employees who sleep in, and you will also include roomers. But exclude guests who maintain homes elsewhere. Do not count as a family member anyone who is away at school, in the Army, hospitalized, or on a trip for a month or more. Be sure not to overlook the person you are talking to.

After you have determined how many adults live there, you must ask the age, sex and relation to the head of the family of each one. List the adults and the required information about them in the table provided under Question I. You can list them in the order mentioned, or in any order you want. Space has been provided to list six adults in the household. You will rarely find households with more adult members than this, but, if you do, note "MORE" at the bottom of the table, and list the remaining adults on the back of the face sheet.

Then list the sub-adults--those under 20--in the same way in the second table. Be sure your informant remembers that infants should be counted too. Then, ask the age, sex and relation to the head of the family for each one, and list the sub-adults and the required information about them in the table under Question II. Again, should there be more than six sub-adults, write "MORE" at the bottom of the table, and list the remaining sub-adults on the back of the Face Sheet.

Make a real effort to remember the family composition you learn from this listing. You will find that many questions in the questionnaire will be easier to ask if you can remember how many adults and children there are in the household, and how they are related to your respondent.

4. SELECT THE PERSON TO BE INTERVIEWED--YOUR RESPONDENT.

The rule for determining who should be interviewed is relatively simple and easy to follow. Look at the case number in the upper left-hand corner of the Face Sheet:

For all interviews with even case numbers (case numbers ending in 0, 2, 4, 6 and 8), you interview the MALE head of the household.

For all interviews with odd case numbers (case numbers ending 1, 3, 5, 7 and 9), you interview the FEMALE head of the household.

EXCEPTION: If there is only one head of the household, interview that person, regardless of sex.

The majority of households consist of one married couple--a man and his wife--and their unmarried children. In a simple situation like this, you have no problem determining whom to interview: the man is, naturally, the male head of the household and his wife is the female head.

Here are some rules to guide you in the more complex situations:

If no married couple lives in the household, you may find:

a) One adult, with his or her servants and/or roomers, or one adult, living alone. This adult is always the head of his or her household; servants and/or roomers living with other people are never household heads. So you interview this adult, regardless of sex.

b) Two or more unrelated adult equals of the same sex, i.e. several men or several women living together. The group may regard some one of their number as the head of the household (You can ask, "Whom do you regard as the head of the household?"), in which case you would interview that person. If no one of them is regarded as the head of the household, interview the oldest of them.

c) Two or more related adults living together--for instance, a widow and her adult child or children; or a brother and sister; or an aunt and a niece; etc. If adults of both sexes live in the household, and there is only one of each sex, then you have no problem: the man is automatically the male head of the household; and the woman, the female head. If there is more than one person of the same sex in the household, then you will have to determine which one of them is regarded as the head by the others. (Remember that this may be regarded as the equivalent of determining whose home it is. That is to say, if it is the aunt's home, and her niece merely lives with her, then the aunt is the head of the household.) If there is no way of deciding which person to regard as the household head of the given sex, then interview the oldest of the persons of that sex.

If more than one married couple lives in the household, you may find:

a) Two or more married couples related in parent-child fashion. Here, it is a question of determining "who is living with who". If it is the parent's home and their married child and spouse live with them, the parental couple should be regarded as the male and female head of the house. If a married couple have their married parents living in their (the couple's) home, then it is the younger couple who are the heads of the house.

b) Other combinations of married couples--for instance, two brothers and their wives living together; two friends and their wives living together; or a

married couple with married servants and/or roomers; etc. Again it is a matter of determining whose home it is, or who is generally regarded as the head of the household by the others. If this can be determined, you interview the person of the sex prescribed by the case number from the couple regarded as household heads. If neither couple is regarded as the household heads, select the oldest couple as the household heads and interview the person of proper sex from this couple.

PLACE A CHECK IN THE LAST COLUMN ON TABLE I OPPOSITE THE LISTING OF THE PERSON YOU SELECT AS YOUR DESIGNATED RESPONDENT.

5. ARRANGE AN INTERVIEW WITH YOUR DESIGNATED RESPONDENT. After you have determined whom you are to interview in the household (your designated respondent), it is your job to locate that person and conduct an interview with him or her.

a) If the person in the dwelling unit who furnished you with the enumeration is your designated respondent, there is no problem. Merely start right in with the interview. In a few cases, you may have to arrange an appointment for a later time.

b) If the person who gave you the enumeration is not the designated respondent, ask the person you are speaking to whether the designated respondent is at home.

(1) If the designated respondent is at home, you can interview him immediately or, if necessary, arrange an appointment for a later time.

(2) If the designated respondent is not at home, find out from the person you are speaking to when he is most likely to be found at home; if at all possible, arrange a definite appointment through the person you are talking to for a time that will be convenient for both you and the intended respondent.

If the person you are talking to wants to know why you can't interview him, you can explain that only certain people are to be interviewed and in this particular household you must interview an older woman or the youngest man, filling in the proper words to describe the person you need.

6. MAKE CALL-BACKS IN ORDER TO FIND THE DESIGNATED RESPONDENT. If you do not complete an interview with a designated respondent on the first visit, you must return for a second visit. If you do not complete the interview on the second visit, you must return for a third visit. Unless you get an interview earlier or get very flatly refused, three genuine visits to every selected dwelling unit must be made. There must be no exceptions.

A genuine visit is one that meets all of the following conditions:

a) No more than one visit can be made per day unless one is made during evening hours (after 6 P.M.) and one made before. The only exception to this is in the case where the second visit is made on the same day in daytime hours by specific appointment. (There is a space on the face sheet for noting the best hours to call.) Of course, if you are on the block and passing by the dwelling unit, you should try again, but do not count this as a call, unless you actually obtain the interview then.

b) Except in cases where calls are made at appointed times, two out of the three calls must be made at hours when people are generally more likely to be found at home -- that is, (1) after 6 P.M. on week days, (2) Saturday afternoons and evenings, or (3) Sunday all day.

c) If your first genuine visit to a dwelling unit does not result in an enumeration, this still counts as a first call. The second call to obtain an enumeration must follow the rules above.

SINCE YOU KNOW BEFOREHAND THAT YOUR EVEN-NUMBERED INTERVIEWS ARE GOING TO BE WITH MEN, IT IS WISE TO MAKE FIRST CALLS ON THESE CASES AT TIMES WHEN MEN ARE USUALLY HOME--EVENINGS AND WEEKENDS--RATHER THAN WASTING A DAY CALL.

7. BE PERSISTENT: Do not give up a single interview without a genuine effort to find and interview each intended respondent. If a person is reluctant to be interviewed, remember that he cannot be substituted for, and each such person lost makes the sample less representative. Therefore, use every bit of ingenuity you possess to get the interview.

For instance:

If he gives you an alibi, try to overcome it.

If he is suspicious, explain that no names are taken.

If he is busy, sick or tired, be willing to return at his convenience.

If he is lazy, tell him "it really won't take very long".

Don't permit one person in a family to refuse for another one. Go back to the right person.

Persistence will enable you to get interviews with those who are difficult to find at home. Remember that checking with the neighbors about the hours they keep can save you waste calls.

Most people are cooperative, and the proportion who will refuse to be interviewed will be very low if you persist.

8. ENTER THE RESULTS OF YOUR VISITS ON THE FACE SHEET. There is a chart on the bottom of the Face Sheet with space to report on six calls. For each genuine call you make, you are to make five entries:

a) The date of the call

b) The hour of the call, including whether A.M. or P.M.

c) Your name

d) The result of that call, using the following notation:

Int.....Interview obtained with designated respondent.

DR.....Designated respondent refused to be interviewed.

SR.....Someone other than designated respondent refused access to designated respondent or refused enumeration of household.

DNAH.....Designated respondent not at home.

NAH.....No one at all is at home.

V.....No one living in this dwelling unit. (Vacant unit.)

No DU.....No dwelling unit corresponding to Face Sheet description can be located.

If you have any "result" other than these, write it out.

e) Except where an interview was obtained, use the "Remarks" space to give all the information that will be helpful to you or someone else in making later calls. This will include appointment times, family and neighbors' reports of what times the person can usually be found at home, what people said and how they acted when they refused; etc. Report this as fully as you can, because the interviews will have to be reassigned in some cases to interviewers who did not make the earlier calls, and they will need all the information you can give them.

9. YOU MAY DISCOVER ERRORS IN THE ORIGINAL LISTING. The person who did the original listing of dwelling units may have occasionally made an error in listing. Where you can find no such address and apartment, notify your supervisor.

The lister may also have listed a certain place as one dwelling unit and when you actually knock on the door, you may find that in actuality there are two or more separate dwelling units at that particular address. This may happen, for example, if the lister failed to see that a one-family house or apartment had been subdivided. You may learn upon ringing that particular bell that there is another apartment in the back, upstairs, in the basement or in the backyard.

In such cases, your sample dwelling unit should be the UNIT WHICH WOULD HAVE BEEN LISTED FIRST if all the units had been listed. This means the unit on the lowest floor, and, if there are several of these, the unit on the right as you face the building, and, if there are several of these, the frontmost unit. Proceed with this unit exactly as you do with any other unit in the sample.

NOTIFY YOUR SUPERVISOR OF THE ADDITIONAL UNITS YOU DISCOVERED, so that these may be added to the lists for completeness and sampled in the correct proportion.

ONE SPECIAL POINT

Sometime during your contacts with the dwelling units assigned to you, determine the name of the household and enter it on your Face Sheet. (This, of course, applies only to the general samples--the pink and the yellow Face Sheets--where no names have been given you.)

In entering this name on the Face Sheet, please print, and make absolutely sure that you spell the last name correctly, and that you give first name and middle initials (of male head of household). These names will be checked against various existing files of people who applied to take part in the Phonevision test, or who wrote in or otherwise inquired about Phonevision. These files are very large and are in alphabetical order. If you make any mistakes on the name, we will never be able to locate it in the files.

Frequently, you can just get this name off of the mail-box at your very first call, without asking anyone in the household any questions about it. If this is impossible, you will have to ask your respondent for it. If you think there may be any suspicion about your asking for names, wait until after you have completed the interview; otherwise try to get it on first call.

If people want to know why you have to get names, be sure to assure them that everything they say is kept strictly confidential. You can say that sometimes people are called on again by your supervisor to make sure that the interviewer did a good job, and the names are needed in order to locate them. Don't tell them that we wish to check the files, because this may sound too much like checking-up on them, and because it may bias their answers to the questionnaire, as is explained below.

YOUR APPROACH TO THE INTERVIEW

As always, the less explanation you give respondents about the nature and the purpose of the interview the better. Don't assume that the respondent needs to be sold on the interview. Just explain that you are making a public opinion survey and ask the first question.

Of course, if the respondent asks any questions about the survey, you will answer them. Try not to refer to the subject of the survey unless you are specifically asked about it. But, if you are asked, just say that it is a survey of "recreation and what people do in their leisure time". NEVER REFER TO THE FACT THAT THE SURVEY HAS SOMETHING TO DO WITH PHONEVISION. In a large number of cases, people would answer many of the questions which are asked before the subject of Phonevision is introduced very differently, if they knew that we were interested in Phonevision. We do not want to bias their responses to these earlier questions in this way, so we ask you to avoid introducing bias by avoiding any mention of Phonevision.

If you are asked anything about who is sponsoring the survey, you can refer to the National Opinion Research Center. The Center is a non-commercial, non-profit research organization that does surveys on all sorts of subjects all the time. (We are affiliated with the University of Chicago, but it is usually not a good idea to mention this when interviewing in Chicago, since many Chicagoans do not like the University.)

THE INTERVIEW

Please follow general NORC procedures in asking questions and recording answers. That is:

IN ASKING QUESTIONS:

1. Read each question exactly as worded on the questionnaire: Do not trust to your memory. It is important that all respondents be asked the questions in identical form. Experience has shown that even small, seemingly minor alterations in wording can change the meaning of the question in the mind of the respondent.

2. Read the questions naturally: Be thoroughly familiar with the questionnaire so that you can read each question without hesitation or stumbling. If you hesitate or emphasize one word more than another you can change the meaning of a question. Occasionally certain words are italicized or underscored. These words are those on which you should place more stress when reading the question. Watch for italics or underscoring in order to obtain a consistency in emphasis.

3. Don't attempt to explain. If the respondent does not seem to understand a question, repeat the question slowly and clearly. Give the respondent time to consider the meaning of the question. Do not elaborate on the wording or suggest an answer. The best answer to a query on what the question means is, "What does it mean to you?", followed by "How would you answer that?". NEVER EXPLAIN THE MEANING OF A QUESTION UNLESS THE INSTRUCTIONS ON SPECIFIC QUESTIONS PERMIT YOU TO DO SO.

4. Never read the answers to the question printed in the questionnaire: These answers are printed in the questionnaire solely to help you to classify the respondent's answer. Do not bias his answer by suggesting any of these answers to him.

5. Ask every question: Never omit a question because you think it does not apply or because you think it has already been answered. If the respondent claims that he has already answered the question agree with him by saying, "Well, we more or less covered this before, but I'd like to get your answer down here" (or "in your own words"). Occasionally, the Instructions on Specific Questions will indicate an exception to this rule.

6. Ask all questions in the order presented: Never change the sequence of a question. The response to a question asked out of sequence may influence or bias answers which appear later in the questionnaire.

7. Watch for dependent questions: Dependent questions are the type of questions which follow specified answers to the previous question. For example, if the respondent says "yes" to the preceding question, you may be instructed to follow this response by asking "Why?" If the respondent answers "No", no further questioning is required. DO NOT OMIT THE APPROPRIATE FOLLOW-UP QUESTION. DO NOT ASK THE WRONG FOLLOW-UP QUESTION OR ASK ONE WHEN IT IS NOT REQUIRED?

8. Use of Card Questions: On this survey "card questions" are used. This type of question requires the interviewer to hand a card to the respondent before reading the question. The card lists several possible answers from which the respondent is asked to choose the one that corresponds most closely to his own opinions. Card questions should be handled as follows:

   a) After you hand the card to the respondent, ask the question slowly and distinctly. Be sure that the respondent understands what you are asking him to do. If he selects more than one category, remind him that you want him to select the one which comes closest to what he thinks.

   b) Give the respondent all the time he needs to read the card. Don't hurry him. Watch to be sure that he reads all of the alternatives. If you suspect that the respondent does not know how to read, don't hesitate to help him by reading all the choices slowly.

IN OBTAINING RESPONSES:

1. Be thoroughly familiar with the Instructions on Specific Questions: Be sure that you are thoroughly familiar with the purpose of each question. If you are not familiar with them, you will not be in a position to determine whether a reply is adequate or not.

2. Get a specific response to each question: Be sure to get a specific response to each question. If the questions ask whether the respondent "agrees" or disagrees" with a statement, do not accept "yes" or "I guess that's right" as adequate answers. You should never assume that the "yes" or "no" refers to agreement or disagreement. Here is an example from an actual interview. Q: "Do you approve or disapprove of the new long skirts women are wearing?" Respondent: "Well, yes, I pay some attention to changes in fashion; of course, a lot of it is awful silly and just done to sell new clothes." This is a vague, and rambling answer, and you cannot conclude that the respondent's first "yes" meant anything more than that he was familiar with the general subject. But you still do not know whether he approves or disapproves. So, you will have to bring him back to the subject by saying, "Well, then, do you approve or disapprove....?" This example also illustrates how a very long statement from the respondent may be no answer at all as far as the purpose of the question is concerned. Do not let talkativeness on the part of your respondent lead you to assume that you are automatically getting a good interview.

3. Get a complete response: Never accept an incomplete or irrelevant response. Do not accept a "don't know" or "can't decide" unless you are convinced that the respondent cannot answer the question. If the respondent does not want to commit himself, you can reassure him again that his views are as important as anyone elses, that there are no right or wrong answers, that what he says is confidential or that no names are taken....depending on the source of his hesitancy.

4. Probing for complete or specific responses: Whenever a respondent has no ready reply, give him a chance to think about one. Encourage him to respond by asking, "Well, what do you think?"--or by a reassuring glance. If, however, a response is

inadequate or incomplete, the interviewer must help the respondent to elaborate on his response by one or more of the following techniques:

a) If the respondent does not seem to understand the question, repeat the question slowly.

b) If the respondent gives a vague or ambiguous response--one in which the meaning is unclear--use the probe questions suggested in the Specifications. If no probe questions are suggested, ask one of the following types of questions: "Could you explain that more fully?", "Could you give me an example?", "What do you mean by....?", and so forth. Whenever you devise your own probe questions remember that you must never word the question in such a way that it will suggest a response.

c) If the respondent merely needs to be encouraged to talk further, silence or an appropriate gesture may be all that is necessary.

IN RECORDING RESPONSES:

NORC surveys include two types of questions--check-list questions and open-end questions. The majority of the questions will be check-list questions which are so worded that respondents will answer in terms of specific types of responses--a "yes" or "no", "easier" or "harder", and so forth. The open-end questions are worded so that the respondent is allowed to give a completely spontaneous response. Responses to these questions should be recorded as follows:

1. Check-list questions: The responses to each of these questions will appear directly beneath the question. Indicate the answer given by the respondent by circling the code number which appears to the right of the appropriate response. DO NOT CIRCLE MORE THAN ONE CODE, UNLESS THE SPECIFICATIONS TELL YOU THAT MORE THAN ONE ANSWER IS PERMITTED. DO NOT USE X'S OR CHECK MARKS. Special problems should be handled as follows:

   a) If, after probing, you still find it impossible to classify a response, record the answer verbatim underneath the question.

   b) If a respondent answers a question, and later decides that he has changed his mind, do not change the original answer. We want the first answer given. To reassure the respondent write down his comments about the change, but do not change the code that you originally circled.

2. Open-end questions: All answers to open-end questions should be recorded verbatim--in the respondent's own words. Do not summarize, paraphrase or edit the answers. Whenever you use probes, these must be recorded too. If you use the exact probe suggested in the Specifications, just place an X at the point in the respondent's remarks at which you asked the probe. All other probes must be written out verbatim, enclosed in parentheses to mark your words off from what the respondent says.

   You'll find the job of recording verbatim answers easier if you use standard abbreviations. For instance:

   Omit articles
   DK is don't know
   Th is think
   Just use the "g" from the "ing"--sayg is saying, hopg is hoping, etc.
   Thg for thing
   c is can; cd is could
   w is will; wd is would
   sh is shall; shd is should
   r for are
   u for you

INSTRUCTIONS ON SPECIFIC QUESTIONS
(Survey 299)

Question 1: This is a simple opening question, designed to get the interview going in an interesting fashion, and beginning the series of questions (1-8) on general recreational interests. Some respondents may wish to say that it "depends"--upon the weather or the time of the year, etc. In such cases, say, "In general", and repeat the question. If a respondent simply cannot generalize about his favorite activity, take the one he likes best "at this time of year". Remember that you are to record only the one most favorite activity, so if a respondent mentions several things, ask "Which one of those do you like best?"

You may have some trouble classifying specific responses, but here are some typical ones:

Studying; reading newspapers, magazines and books of all kinds are all included under "Reading".

All kinds of inactive games--checkers, chess, monopoly, backgammon, etc.--are included under "Playing cards, games".

"Visiting with friends" includes either going to their homes or having them to one's own home.

Hunting, fishing, bowling, and all kinds of active games and athletics are included under "Taking part in sports".

All kinds of activities about the house, done to make the home more livable or the family more comfortable, are included under "Homemaking activities". For instance, cooking, baking, sewing, mending, embroidering, puttering around fixing faucets and light connections, etc.

"Other" includes everything which cannot be classified elsewhere; for example, going to political meetings, lectures, listening to music, playing a musical instrument; etc. Be sure to circle the code for "Other" and to state clearly what the "Other" is.

Watch out for vague answers, and probe to get them clarified. For instance the answer, "I just like to stay home", does not tell us what the favorite activity is. You might go on to ask, "And what do you like to do best when you stay home?"

Question 2: This question permits the respondent to add other preferred activities to his favorite one. Circle as many answers as apply to the respondent, and remember to probe for all the activities he enjoys. As always, the parenthetical probe is there to remind you to probe for completeness of answer, but you should never ask it in the short-hand form in which it is suggested here. In this case you might ask instead, "What other things do you enjoy doing?" or "Are there any other things you enjoy doing?"

All of the points made under Q. 1 also apply here. Also, if there is any doubt in the respondent's mind, this question refers both to daytime and evening activities, instead of merely to evening activities.

Question 3: Here we are interested in the amount of agreement about leisure-time activities among the adult members of the family. This is the first of the questions where you will need to be familiar with the composition of the family given on the Face Sheet. In asking the question, substitute for the parenthetical "the other adults, 20 and over, in your household", the simplest phrase which accurately describes

the rest of the adults. For instance, if there is only a man and his wife in the household, and you are interviewing the woman, you would simply ask: "How about your husband?...." Obviously, if there are no other adults in the household, you skip this question.

If some of the adults in the household like to do the same things as R, while others like to do different things, circle the code for "Other things". Notice that, if you code "Other things", sub-question A should be asked.

Sub-question A is a parallel of Q.'s 1 and 2, and the same points made about these questions apply here. You should circle here all the things which any of the other adults in the family enjoy doing that R doesn't particularly care for. That is, if R says that one adult likes one thing better than he does, and another adult likes another thing better, you would circle both things in the answer. Remember to probe for all the preferred activities of the adults who like other things than R.

Question 4: Here we are interested in the amount of agreement on leisure-time activities between adults and children in the family. If all the children are under five years of age, we assume that their activities are simply those typical of their age group, and you skip the question. Otherwise, the question is asked, and again you have to remember the family composition to ask it in the simplest fashion. If there is only one child under 20, you might say, "How about your son?..." or "How about your daughter?...". Otherwise, just ask, "How about your children?..." or "How about the children...?" Answers should refer to the children five and over only.

This question is handled just like Q. 3. That is, if one child likes the same things as the adult, but another does not, you circle the code for "Other things".

If "Other things" is circled, you ask sub-question A. Sub-question A is handled exactly like Q. 3 A.

Question 5: This is a simple preference question, getting at whether people would rather stay home or go out. Some respondents may wish to qualify their answers, and say it "depends"--on the occasion, or the weather, or whatnot. Try to get people to generalize, however, just, "In general...". If you cannot get a complete generalization, you can, as in Q. 1, take the R's preference "At this time of the year". If the respondent cannot generalize even this much, after you have probed, circle the "Don't know" code.

Question 6: Here we compare the R's attitudes toward staying home with those of the other adults in his family. Again, as explained in Q. 3, substitute the simplest phrase describing the other adults for the parenthetical phrase which appears in the questionnaire. As in Q. 5, try to get a generalization from the respondent. If the respondent cannot generalize because some adults would rather stay home, while others would rather go out, a special code has been provided.

Question 7: A factual question on amount of movie attendance. Unlike some of the earlier questions, for purposes of estimating movie attendance, the respondent is included with the other adults in his family in this question. Be sure the respondent is clear that he is included by stressing the phrase "including yourself". If different adults in the family go to the movies with different frequencies, try to strike an average. For instance, if there are two adults in the family, and one goes once a week, while the other goes once a month, take the code half-way between as the answer: "Two or three times a month". The code "Less than once a month" should include all people who attend the movies even less frequently--for instance, once a year--as long as they sometimes go.

Question 8: A parallel question on children's movie attendance. If all the children in the family are under five, we assume that they seldom go to the movies, and you omit the question. Otherwise, you ask the question, with reference to the movie attendance of the children five and over only. In case different children in the family have different rates of movie attendance, handle it just as in Q. 7.

Question 9: A rather straight-forward question, introducing the series of questions (9-26) on television by asking the respondent for his general preference as between movies and television. Try to get the respondent to generalize, if he wishes to qualify his answer, by saying, "Well, in general...." If the R can't answer, because he feels that it depends on which TV program versus which movie, you can say, "Assuming they are both good, which would you rather do....?" If he still cannot generalize, after this probing, circle the code for "Don't know".

Question 10: A repeat of Q. 9 for the other adults in the family. By now, you should be familiar with substituting a more specific description of the family for the parenthetical phrase in the questionnaire, so this point will not be repeated hereafter. The problems which may arise here are the same as those under Q. 9. In addition, an extra code is given here to handle the cases where the other adults in the family have different tastes among themselves.

Question 11: A repeat of Q. 9 for the children in the family. By now, you are familiar with asking this type of question only in families with children five and over, asking it only with respect to the children in this age group, and substituting a more specific description for the parenthetical phase in the questionnaire. Otherwise, proceed as with Q. 10.

Question 12: A straightforward question. Those who like or dislike television are asked Sub-question A, to get the strength of their feelings about television. In asking A, use the appropriate word--like or dislike--depending on the answer to Q. 12.

Question 13: An open question on reasons for liking television. With those who said they dislike television, it is a good idea to ask Q. 14 first, and then come back and ask Q. 13. This is an extremely important question, so be sure to probe enough to get complete, detailed and clear answers. It is generally wise, after the R has mentioned something he likes about television, to probe about that answer to make sure it is fully explained. Then, after this answer is complete, ask, "Now, what else is there about television that you like?", probe this answer, and start again, till the respondent runs out. The parenthetical, short-hand probe is there just to remind you to get complete answers. Here are a couple of examples of vague, incomplete answers:

"It's a source of convenient entertainment."--Here the answer should be probed for why the respondent thinks this: "How do you mean?" or "What makes it convenient?" or "Why is it more convenient than something else?" After this probing, an attempt should be made to get other reasons: "What else is there....?"

"It gets tiresome."--Again, an incomplete answer, since we have no way of knowing what about television gets tiresome, or why the respondent finds it so, and since no attempt has been made to get other reasons.

Some respondents will answer this question with a discussion of their specific program preferences. The question is intended to get at more general factors in the liking for television, but if a respondent answers this way, you should, of course, record this answer. In such a case, however, when you ask for other reasons, say something like, "Now, aside from particular programs, is there anything more general about television that you like?"

Question 14: An open question on reasons for disliking television. Proceed exactly as with Q. 13, remembering that this question should be asked before Q. 13, if the R has said that he dislikes television.

Question 15: An open question on the changes people would like to see made in television. The general points made under Q. 13 with reference to probing responses on open questions apply here, as well. Probe until you have complete, detailed and clear answers. For instance, don't settle for ambiguities like:

"Better type programs"--Find out what kind of programs these would be.

"A high level of entertainment"--Find out what level the R considers higher.

And always probe for exhaustive answers with, "And what other changes should be made?"

Again, as in Q. 13, if the respondent answers here with changes in specific TV programming, make your next probe refer the R to more general ways of looking at the subject: "Now, aside from changes in the kind of programs, are there any more general changes in television you would like to see?"

Question 16: This is a question on TV program preferences. If the R has already referred to programming in any of his answers to Q.'s 13-15, you can get around the repetitiousness of this question by using the parenthetical "other", to indicate to the R that you know he has already talked some about programs. That is you would say, "What are some of the other kinds of television programs you especially like?"

In getting answers to this question, remember that we are more interested in types of programs than in specific programs. The question is not whether the R likes some particular comedian or another, but whether, in general, he likes comedy-type TV shows.

Remember here, as elsewhere, to probe for completeness: "What other types of programs do you like?"

Question 17: This is a question of TV program dislikes, paralleling Q. 16. Handle it just like Q. 16.

Question 18: This is a question on demand for various kinds of TV programming. Handle it just like Q. 16.

Question 19: The usual type question on whether the R's opinion on television are shared by the other adults in his household.

Question 20: The usual type question on whether the R's opinion on television are shared by the children five and over in his household.

Question 21: A factual question on television ownership. By this time, you will probably already know the answer to the question, and, if you do, circle the proper answer, without asking the question.

Notice that the question determines the next set of questions that you ask. Television owners are asked the left-hand side of the next page and a half (down to the double line), while families without television are asked the right-hand side.

TELEVISION OWNERS ONLY

Question 22: A straightforward question on length of television ownership. The question refers to the total length of time a family has had a television set. If the R has recently gotten a new set to replace an older one, the correct answer to this question is the length of time he has had the new set plus the length of time he had the older ones.

Question 23: A straightforward factual question on the amount of time the television set is in use on an average weekday. Be sure to ask all three parts and to write in an answer in each place. If the answer is "None" or "Don't know", be sure to write that in. In interviewing men, you may find that they frequently do not know about the use of the set in the daytime hours. Since this is a factual question, it is perfectly all right to get this answer from the woman, if she is around.

NON-OWNERS ONLY

Question 22: A question on desire for television sets among families that do not have them. This question should be interpreted as pure "wish". If a respondent says, "That's out-of-the question, we can't afford it", etc., repeat the question, saying, "If you could have one, would you and your family like to have....?" If there is a conflict in the family, with some of the members wanting it, and some of the members not wanting it, circle the code for "Don't know".

Question 23: This is a straightforward question on whether the R and his family have given any consideration--"thought at all about"--to getting a television set, regardless of whether they have decided as yet on what they will do, or what it is they decided.

Question 23 introduces a rather complicated series of dependent questions, but if you follow the asterisks, and read this explanation carefully, you will come out all right.

If an R has thought at all about getting a television set, he is asked Sub-question A, in order to determine whether he came to a decision and what he decided.

If an R has not thought at all about getting a television set, he is asked Sub-question B, which asks him to think about it now and come to a decision (thus paralleling A exactly).

Regardless of whether they gave this answer to Sub-question A or to Sub-question B, those respondents who think they will get television sets, or will get them under certain circumstances--"Depends"--are asked Sub-questions C and D.

In Sub-questions A and B, do not use the "Depends" code, unless it is clear that the R means that he will get a set under certain circumstances and will not, under others. For instance, if an R says he will get a set when he has the money, this should be coded "Will get". If he says that he will get a set if he gets a raise, then it is a "Depends" answer. With all "Depends" answers, write in an explanation

TELEVISION OWNERS ONLY

Question 24: A straightforward question on how the ownership of a television set has affected the adult movie attendance. Notice that in this question, as in Q. 7, the R is included with the other adults in his family. Usually the R will volunteer whether his attendance has increased or decreased, if it has changed. If not ask "How has this attendance changed?" or "Has it increased or decreased?".

Question 25: This question parallels Q.24 for the children five and over in the family.

Question 26: There is no Q. 26 for television owners. Skip to Q. 27.

NON-OWNERS ONLY

of "what it depends on" in the space provided just below the answer list that is full enough to tell us what it is about. For instance, don't just say "Finances", say "If he gets a raise", or "If he can make some extra money" or whatever it is specifically.

Sub-question C calls for an estimate of how soon the R thinks he will get the TV set. Even if the R is pretty vague, if he can make any guess at all about the length of time, code that rather than coding "Don't know".

Sub-question D is designed to see how definitely plans about the TV set to be bought have been formulated. If the R thinks he has any idea at all about what he will buy, circle "Yes", and ask Sub-question (1).

In Sub-question D (1), a respondent may talk in terms of brand of set, size of picture tube, model, appearance or style, etc. Make no attempt to suggest to the R which of these aspects of the set he should talk about. Just make sure to probe enough that you have gotten from the respondent every detail about the set about which he has already made up his mind.

Question 24: A straightforward question on how frequently the R now sees television. An answer like "only when I visit friends" should be probed with, "About how often is that?"

Question 25: The usual type question on the television viewing of the other adults in the family. If it differs for different adults, strike an average, as in Q. 7.

Question 26: The usual type question on the television of the children five and over. Handle just like Q.'s 24 and 25.

Question 27: A factual question on telephone ownership, which introduces a brief series (27-29). A phone in the hall or in the lobby of the building, etc. should not be counted. A "Yes" to this question means that the respondent has a telephone inside of his dwelling unit.

Notice that this question determines the next set of questions that you ask. Telephone subscribers are asked the left-hand side of the rest of this page and the next half page (down to the double line), while non-subscribers are asked the right-hand side.

TELEPHONE SUBSCRIBERS ONLY

Question 28: A factual question about type of telephone service. As with other factual questions, if the R you are talking with does not know, it is permissible to get the answer to this item from other members of the household. More than one answer may be circled here.

Often, when an R does not know the type of service, he will know how much it costs monthly. The minimum rates for the different services (including tax) are as follows:

Individual line (one-party)
- Residence message service (MR). .$5.83
- Residence coin-box service (CR) . 7.77
- Business message service (MB) . . 8.05
- Business coin-box service (CB). . 9.66

Two-party line
- Residence message service (2MR) . 4.72
- Residence message service (2ML) . 4.14
- Residence coin-box service (2CR). 5.29
- Business coin-box service (2CB) . 7.94

Four-party line
- Residence coin-box service (4CR). 4.09

Any types of service not classifiable into the list of answers are coded "Other". Specify plainly below exactly what type of service it is.

Question 29: This question deals with whether the R has considered changing his telephone service at all. If he has thought of it at all, ask Sub-question A, which deals with the type of service he has thought of changing to.

NON-SUBSCRIBERS ONLY

Question 28: A question about the R's desire to have a telephone. This question should be interpreted as pure "wish", as was Q. 22 for non-television owners. That is, irrespective of whether it is practical for the R to consider it or not, does he particularly want to have one.

If there is a conflict in the family, with some wanting a telephone and some not particularly wanting it, circle the code for "Don't know".

Question 29: This asks the more realistic question of whether the R ever will get a phone or not. If he thinks he might, under certain circumstances, but not under others, circle the code for "Depends", and specify clearly below what it depends on. (See notes on Q. 23 A and B for non-television owners for handling this type of "Depends" answer.)

Those who think they will get a phone, or might get one under certain conditions

TELEPHONE SUBSCRIBERS ONLY	NON-SUBSCRIBERS ONLY
	("Depends") are asked Sub-question A and B. Sub-question A asks for an estimate of how long it will be before they get a phone, and, as with Q. 23 for non-television owners, no matter how vague the R sounds, take any time estimate in preference to a "Don't know" answer. Sub-question B deals with the type of service they would want. Handle it like Q.'s 28 and 29 A for telephone subscribers.

Question 30: This question introduces the series on phonevision, to which the rest of the questionnaire is devoted. The question itself is straightforward, simply asking the R whether he has ever heard anything about phonevision. If he has heard about it, you ask Sub-questions A, B, and C. IF, AT THIS POINT OR ANY POINT IN THE INTERVIEW, YOU LEARN THAT YOU ARE INTERVIEWING A TEST FAMILY, TERMINATE THE INTERVIEW IMMEDIATELY. Test families will be interviewed later on Survey 299A.

Sub-question A asks the R to explain, in his own words, what phonevision is and how it works. Do not simply take what the respondent says, spontaneously, in answer to your first question and let it go at that. Instead, use the suggested probes to draw out from the respondent everything he knows about it. Don't use leading questions like, "How do they charge you for it?", or anything like that, but keep asking for more, until the R has told you all he knows or has given you all the elements of a complete answer. A complete answer might include all of the following:

(1) Phonevision is a system of charging people for seeing certain television programs.

(2) Part of the television picture is sent out, in jittered form, over the regular television wave lengths.

(3) The missing portions of the picture, needed to clear-up the image, are transmitted through the telephone wires.

(4) Phonevision requires the installation of a special device on the television set and an adjustment of the telephone wires.

(5) People order the programs they want by phone and are then billed for the programs they see in clear form.

(6) Phonevision was developed by the Zenith Radio Corporation and was tested for three months ending March 31st over Channel 2, using 300 test families.

(7) During the test, the sound was distorted too.

(8) During the test, full-length feature movies were used.

Sub-question B asks for the R's sources of information about phonevision. It is very important here not only to cover all the sources, but to get the respondent to tell you for each source when it was or what it was about so that it can be placed in the historical development of publicity about phonevision. For your own information, so you can understand whether the R has told you enough or not, the sequence may be sketched out as:

(1) More than a year ago: Sporadic publicity about the development of phonevision and Zenith's attempt to get F.C.C. permission to test it.

(2) A year ago: Large-scale publicity announcing the test and requesting volunteers to take part in the test.

(3) From about June, 1950 to January, 1951: Sporadic publicity about test arrangements, trouble getting movies, postponing the test, etc.

(4) January 1, 1951 to March 31, 1951: The test period, during which there has been a good deal of publicity about what the test is showing, how people are reacting to it and how phonevision works, etc.

Sub-question C deals with whether the R or some member of his family ever applied to take part in the test. In asking the question, use "is going on" through March 31st, and "just finished", thereafter. If they did, ask Sub-questions (1) and (2). Sub-question (1) deals with the method by which the R volunteered. Don't accept an answer like "Filled out an application", but get the R to tell you enough about it so you can tell what it is. The types are as follows:

(1) Wrote in to WEFM. This is Zenith's FM radio station, and the plans to test phonevision were first announced on it, before the general publicity about the test. Persons who wrote in to WEFM were sent a questionnaire to fill out.

(2) Sent newspaper coupon. When the general publicity was launched, all Chicago newspapers carried an ad which contained a coupon which could be clipped and returned if the person was interested in taking part in the test. These volunteers generally received a letter telling them that the test was limited to Lakeview-Lincoln, so that they could not be considered.

(3) Sent return postcard. Telephone subscribers in the Lakeview-Lincoln district each received a letter explaining the test and enclosing a return postcard to be sent in, if the person was interested in taking part in the test. All these persons received questionnaires.

(4) Sent dealer card. Dealers handling Zenith products had a supply of cards which people could pick up there and send in, in order to volunteer for the test.

(5) Other. People may have written in or phoned, etc., as the news got around.

People may have applied in more than one way, so more than one answer can be circled here.

On this Sub-question C, take what the respondent tells you. Even though you know from the information given you here that the family did not receive a questionnaire or could not have had a return postcard, do not argue with the respondent. Sometimes mistakes were made, and sometimes the R no longer remembers things correctly, but we want to know whatever discrepancies there are, so don't coach your respondents. Obviously, with interviews on white Face Sheets you are talking to people whom our records show received questionnaires but didn't return them, while with green Face Sheets you are talking to people whom our records show returned questionnaires, but ask the questions in every case and put down the answers the respondent gives you.

Question 31: This question deals with current interest in participating in the phonevision test. Be sure to read the entire explanation printed in the questionnaire in every interview, since we have to be sure that every respondent has the same understanding of the test in answering the question. Saying "As you know" will ease the asking of this question with informed respondents. Try to read the long statement conversationally and slowly enough for your respondent to understand all the points.

The question itself then refers to the phonevision test, just as it was conducted. The only element not explicitly stated in the explanation is the fact that the movies used in the test were a couple of years old. If any respondent wants to know whether

this would be a part of the test being asked about in the question, you should say that it is--"Yes, just the way the test was conducted this time". This means that an answer like, "Yes, I would like to take part, but only if they had newer movies than they used", should not be coded as a "Depends" answer, but as a "Would not". A real "Depends" answer is one in which the conditions on which it depends have nothing to do with what the test conditions might be, for the test conditions are fixed and known. Remember, with "Depends" answers, to specify clearly what it depends on in the blank space to the left of the answer list.

Sub-questions A and B deal with reasons for wanting or not wanting to take part in the test--A being asked of those who want to or might want to under certain conditions ("Depends"), and B of those who don't want to. These are key questions in the survey and should be handled with all the thoroughness described under Q.'s 13 and 14. That is, when an R gives you a reason, be sure to probe it enough to make entirely clear what the respondent had in mind; then, go on to ask for additional reasons, as suggested by the parenthetical probe.

Question 32: This question deals with the amount of viewing of phonevision that was done during the test period. The main question is straightforward, and respondents whose families have done any viewing of phonevision are asked Sub-questions A, B, and C. For the purposes of this question, any amount of viewing, even just catching a glimpse of it while tuning another channel, should be counted as a "Yes" answer.

Sub-question A calls for the number of separate days on which anyone in the family looked at phonevision for any amount of time. For about the first thirty days of the test, the sound was clear, and most of the viewing would have been done at this time, making it a little difficult for your respondent to recall exactly how often they looked at phonevision. Nevertheless, try not to accept vague answers; for instance, if a respondent says, "A few times", ask, "About how many times would that be?".

Sub-question B calls for the longest time at any one time that anyone in the family watched phonevision. Answers here should be in terms of minutes, fractions of an hour, or hours. If you get an answer like "A whole program, find out for sure whether this was a full (1½ hour) movie, or whether it was just a full (15 minute) program of previews. If the person says "Just in tuning", you can simply record this, or write down "Momentarily".

Sub-question C calls for a simple answer to the form in which they saw phonevision--jittered or clear, and, if clear, how this happened. The two main possibilities are printed in the questionnaire. If you get any other types of answers, circle the code for "Other" and specify clearly exactly how the respondent saw clear phonevision programs at the side. Simply seeing the clear test pattern which was run from time to time should not be counted as seeing Phonevision in the clear. It is possible to circle more than one answer on this question.

Question 33: This question calls for an opinion on the basic idea of phonevision, which is sometimes called "Box-office Television". People who favor the idea--"Good idea"--are asked Sub-questions A and B, while those who oppose it--"Bad idea"--are asked Sub-questions A, B, and C.

Sub-question A calls for the strength of their previously-expressed opinion. With those who said "Good idea", you will say "How strongly do you favor....?", while you substitute the word "Oppose", with those who said "Bad idea".

Sub-question B asks for their reasons for favoring (or opposing) box-office television. You may have gotten part of the answer to this question offered to you spontaneously at the time you asked Q. 33, itself. In such cases, write down that part of the answer here, go back to A, and then, when you come to this question again, ask for "other reasons". As with Q.'s 13, 14, 31 A and 31 B, this is an extremely important item,

and you should take pains to probe carefully and fully for all the reasons the person may have, and for the exact meaning of each of these reasons.

Sub-question C is asked only of those who are opposed to box-office television to see whether their opinion changes or stays the same when one of the major facts about box-office television is suggested to them.

Question 34: This question deals with personal willingness to pay for some television programs. You should never assume that a person who favors box-office television will necessarily be willing to buy some of these programs himself; nor should you assume that someone who is opposed will never buy any. Ask the question in all cases, soothing the respondent about the repetitiousness, if you have to. The only exception to this is in the case where a respondent has clearly and explicitly said in answering Q. 33 that he would certainly buy such programs himself. In these exceptional cases, you may circle the "Yes, might pay" answer to Q. 34, without asking the question.

Respondents may be a little vague on this question, since it is somewhat new to them. If a respondent thinks that he might pay, this is sufficient to circle the first code; you do not have to have a respondent who is completely definite and certain that he would in order to code "Yes". Respondents who qualify their answers with comments about the program--for instance, those who say they "would if the programs being shown were good", should be coded "Yes, might pay" in this instance.

Question 35: Here, we begin a series of questions specifically on phonevision interest and buying. This question deals with the test situation--where only older movies were available--and whether respondents' families would buy any of these. (In asking this question use the parenthetical phrase, if the respondent gets confused.) Notice that if any financially-responsible member of the family would buy some of these programs the answer should be recorded as "Yes, would pay". As with Q. 34, even if respondents are a little vague about this, if they think they might pay, code it as "Yes, would pay". Respondents who say, "Yes, would pay", are asked Sub-questions A and B.

Sub-question A asks for an estimate of the number of programs they think they would take monthly, if the only phonevision programs available were these older movies. Since the programs cost $1 each, this is the same thing as asking them about how much money they think they would spend on it monthly. Again respondents will be somewhat vague, but if they can make any guess at all--and you can use the parenthetical probe by way of reassurance--record the number they mention. Ambiguous answers, like "Any that were appealing to us", should be probed for a more definite answer: "If they were all appealing, how many....?" If the answer is "None", or, after probing, "Don't know", be sure to write this in.

Sub-question B asks the respondent how sure he feels about all the speculating he has been doing. If the answer to Sub-question A is "Don't know", skip Sub-question B.

Question 36: This is the same question as Q. 35, only this time we assume that the only programs on phonevision are new movies. Follow the same procedures outlined under Q. 35, asking Sub-questions A and B of those who say "Yes, would buy". Make sure that the R understands that this is a different question from Q. 34, in the sense that he should not assume that these expenditures are in addition to the earlier expenditures he has decided on. Each question calls for a separate estimate of expenditures under different conditions.

Question 37: This is a series of four questions, A, B, C, and D, comparing phonevision with other types of entertainment, by asking the respondent to choose between them, if they were competing for his attention. Be sure to ask all four parts of every respondent. Some respondents may get a little confused in this, but keep in mind

that A, B, and C all tell the respondent that the phonevision program and the things it is being compared with are all things he would enjoy, so answers like "It would depend on whether it was a good movie or not" are irrelevant. In such instances, you should repeat the question, stressing the part that states the conditions. In each Sub-question, a parenthetical question has been added, which you can use if the respondent does not understand the present form of the question.

Question 38: This is the same question as Q.'s 35 and 36, only this time we assume that the only programs on phonevision are sports events. Remember, since sports usually appeal more to men than to women, that if any member of the family would buy these programs, the answer should be recorded as "Yes, would buy". Here, those who say "Yes, would buy" are asked three Sub-questions, A, B, and C.

In Sub-question A, we want to know exactly what types of sports events the respondent, or members of his family, would be interested in seeing on phonevision. Be sure to probe for all the types of sports events they're interested in and to write them down in enough detail so we'll know what they are.

Sub-questions B and C are the same as those which were asked previously on Q.'s 35 and 36, and should be handled in the same way.

Question 39: Here, we ask the respondent whether there are any other kinds of programs that we have not already covered which he would be interested in seeing on phonevision. Obviously, there are many things which could be on phonevision--like opening night at the opera, Broadway plays, ice shows, college courses, and whatnot. You should, of course, not suggest any of these to your respondents, the object being to see to what extent they are interested in and have thought of these. Respondents who say "Yes" to Q. 39 are asked Sub-questions A, B, and C.

Sub-questions A, B, and C, exactly parallel the Sub-questions in Q. 38 and should be handled in the same way. Be sure, in A, to probe for all the different kinds of programs in which the respondent might be interested.

Question 40: This is the summary question on interest in phonevision, this time assuming that all the types of programs--older movies, new movies, sports events, and others--in which the respondent or members of his family have any interest would be on phonevision. Questions may arise at this point, or, perhaps, earlier, about what the costs of phonevision (in addition to the $1 a program) might be. If the respondent raises the question, you can tell him that, while it isn't definite yet, it would probably be like having an extension added to a telephone--there would be a small installation charge and then some small monthly maintenance charge of probably one dollar a month. Don't go into all these complications, however, if your respondent doesn't bring up the subject.

As with previous questions of this type, don't expect your respondent to be too definite: If he thinks he might want phonevision, this is sufficient to code "Would want". Those who say "Would want" are asked Sub-question A, which is a final estimate of total phonevision expenditures, when all different kinds of programs are available. Handle ambiguities and vagueness in the same way as outlined under Q.'s 35 and 36.

Question 41: This is a summary question on the fairness of the charges contemplated for phonevision programs. A respondent may wish to say that the charge for one type of program is too high, for another is about right and for still another too low. In such cases you would circle the code for "Depends". Sub-question A is asked of all those who are not satisfied with the $1 charge.

If a respondent says "Should be more" or "Should be less", you can write in only one answer--what the charge should be. For "Depends on the program" respondents, be sure to

write in more than one answer, giving the charge per program by types of programs; that is which programs the respondent thinks should cost each price he mentions.

Question 42: This question is asked only of respondents who do not have television sets, but have expressed some interest in phonevision, in order to see whether phonevision would make any difference to their likelihood of getting television sets. (You will have to remember from earlier in the interview whether the R has a television set or not.) Those who say "Yes" to the question are asked Sub-question A.

Question 43: This question is asked only of respondents who do not have telephones, but expressed some interest in phonevision, in order to see whether phonevision would make any difference to their likelihood of getting telephones. Again, you will have to remember from earlier in the interview whether the R has a telephone or not. As explained in the question, a telephone is necessary in order to get phonevision, since part of the picture is transmitted by telephone wires. If a respondent should, at this point or anywhere else in the interview, raise any question as to whether phonevision would interfere with the normal use of the phone either for incoming or outgoing calls, the answer is "No". Respondents who say "Yes" to this question are asked Sub-question A.

Factual Item 1: This question refers to the male head of the household (who is generally also the main earner), unless there is only one head and she is a woman. In the latter case, the question refers to her. Be sure to get precise information in recording occupation. You should report both "Job" and "Industry". "Job" refers to the type of work the person does (carpenter, lawyer, proprietor, machinist, etc.); "Industry" refers to the line of business that employs him (construction company, drug store, private practice, steel mill, etc.) Reassure your respondent, if necessary, that we do not want to know the name of the company, just the kind of business it is.

Factual Item 2: Again, this question refers to the male head of the household, unless there is only a female head. Count only formal schooling; do not include correspondence courses, adult education classes, trade schools, etc. If a person was educated in foreign schools, ask for its nearest equivalent in our school system.

Factual Item 3: Again this question refers to the male head of the household, unless there is only a female head. Record the name of the country in which the male head of the house was born and the name of the country in which his father was born. In recording names of foreign countries, get them specifically: Do not write "South America" or "Eastern Europe", etc.

Factual Item 4: Straightforward.

Factual Item 5: Straightforward.

Factual Item 6: Bathrooms and Pullman kitchens do not count as rooms. Where a family has only one room (not counting bath and/or Pullman kitchen) ask Sub-question A. In Sub-question A, we want to know whether this should count as complete living quarters or just a room. "Complete kitchen facilities" means at least a stove and an ice-box; if the person has only a hot-plate this should not be counted as complete cooking facilities.

Factual Item 7: A straightforward card question. Use the parenthetical reassurance when you need to.

Factual Item 8: This item and the ones following it are not asked of the respondent, but are filled in by you. Here, circle the house type, specifying clearly when you circle the "Other".

Factual Item 9-12: Obvious.

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SUPPLEMENTARY INSTRUCTIONS FOR SURVEY 299A

Some General Points

This survey involves interviews with only the three hundred families who actually took part in the phonevision test. The objective is two-fold: to learn their reactions to phonevision, and to obtain data comparable to those obtained from the general Chicago population in Survey 299.

In filling out the Face Sheet and determining whom in the household to interview, you follow exactly the same procedures described for Survey 299.

In explaining the purpose of the survey to any respondent who may ask you what it is about, you do not have to avoid mentioning phonevision with these test families. The fact is that they will probably guess that the interview has something to do with phonevision, and the questions touch on phonevision much sooner than in the Survey 299 interview. Moreover, the test families have been warned against talking with anyone who cannot present a "Phonevision Identification Card." You will be carrying one of these cards, and, if any respondent asks to see it, he will immediately know that the interview has to do with the phonevision test. So, if anyone asks you what this survey (S 299A) is all about, you can say something like, "It's about phonevision and some of your other recreational tastes and interests."

There is one point about which you should be very careful: Since you carry the official Phonevision Identification Card and are talking to test families, there may be some tendency for people to feel that they are talking to official representatives of the phonevision test and be somewhat reluctant to express any criticisms of or dissatisfaction with phonevision. So, take pains to assure your respondents that we are an impartial research organization and our only interest is in learning what people's frank, honest opinions of phonevision are.

Beyond these few points, all of the general instructions given for Survey 299 also apply to Survey 299A.

Instructions on Specific Questions

NOTE: Wherever a question in Survey 299A duplicates a question in Survey 299, and the instructions with regard to it are exactly the same, you will be referred to the "Instructions on Specific Questions for Survey 299", in order to avoid repetition. Be sure to go back and review these instructions.

Question 1: For general points, see Survey 299, Q. 1. Here, respondents may reply, "watching a phonevision movie". In case you get an answer of "phonevision", proceed as follows: write in "phonevision" in the space provided at the bottom of the question, without circling any code; then repeat the question as, "Now that you can't have phonevision, what is your favorite way of spending an evening?" Circle the answer you get to this new question. That is, answers of "phonevision" are always written-in, but no code is ever circled for this answer.

Question 2: See Survey 299, Q. 2. For answers of "phonevision", proceed as described in Q. 1 above.

Question 3: See Survey 299, Q. 3. For answers of "phonevision", proceed as described in Q. 1 above.

Question 4: See Survey 299, Q. 4. For answers of "phonevision", proceed as described in Q. 1 above.

Question 5: This question deals with whether any of the recreational interests of the respondent, the other adults and the children in his family--which were ascertained in Q.'s 1-4--are interests which they have developed since the beginning of the phonevision test. If any person--adult or child--in the family now enjoys doing anything which he didn't care for before the phonevision test, you circle the code for "Yes", and ask sub-questions A and B. If no one in the family has acquired any new recreational interests, then you circle the code for "No" and skip the sub-questions.

Sub-question A is merely concerned with which member or members of the family have acquired the new recreational interests. Since several family members may have changed, more than one code may be circled for this question if the changing family members fall into different codes.

Sub-question B then asks for what these new recreational interests are. As with earlier questions of this type (Q. 2, Q. 3A, Q. 4A), more than one code can be circled, and, if one member of the family has acquired one new interest and another member of the family has acquired another new interest, both of these categories should be circled. Since sub-question B is asking which of the interests they now have were acquired since the beginning of the phonevision test, in general, anything which is circled here should also have been circled as an answer to one of the four preceding questions.

Question 6: This question is the opposite of question 5, dealing with whether any former recreational interests of anyone in the family have been dropped since the beginning of the phonevision test. If any person in the family no longer enjoys doing something that he used to enjoy before the phonevision test began, you circle the code for "Yes", and ask sub-questions A and B.

Sub-question A (like sub-question 5A) merely determines which family members have changed, and several codes may be circled.

Sub-question B then asks for those recreational interests which anyone in the family formerly enjoyed, before the phonevision test, but no longer enjoys. As before, more than one code can be circled here, and if different members of the family have each given up different recreational interests, all of the interests given up by any of them should be circled.

Question 7: See Survey 299, Q. 5. Respondents should not assume that staying home includes watching phonevision movies, since these are no longer available. So, if a respondent wants to say that it "depends on whether he can have a phonevision movie", you should remind him that they are no longer available, and repeat the question. "In general....."

Question 8: See Survey 299, Q. 6. For handling answers involving phonevision, see Q. 7 above.

Question 9: This question asks whether the attitudes of the attitudes of the adults in the family, including the respondent, toward staying home, which were just expressed in Q.'s 7 and 8, are the same as they were before the phonevision test or whether some change in attitude has taken place during or since the test. A special code has been provided to take care of situations in which some adults changed and some did not.

Question 10: A straight-forward question on the effect of the phonevision test on adult movie attendance. "Going to the movies", of course, means going to a movie theater. Respondents should not count the movies they may have seen on phonevision as going to the movies. Try to get the respondent to generalize for all the adults in the family (including himself); if he cannot generalize, there is a special code for those who have to say that one adult went more, another the same, and still another less, etc.

Respondents who say that adult movie attendance changed during the phonevision test, and was either more or less, or mixed, are asked sub-question A, to get the amount of adult movie attendance during the phonevision test. For points on handling this sub-question, see Survey 299, Q. 7.

Question 11: See Survey 299, Q. 7. "Usually" may be interpreted to the respondent as "before the phonevision test", if it raises any question for him.

Question 12: A repeat of Q. 10, this time with regard to the effect of the phonevision test on children's movie attendance. See the points under Q. 10 above and Survey 299, Q.'s 7 and 8.

Question 13: A repeat of Q. 11, for children's usual movie attendance. See Q. 11 above and Survey 299, Q.'s 7 and 8.

Question 14: See Survey 299, Q. 9. Respondents should not assume that television programs include phonevision movies, since these are no longer available. So, if a respondent wants to say that it "depends on whether the television program is a phonevision movie", you should remind him that they are no longer available, and repeat the question. In other words, the comparison is between a good movie and a good television program of the kind available on free television.

Question 15: A repeat of Q. 14 for the adults in the family. See Q. 14 above and Survey 299, Q.'s 9 and 10.

Question 16: A repeat of Q. 14 for the children in the family. See Q. 14 above and Survey 299, Q.'s 9, 10 and 11.

Question 17: This question is asked to see whether the R's preference as between movies and television, just expressed in Q. 14, is any different than it was before the phonevision test. Since phonevision was not available before the phonevision test, this problem will not arise. The other points to remember are discussed in Survey 299, Q. 9.

Question 18: A repeat of Q. 17 for the other adults in the family. See Q. 17 above and Survey 299, Q.'s 9 and 10.

Question 19: A repeat of Q. 17 for the children in the family. See Q. 17 above and Survey 299, Q.'s 9, 10 and 11.

Question 20: This question asks for the effect of phonevision on the respondent's opinion of ordinary (free) television. Respondents who now like television more or less than they did before the phonevision test, are asked sub-question A, in order to determine what their opinion of television was before the test. Those who express a definite opinion of television ("Like" or "Dislike") in answer to sub-question A are asked sub-question A (1), in order to get the intensity of their feelings about television before the phonevision test.

Question 21: A repeat of the main part of Q. 20--the effect of phonevision on opinions of ordinary television--for the other adults in the family. If the respondent cannot generalize about all of the other adults in the family, but must report each one differentially, a special code has been provided.

Question 22: A repeat of Q. 21 for the children in the family. See Q. 21 above.

Question 23: A straight-forward question on opinion of television at the present time. "Television" should be interpreted as regular (free) television and should not include phonevision, which is not available at the present time. If necessary remind the respondent that phonevision is not available and ask the question about

"Television as it is now". Those who like or dislike television are asked sub-question A, in order to get the strength of their feelings about television.

Question 24: See Survey 299, Q. 13. This question refers to television as it is now, so answers in terms of phonevision are not to the point. Record all answers of this kind, but be sure to ask the question again in terms of television as it is now.

Question 25: See Survey 299, Q. 14. For answers involving phonevision, see Q. 24 above.

Question 26: See Survey 299, Q. 15. Since this question deals with possible future changes in television, answers in terms of phonevision are to the point here.

Question 27: See Survey 299, Q. 16. For answers involving phonevision, see Q. 24 above.

Question 28: See Survey 299, Q. 17. For answers involving phonevision, see Q. 24 above.

Question 29: See Survey 299, Q. 18. For answers involving phonevision, see Q. 26 above.

Question 30: See Survey 299, Q. 19.

Question 31: See Survey 299, Q. 20.

Question 32: See Survey 299, Q. 21. In this survey every family you visit may have a television set in the home, since the phonevision test set will probably not yet have been removed. DO NOT COUNT THE TEST SET; the question deals with whether they have a set of their own in addition to the test set. Notice that the answer to this question determines the next set of questions you are to ask: those who have sets of their own are asked the left-hand side of the remainder of this page of the questionnaire and the next two-and-a-half pages; those who do not have sets of their own are asked the right-hand side.

TELEVISION OWNERS ONLY

Question 33: See Survey 299, Q. 22 for television owners. Here, in addition, those who have owned television sets for only six months to a year are asked sub-question A, in order to find out whether they got their sets before or after applying for the phonevision test.

Question 34: A question on whether the phonevision test affected the viewing of regular (free) television. Be sure that the R is not including the watching of phonevision programs in answering this question. Those who say their viewing of regular television was affected ("More often" or "Less often") are asked sub-question A, which calls for the exact amount of television viewing of regular television programs at three periods of the day. BE SURE TO ASK ALL THREE PARTS. For handling this sub-question, see Survey 299, Q. 23 for television owners.

NON-OWNERS ONLY

Question 33: A straight-forward question on the R's amount of television viewing before the test set was put into home. See Survey 299, Q. 24 for non-owners.

Question 34: A repeat of Q. 33 for the other adults in the family. See also Survey 299, Q. 25 for non-owners.

TELEVISION OWNERS ONLY

Question 35: A straight-forward question on the amount of television viewing before the phonevision test. See Survey 299, Q. 23 for television owners.

Question 36: A straight-forward question asking the respondent to compare the amount of current television viewing with the amount of viewing before the phonevision test. Be sure that the respondent does not compare current viewing with viewing during the test.

Question 37: A question on whether homes which had two television sets during the phonevision test--their own and the test set--made use of both of them or not. Respondents whose families used "Both" are asked sub-questions A and B.

In sub-question A, we want to know how it happened that they made use of both: what reasons they had for using both, what caused them to use them, under what conditions they used them, etc. Remember to probe first to clarify the answer you have already been given and then for additional reasons, as suggested by the parenthetical probe.

Sub-question B asks about one special circumstance under which both sets might have been used--that is, when part of the family wanted to see the phonevision movie and part of the family wanted to see a regular program. If sub-question B has clearly and explicitly been answered as part of the answer to sub-question A, then you may circle an answer for this sub-question without asking the question. Do not guess, however, if you have not been directly told about this, ask this sub-question.

Question 38: This question deals with the possible influence of having two television sets on the purchase of phonevision programs. Everyone who has any idea whether the two sets made any difference or not ("More", "Fewer" or "Same") is asked sub-question A in order to see how certain they are of their opinion.

NON-OWNERS ONLY

Question 35: A repeat of Q. 33 for the children in the family. See Q. 33 above and Survey 299, Q. 26 for non-owners.

Question 36: A question on the amount of regular (free) television viewing during the phonevision test. Remember to ask all three parts, and see Q. 34 for television owners, above, and Survey 299, Q. 23 for television owners for special points to remember.

Question 37: A question on desire for television sets before they took part in the phonevision test and had the use of a television set. This question should be interpreted as pure "wish", as explained in Survey 299, Q. 22.

Question 38: A question on present desire for a television set. As with Q. 37 above, the question should be interpreted as pure "wish". See Survey 299, Q. 22.

TELEVISION OWNERS ONLY

Question 39: There is no Q. 39 for television owners. Skip to Q. 41.

NON-OWNERS ONLY

Question 39: This question introduces the same rather complicated series of questions used in Survey 299. Review carefully the directions given in Survey 299, Q. 23.

Question 40: A question on whether the R believes that participation in the phonevision test delayed his purchase of his own set. Those who say they otherwise would have gotten their own television set are asked sub-question A to determine how certain they are of this.

Question 41: This question begins a series on reactions to participation in the phonevision test. Be sure to ask both parts of the question of everyone. In asking each part, probe thoroughly and completely, both for the meaning of each thing the respondent may say and for any additional ideas he may have to add to what he has already said.

Question 42: A question on whether the test lived up to expectations or not. All respondents who have an opinion on this are asked the two sub-questions A and B. Notice, however, that respondents who found that the test came up to expectations ("As good as expected" or "Liked it better") should be asked sub-question B first; then they should be asked sub-question A in the form of "Was there anything disappointing about phonevision? What?" Those who are disappointed in the test ("Didn't like as well") are asked sub-question A first; then sub-question B should be asked in the form of "Was there anything you liked about phonevision? What?". BE EXCEPTIONALLY CAREFUL TO PROBE THOROUGHLY ON THESE SUB-QUESTIONS.

Question 43: This question is another approach to evaluating the phonevision test, by asking people whether they would still want to take part if they had it to do over again. This question does not ask whether the person would like to take part again in a second test of phonevision, so an answer like "No, we've seen it now, so someone else should have a chance to take part" is irrelevant. Rather, the question asks whether they would have decided to take part in the test, if they had known more about it when they were making the decision. Those who would not have wanted to take part or those who aren't sure are asked sub-question A in order to find out what the factors are that might have kept them from taking part.

Question 44: A straight-forward question on whether the movies shown on phonevision had been seen before by the participating families. If anyone in the family had seen any of the movies before, sub-question A and B are asked.

In sub-question A, we want to know about how many of the ninety movies shown on phonevision had been seen by at least one member of the household prior to its showing on phonevision, irrespective of whether this family saw them on phonevision also. If several members of the family had each seen different ones of the movies shown on phonevision, the answer to this question should be the sum of all the different movies that one or more of them had seen before.

Sub-question B calls for an estimate of how the family might have purchased programs if none of the programs had duplicated movies they had already seen.

Question 45: This question deals with whether test participants felt that there were any pressures on them to buy phonevision programs. Those who feel this way are asked sub-question A in order to determine what the pressures were.

Question 46: This question deals with whether the family's expenditures for phonevision deviated in any way from what their real desires were. Those who feel that they bought either more or fewer programs than they really wanted to are asked sub-questions A and B. Sub-question A deals with the causes of their over- or under- expenditures. Sub-question B deals with whether these factors operated all through the test or at some special time during the test.

Question 46X: (Forgive our numbering error!) See Survey 299, Q. 33.

Question 47: See Survey 299, Q. 35. Phonevision families may find this question a little odd, since they have just been buying movies of the type covered by the question, but they may feel that they would not do it again. At any rate, we need the question for comparative purposes, so ask the question, apologizing for its repetitiousness if you have to.

Question 48: See Survey 299, Q. 36.

Question 49: See Survey 299, Q. 37.

Question 50: See Survey 299, Q. 38.

Question 51: See Survey 299, Q. 39.

Question 52: See Survey 299, Q. 40.

Question 53: See Survey 299, Q. 41.

Question 54: See Survey 299, Q. 42.

Factual Items 1-7: Same as Survey 299, Factual Items 1-7, which see.

Factual Item 8: See Survey 299, Q. 28 for telephone subscribers.

Factual Items 9-13: Obvious.