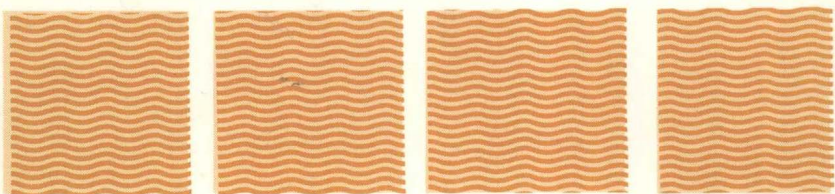


SURVEY RESEARCH BY TELEPHONE

JAMES H. FREY



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CONTENTS

<i>Preface</i>	7
1. Introduction	9
2. Comparing Survey Methods	27
3. Sampling	57
4. Questionnaire Design	87
5. Administration	129
6. Final Considerations and the Future	171
<i>Appendix A</i>	189
<i>Appendix B</i>	193
<i>References</i>	195
<i>Author Index</i>	202
<i>Subject Index</i>	205
<i>About the Author</i>	208

PREFACE

This book was written for the person who has some familiarity with surveys in general and who desires additional information on how to implement one particular type of survey—the telephone survey. More than likely, this person will be someone like myself who directs a medium- or small-scale operation and who desires, at times, to utilize a telephone survey to meet a particular research need. The material contained in the chapters which follow includes a discussion of the place of the telephone in social and economic life; it will compare the telephone survey to mail and face-to-face survey techniques, and there is a description of the procedures necessary for drawing a sample, designating a questionnaire, and implementing an administrative plan for a telephone survey. Certainly one's research situation will call for adaptations of the procedures described, and not all of the information required to conduct a telephone survey will be contained in this treatise. Very often, conducting a survey is a matter of style, but following standardized procedures such as those suggested in this text will prevent an excessive compromise of data quality in the name of research artistry.

Throughout the text I have noted that the telephone survey has many advantages over other types (lower cost, less time for completion, and so forth). At no time do I want to imply, however, that the telephone survey is any “easier” to implement than the face-to-face or mail survey. On the contrary, I want to emphasize that conducting telephone surveys requires just as much attention to organizational and procedural matters as any other type of research. It is misleading to assume that a telephone survey can be “quick and dirty” at a lower price. If

this is your conception of telephone survey research, it is incorrect. A thorough reading of this text should demonstrate that most telephone surveys are complex and demanding, not simple and easy.

At this time I would like to acknowledge several persons who assisted me in the preparation of this manuscript. Lillian Havis, Debra Duddleston, Judy Robinson, and Carol Frey provided typing assistance on earlier drafts. Joyce Standish supplied invaluable editorial input. Special thanks go to Jim Richardson, JoAnn Nigg, Morrie Axelrod, and a Sage reviewer who read all or part of earlier drafts. Finally, a great deal of the material in this book reflects the inspiration and tutelage of my friend and former advisor, Don A. Dillman. Even with this able assistance, errors remain, but they are of my own making.

—James H. Frey
University of Nevada, Las Vegas

CHAPTER 1

INTRODUCTION

In the history of survey research, no other technical or procedural innovation, with the exception of the computer, has made as significant an impact on this type of data gathering as the telephone. It is safe to say that within the last five years or so, surveys by telephone have achieved some equity with the more traditional face-to-face technique in terms of frequency of use and methodological attention. A significant portion of this shift can be attributed to the rising costs and declining response rates experienced by the face-to-face survey. These factors have made this technique less attractive to survey researchers, particularly those working within severe constraints on time and money. On the other hand, the rise to prominence of surveys by telephone is also the result of improved telephone technology, improved telephone research procedures, and the nearly complete accessibility of any population via the telephone. As a result of these factors, many researchers who had habitually depended on the face-to-face interview have had to reorganize their approach to survey research and increase their use of telephone surveys. This book describes the technical and methodological development of telephone surveys, beginning with a brief history of the telephone and its use. The text continues by outlining how this type of data gathering can generate reliable information for social scientists, policymakers, commercial research firms, and others who would utilize survey research.

History of the Telephone

Throughout history there have been technological innovations that contributed greatly to the transformation of everyday

life. The radio, automobile, telegraph, television, electric light, and of course, the telephone, are some examples. Not only have these devices reduced problems related to time and distance, they have also had impacts on social relations and human behavior. Long neglected by social scientists, the telephone's impact on behavior may be more pronounced than any other technological innovation of the modern industrial era.

Few survey researchers have looked at the telephone from any other perspective than a technological one; that is, adapting hardware to survey needs. This is unfortunate, since it is possible that understanding the social significance of the telephone and how it conditions certain behavior patterns may provide some insights regarding certain patterns of response (for example, refusals) that survey researchers encounter. To fully comprehend this phenomenon, it is important first to outline the history and social significance of the telephone in American life.

When Alexander Graham Bell presented the telephone for patent in 1876, he was one of many who had been working on a process to transmit speech electronically. In fact, Bell's patent application was filed only one hour before that of Elisha Grey (McLuhan, 1964: 269). The first telephone was a successor to the telegraph, which had been invented some forty years before, and preceded by another forty years the invention of the radio by Marconi.

In its early history, the telephone was viewed as an "electrical toy" (Aronson, 1977); few people could see any use for it. At that time, the telegraph was the most prominent communicating device, as evidenced by an extensive network of telegraph stations and lines stretching across the country. In addition, the telegraph was preferred because it left a permanent record, while the telephone did not. Since two-way communication was not possible in early phone technology, the first telephones were marketed as a broadcasting or entertainment medium similar to the still-to-be-invented radio (Briggs, 1977). Concerts by a chorus of young ladies, news broadcasts to a central location, such as a tavern or general store, and recitations of Shakespeare to audiences gathered at fairs or expositions were representative of the first uses of the telephone.

As with most inventions, the prominent and well-to-do were the first to realize the utility of this device. In 1879, Lord Salisbury, British Prime Minister at the time, recited nursery rhymes to astonished guests from a "mysterious instrument on a neighbouring table" (Briggs, 1977: 41). Very often one of the 230 or so American subscribers who could afford its installation would invite guests to a party that would feature a musical concert, dramatic presentation, or lecture by means of the telephone. Even Alexander Graham Bell was known to entertain at these functions with lectures on electricity, and his compatriot, Thomas Watson, would sing the latest popular tunes. In fact, in the first telephone transmission to Boston from New York, Bell played "Yankee Doodle" on an organ and asked the receiving telegraph operator to "name that tune" (Aronson, 1977). These examples demonstrate that in its early years, the telephone was essentially a device of pleasure and novelty rather than an instrument for practical use in everyday affairs. This was soon to change, however, as "pleasure telephoning" gave way to routine conversational use.

The routinization of telephone usage began when two way communication became possible. In fact, Bell and Watson took only eight months after the original March 10 patent date to present a telephone device that could satisfactorily carry two-way conversations. Nevertheless, the inventors continued to market radiolike broadcasts to satisfy the interests and demands of their financial backers, who saw this as the best way to recoup their investment and to popularize the instrument. From its inception, Bell conceived of the telephone as a device to reduce the barriers of time and distance by allowing separated friends, family, and business associates to talk to each other directly. But it was not until the installation of a central exchange with the appropriate switching mechanism that the telephone began to move from its novelty status to one of practicality.

The first experimental telephone exchange was established in Boston in 1877 and, interestingly enough, the first switching stations were located in commercial banks. The exchange concept became popular only when business interests saw the

potential in the telephone for organizing their daily affairs, for information gathering, and for expanding their markets. This was a time when corporate powers needed to raise money quickly, and the phone was simple to operate and left no written record. This fact was not lost on the "Robber Barons," since messages of the times often carried violations of the anti-trust laws (Aronson, 1977). The hotel industry was also one of the first to see the potential of the phone, since it provided a mechanism whereby executives could operate out of the hotel and still keep in touch with their businesses. Thus, the early history of telephone usage is one of business and commercial domination, with residential areas represented by only 11 percent of the total subscribers and limited to the well-to-do who could afford the \$100-200 monthly fees.

The only way the average citizen could use the telephone in its early history was to go to a bank or drugstore to use a "pay phone" for five cents. The caller could make contact with a friend or business establishment. At the same time, one could catch up on the latest local gossip by quizzing the telephone operator at the central switchboard. It did not take long, however, for the dispersion of the telephone to reach unprecedented dimensions, even in the early decades of the century. Several factors contributed to this phenomenon. First, people recognized that the phone was much easier to use than the telegraph. It was not necessary to learn a special communicating code, nor did one have to wait for a reply message. Second, after Bell's patent expired in the 1800s, competition developed with Bell's company, American Telephone and Telegraph. The presence of other telephone companies in the marketplace pushed down prices and increased the telephone's dispersion. By the end of World War II, the telephone was available to even the poorest segments of the population. Third, America's industrial sector found that it could decentralize its operations, locating factories in cities and states at some distance from the central office, because of developments in transportation and because of concomitant improvements in long distance, two-way telephone communication.

Today, the United States leads the world in the absolute number of phones and is second only to the principality of Monaco in the number of phones per 100 inhabitants (United Nations, 1981). Virtually every American household has a phone. The latest figures for the United States show that there are 730 phones per 1000 population, 130 million residential phones in use, 1082 million conversations daily, and telephones in 98 percent of American households. In fact, nineteen states have 100 percent phone coverage, and twenty states can claim 95-99 percent coverage (U.S. Bureau of the Census, 1981). No other device, except perhaps television, can claim such ubiquity. The telephone is an omnipresent technological appendage of American life. Its significance, however, rests not with its mere technological presence, but with the social and behavioral changes that have come about as a result of the telephone's full-fledged adoption by the American public.

Impact on Social Relations

Arthur Pound (1926), in his book, *The Telephone Idea: Fifty Years Later*, asserted that the telephone was actually three things: (1) a cohesive force for the nation, (2) an antidote for sectionalism, and (3) an invigorator of trade. Both Pound and Alexander Graham Bell recognized that the telephone had the potential to make significant organizational, economic, and social impacts on society.

New forms of social organization became possible that no longer required persons to be located at fixed points (Perry, 1977). Thus the telephone was a great device of personal and geographical emancipation. Economically, the telephone reduced what Aronson (1971) calls "transaction time" for doing business, and it made industrial decentralization possible by enabling companies to locate various parts of their operations at some distance from each other. The stock, bond, and commodity markets were able to expand beyond Wall Street, thus enabling production to be separate from marketing or administration. Time and distance were no longer obstacles to busi-

ness dealings, nor to the supervision and control of satellite enterprises. Even shopping patterns were changed with the introduction of the ultimate buyer's guide—The Yellow Pages.

The telephone also had a significant impact on social relations. The nature of modern urban life, particularly the separation of workplace and residence, and the development of modern suburbia can be attributed to a large extent to the development of the telephone. The telephone made it possible for personal relations and multilevel commitments to be established and maintained beyond the immediate living area. An extended family could be kept together even as members of that social unit were scattered to various regions of the country. New concepts of the "psychological neighborhood," "conceptual environment," or "symbolic proximity" referred to the ability of persons no longer living in contiguous housing units or sharing group experiences to maintain a social bond as the result of being in contact by telephone.

The telephone became a mechanism that helped to reduce the effects of isolation, alienation, fear, and insecurity which resulted from a relocation to unfamiliar surroundings. It permitted the retention of the old community network (Keller, 1977), which became a source of protection, therapy, and sociability. Thus, if the phone promoted the decomposition of neighborhoods, it was also instrumental in retaining membership in old neighborhoods while easing the transition into new ones. In fact, it is still true today that the households that are the highest users (based on number of outgoing calls) are those containing families that have just moved into a new neighborhood (Meyer, 1977).

The telephone is also a mechanism for relief from boredom. Very often the phone provides one's only access to the outside world. Jack Paar tells the story of a woman who called him and said that she was so lonesome that she took a bath three times a day in hopes that the phone would ring (McLuhan, 1964: 265). The desire to reduce the effects of isolation explains, to some degree, the behavior of the eager respondent who will talk for what seem to be hours in response to the simplest of questions,

or who seems to be utilizing the interview for therapeutic reinforcement rather than a simple information-sharing device. For many, the possession of a telephone is a mitigating factor in reducing the harsh effects of a continually changing urban lifestyle.

Human Behavior and Telephone Usage

The telephone is a technological innovation that has altered our social relations perhaps more than any other device, including the automobile (McLuhan, 1964). It has become an extension of ourselves. It is even more of an embodiment of ourselves than the other media, because its requirements for our attention and concentration are much greater; the telephone demands our complete participation, whereas the other media do not. We read the paper while drinking coffee or eating breakfast. We can play cards, read a magazine, eat dinner, or converse with friends while watching television. And almost any other activity can accompany listening to the radio. However, when on the telephone, and particularly when engaged in an instrumental activity (for example, answering poll questions), complete attention is required. Many may not be ready to give their undivided attention to a telephone conversation because they are used to sharing their attention to any media event with other demands. In fact, it is possible that reluctance to be totally consumed by a telephone interview request could explain why some persons refuse to be interviewed or answer in an evasive or incomplete fashion.

Engaging in conversation via the telephone can also produce a great deal of anxiety on the part of respondents because there are no visual cues that one can utilize to predict the status or social categories of the caller. There is immediate equality but also a great deal of uncertainty in each phone contact, particularly in the early stages of the call (McLuhan, 1964). Usually we want to compare our social position to that of another in order to inject certainty and predictability into social relations. If we

cannot do this, we are uncomfortable in that social context, and we may want to relieve that uneasiness by a quick termination of the relationship. This is why an introductory statement is so crucial to obtaining a complete interview; its first task is to relieve any potential anxiety by providing the respondent with full information about the source and nature of the call.

NORMS OF TELEPHONE USAGE

There are several norms of behavior surrounding phone usage. First, the ringing phone creates tension to the point that we feel a compulsion to answer the ring. Some of us even feel the urge to answer a ringing public telephone when we know that the call cannot be for us. The phone is a participant in life; it demands a partner. The ring calls for completion or closure (McLuhan, 1964). The phone is not a background instrument but a dominant participatory feature in any setting in which it is included, and its ring calls loudly for response.

It is as if we have been conditioned to respond; not to answer would mean risking the loss of a potentially rewarding social interaction or message (Ball, 1968). Hence, it takes a significant diversion not to answer the phone. For a telephone researcher, this means that if the phone rings in the home of a potential respondent, it will probably be answered. The compulsion to answer guarantees some success for phone solicitors and has contributed significantly to the proliferation of telephone sales promotions (and telephone surveys, I might add).

Second, the survey researcher can take advantage of another norm of telephone behavior which holds that it is the "initiator of the call who shall terminate that call" (Ball, 1968). Hanging up is very difficult, since it would represent what Ball has called "interactional homicide." Hanging up has the irrevocable effect of killing the dyad. Few of us are able to just "hang up"; rather, we somehow negotiate our intention not to participate. The fact that there are few flat-out hang-ups in telephone work may be the result of the pressure of this norm. Skillful interviewing