

Qualitative and Quantitative Research in Marketing

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Abstract

This article reviews the gathering information techniques that are most commonly used in marketing research, as well as the criteria to be considered when selecting one for a research project. To this end, it begins with a brief introduction to marketing research, types of research, and the main techniques for gathering information, with a particular emphasis on qualitative methods. Finally, it presents how the authors conducted a social marketing research using both qualitative and quantitative approaches, analyzing the role and contribution of each technique employed in understanding the problem under study.

Keywords: Marketing research, Qualitative methods, Quantitative approaches

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INTRODUCTION

In discussions about the methodologies to be used to address a problem within organizations, the debate about the merits of quantitative techniques versus qualitative ones is widespread, as if they were two antagonistic approaches when in reality, they complement each other and allow for a broader and more complete understanding of the issue being studied.

In the particular case of marketing, the research on consumer attitudes, habits, and preferences, as well as ad recall levels, and sales force effectiveness, among others, has led to the development of an entire field of study called marketing research. It is common to find that marketing research tends to be confused with conducting surveys; however, there is a whole array of both qualitative and quantitative techniques available to researchers. It is also common to consider that quantitative methods should have precedence over qualitative ones, when in fact each of these approaches has characteristics specific to the marketing under study.

In this context, this article reviews the most commonly used information collection techniques in marketing research and the aspects to consider when selecting the most suitable one for the project at hand. To this end, a brief introduction to marketing research, types of research, and main techniques are presented. Following this, the authors discuss how they conducted a social marketing research using both qualitative and quantitative approaches, engaging in a dialogue analyzing the role and contribution of each technique employed in understanding the problem under study.

MARKETING RESEARCH: NATURE AND SCOPE

Kotler and Armstrong (2013:100) define marketing research as: "The systematic design, collection, analysis, and reporting of data relevant to a specific marketing situation faced by an organization." Based on this definition, it can be said that the essence of marketing research is to provide useful information for understanding an issue and making decisions, with a wide variety of applications in both for-profit and non-profit organizations. Table 1 presents some of the most common applications in each of these types of organizations as examples. In both cases, it is observed that these applications revolve around the identification of the target market/audience and the four Ps (product, price, place, and promotion/communication) that make up a comprehensive marketing program.



TABLE 1

APPLICATIONS OF MARKETING RESEARCH

FOR-PROFIT ORGANIZATIONS	NON-PROFIT ORGANIZATIONS
Sales Analysis Attitudes, habits, and preferences Market opportunity identification Market segmentation New product design Advertising recall Market testing Positioning Pricing studies Distribution studies Branding	Target audience identification Segmentation Attitudes, habits, and preferences Social trends Design of communication campaigns Message Recall Campaign evaluation Slogan development Strategy evaluation Fundraising Adoption of new behavior pattern

Source: Own elaboration

TYPES OF MARKETING RESEARCH

Marketing research can be classified based on its purpose and scope according to (Kinnear and Taylor, 2000):

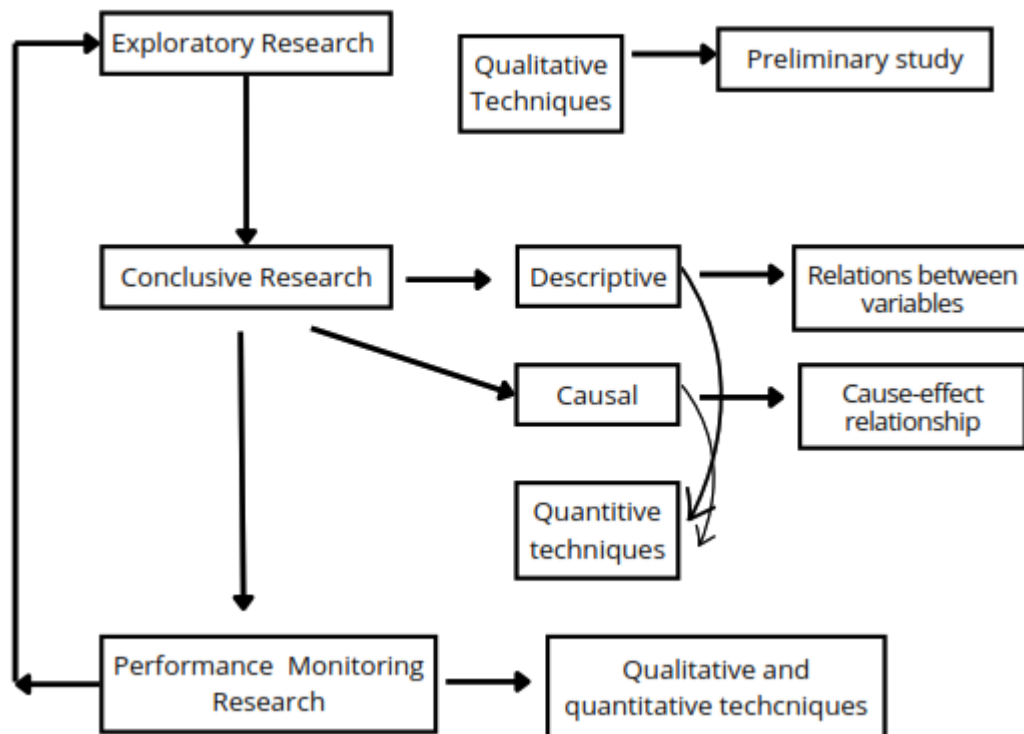
- **Exploratory Research:** As the name suggests, this type of research is used in the initial stages of an investigation to gather preliminary information, typically in a short amount of time. It is highly flexible and involves the analysis of secondary sources, as well as the use of qualitative techniques such as interviews with experts. Exploratory research is very useful when the problem under study is not clearly defined, and it helps identify possible courses of action if the research involves decision-making.
- **Conclusive Research:** This is a more formal type of research conducted based on a clearly defined protocol. It includes establishing objectives or hypotheses, determining a method of data collection, designing a sampling plan, and utilizing statistical techniques for data analysis. Conclusive research is commonly used to evaluate and select courses of action and includes techniques such as surveys, experiments, and mathematical models. Conclusive research is further divided into descriptive and causal research. Descriptive research, as the name suggests, describes the characteristics of a marketing situation and establishes relationships between variables. The majority of marketing research studies are descriptive. On the other hand, causal research aims to establish cause-and-effect relationships between variables.
- **Performance Monitoring Research:** This type of research is used to track and evaluate the performance of promotional programs, sales force, and distribution, among others. The types of research described above complement each other and allow marketers to gain a deeper and more comprehensive understanding of the

problem or phenomenon under study, as well as potential solutions. Thus, it is suggested to begin with an exploratory study to gain a clearer understanding of the problem, followed by a conclusive study to identify the most relevant relationships between variables, and finally conduct causal research to test cause-and-effect relationships, which often involves experimenting.

Finally, as indicated earlier, performance monitoring research will determine the efficiency and effectiveness of the implemented courses of action, serving as a basis for future exploratory research. Figure 1 graphically illustrates the relationship between these types of research and the most commonly used techniques in each of them.

FIGURE 1

TYPES OF MARKETING RESEARCH



Fuente: elaboración propia a partir de Kinnear y Taylor (2000)

QUALITATIVE AND QUANTITATIVE TECHNIQUES IN MARKETING RESEARCH

Once the types of research have been identified, a general description will be provided of the qualitative and quantitative characteristics techniques for gathering information, from the perspective of marketing research. Qualitative research is characterized by attempting to understand the behavior of consumers or users, while quantitative research allows for more precise measurement and/or validation of the extent to which a variable, relationship, characteristic, or attribute is present in the phenomenon under study. For example,

qualitative research may aim to identify possible market segments for a product, while quantitative research may estimate the size of those segments.

Table 2 presents the most significant differences between qualitative and quantitative research, allowing us at the same time to understand the role each plays in studying a particular marketing problem, the scope in terms of internal and external validity, the type of information to be obtained, and the research skills required for each.

TABLE 2

CHARACTERISTICS OF QUALITATIVE AND QUANTITATIVE RESEARCH

	QUALITATIVE TECHNIQUES	QUANTITATIVE TECHNIQUES
Objective	Detect new concepts, ideas, applications; identify unmet needs; identify preliminary relations; courses of action; define a problem; formulate hypotheses; obtain preliminary information.	Measure the size, intensity of an attribute, relation, variable; statistically validate a relation, a hypothesis; develop a forecast.
Type of research	Exploratory	Conclusive
Representativeness	Small samples	Large samples
Analysis	Subjective, content	Descriptive and inferential statistics; experimental design.
Questions	Open-ended	Mainly closed-ended
Questionnaire type	Indirect unstructured; indirect structured	Direct structured
Time	Short duration	Longer duration
Scope	Limited to study participants	Broad, inferences can be made
Flexibility	High	Medium
Required researcher skills	Specialized training in qualitative techniques; group management; interpretation of texts, observed facts, testimonials, and orally expressed opinions.	Specialized training in statistical analysis; data handling; and interpretation of statistical results.

Source: Own elaboration based on Hair, Bush, and Ortinau (2010)

The choice of technique to use is primarily based on the marketing problem to be solved, the research objectives, time constraints, and available resources. For example, Table 3 presents the type of research that would be most suitable based on the researcher's objective. As can be seen, in many cases, qualitative and quantitative techniques complement each other. As mentioned earlier, the researcher's ultimate goal will determine the choice of research approach(es).

TABLE 3

TYPE OF TECHNIQUE TO USE BASED ON RESEARCH OBJECTIVE

QUALITATIVE TECHNIQUE	QUANTITATIVE TECHNIQUE
Identify attributes for developing new products.	Estimate the market size of a new product.
Identify variables to develop measurement scales for attitudes, preferences, and satisfaction.	Construct scales and measure attitudes and preferences, and satisfaction.
Determine criteria for market segmentation.	Estimate market size.
Identify variables for constructing models on consumer behavior-	Construct mathematical models on consumer behavior
Develop the concept, image, and positioning of the product.	Measure brand awareness and the effectiveness of its positioning.
Preliminary evaluation of marketing strategies.	Monitor the performance of marketing strategy.
Directly understand consumers' purchasing and usage habits.	Estimate the potential of new market segments.

Source: own elaboration

QUALITATIVE TECHNIQUES

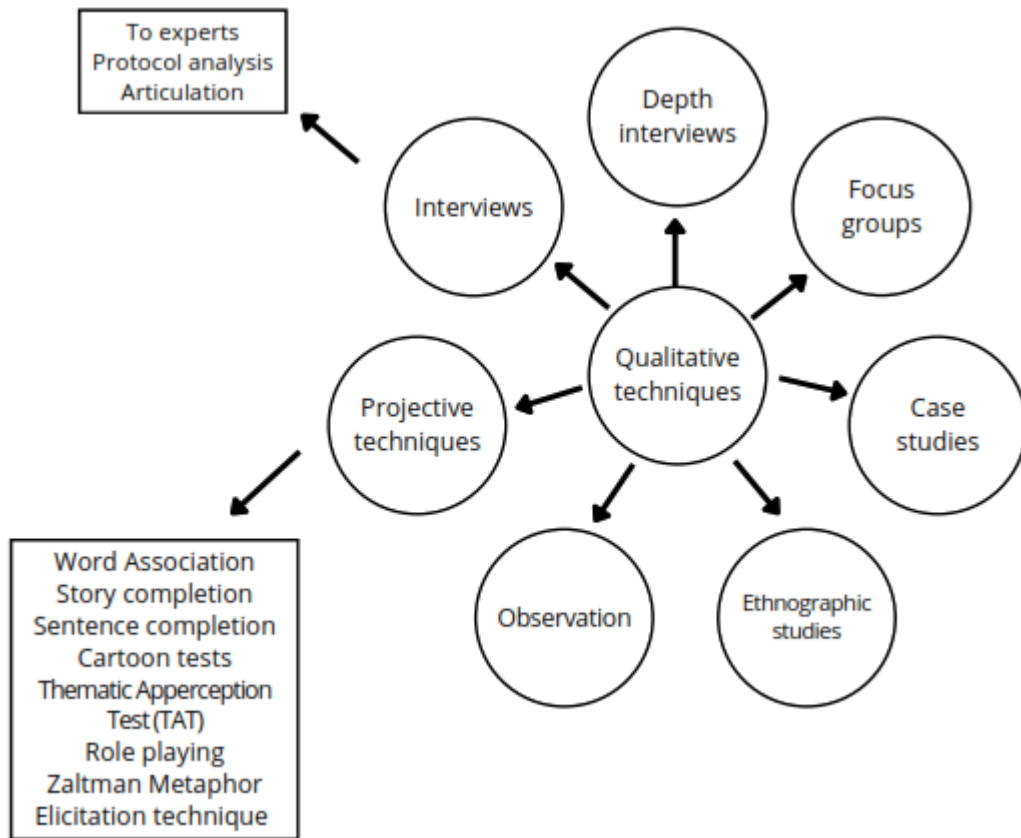
There is a variety of qualitative techniques available to marketing researchers, with some of the most commonly used being focus groups (focal) and in-depth interviews. However, as shown in Table 4, researchers have a range of options to consider when addressing a problem. One aspect to consider when selecting one of these techniques is that the type of information obtained should be useful in the context of marketing decision-making.

Particular mention should be made of virtual qualitative techniques, which represent unprecedented opportunities for gaining in-depth knowledge of consumers or users. These techniques are outlined in Table 5, where it can be seen that not only have some techniques been adapted to the virtual environment, for example, the focus groups, but others have also emerged, such as image and video-based diaries, and tools supported by apps.



TABLE 4

MOST USED QUALITATIVE TECHNIQUES IN MARKETING RESEARCH



Source: Own elaboration

TABLE 5

VIRTUAL QUALITATIVE TECHNIQUES

Social media research: Pinterest
Online research communities
Online bulletin Boards
Online focus groups
Diaries, digital journals, and blogs
Image and video-based diaries
Webcam groups/interviews
Mobile device research:

Text messages (SMS)
 Voice messages
 SMS and voice message-based tools
 App-based tools

Source: Own elaboration based on Nash (2012)

QUANTITATIVE TECHNIQUES

The most used quantitative techniques in marketing research encompass three major groups: surveys, attitude measurement, and experimental design, which offer a variety of modalities as shown in Table 6.

TABLE 6

QUANTITATIVE TECHNIQUES MOST COMMONLY APPLIED IN MARKETING RESEARCH

Surveys	In-person Landline and Mobile Phone. Traditional Mail. Online: Email, Internet. Social Media
Attitude Measurement	Graphic Rating Scale Rank order Scale Paired Comparison Scale Constant Sum Scale Fractionation Scale Semantic Differential Stapel Scale Likert or Summated Scale
Experimental Design	Pre-Experimental Designs <ul style="list-style-type: none"> • One-shot design • Pretest-posttest design with one group • Static Group Comparison True Experimental Designs <ul style="list-style-type: none"> • Pretest-posttest design with Control group. • Solomon Four-Group Design • Posttest-Only Design with Control Group Quasi-Experimental Designs <ul style="list-style-type: none"> • Time-series Experiments • Nonequivalent Control Group Design

Source: Own elaboration

The choice of quantitative technique will again be influenced by the study's objective, with surveys or attitude scales being most used for descriptive studies, and experimental design being used to test causal relationships.

INTERACTION BETWEEN QUALITATIVE AND QUANTITATIVE TECHNIQUES IN THE DEVELOPMENT OF SOCIAL MARKETING RESEARCH

As mentioned earlier, when conducting a marketing study, the researcher determines the type of project it will be, as well as the information collection technique to be used to achieve the study's objectives. On many occasions, this involves using both qualitative and quantitative approaches to gain a deeper understanding of the problem under study and to validate the results of previous stages. To illustrate how both types of techniques interact, the following sections present the development of a study carried out by the authors in the field of social marketing (Paredes and Velázquez, 2011a and 2011b).

Problem Statement

Childhood overweight and obesity have become a public health problem in Mexico. Consequently, the Ministry of Health (SA) and the Ministry of Public Education (SEP), along with representatives from the public, social, and private sectors, signed the "Agreement determining the general guidelines for the sale or distribution of food and beverages in school consumption establishments of basic education" on January 25, 2010. They committed to implementing the strategy against overweight and obesity. Based on this agreement, the "Simplified document of guidelines for the sale of food and beverages in schools and its Single Annex" was developed, distributed in public and private schools at the basic level nationwide, and became mandatory in January 2011.

From this issue arose the following initial research question:

What is the level of knowledge and application of the general guidelines for the sale or distribution of food and beverages in the consumption establishments of basic education schools in Mexico City by the actors involved?

Exploratory Research

To gain a better understanding of the issue under study, the first step was to design an exploratory study (Paredes and Velázquez, 2011a) with the objective of: Obtaining preliminary information about the importance that school authorities and parents attributed to the problem of childhood obesity, as well as the level of knowledge and application of the guidelines.

To collect information in this initial phase, a qualitative technique was selected. Thus, 40 in-depth interviews were conducted, 20 with school authorities and 20 with parents from both public and private schools in Mexico City. For this purpose, topic guides were prepared for both authorities and parents. This study was complemented by observation of the products available for sale in the schools where interviews with authorities were conducted.

The qualitative study allowed the authors to expand their understanding of the application of the guidelines and to identify the actors involved more precisely. Based on the results and conclusions of the qualitative study, it was deemed necessary to conduct a quantitative study targeting parents.

Conclusive Research


Based on the results and conclusions of the qualitative study, the objectives of the quantitative study were defined, and hypotheses were formulated. This second phase of the research comprised (Paredes and Velázquez, 2011b):

- Designing a sampling plan, which began with defining the universe, consisting of parents of children attending primary school in both public and private schools in Mexico City. The sample consisted of 1,250 parents from the Azcapotzalco, Benito Juárez, Coyoacán, and Iztapalapa Delegations. Cluster sampling was used to select the sample.
- Designing a structured direct questionnaire to be administered through personal interviews. The information obtained in the qualitative study, through in-depth interviews with parents, served as a starting point for designing the questionnaire, which underwent a pilot test before its application to the sample.
- Processing and analyzing the information, estimating measures of central tendency.
- Testing hypotheses using the χ^2 test.
- Developing statistical tables and graphs.
- Formulating conclusions.

Among the results obtained, it is noteworthy that according to the information provided by the parents, children's diets at home include the foods that a child should consume, which is somewhat contradictory given the levels of overweight and obesity. To clarify this situation, a recommendation derived from this study is to conduct focus groups with parents. Additionally, it was detected the convenience of carrying out quantitative research targeting children to have a more comprehensive understanding of the issue under study.

CLOSING REFLECTIONS

While there may be a tendency to prioritize the use of a particular type of technique for gathering information, both qualitative and quantitative approaches address specific and different information needs, and in many cases, their joint application allows for a more comprehensive approach to the issue under study. Indeed, as seen in the example provided by the authors, the researcher's objective determines the type of technique to be used at each stage of the research project.

In the case of marketing research, there is a tendency to equate research with surveys, when in reality, there are multiple approaches to studying a problem. In this regard, it is advisable to consider the various qualitative and quantitative techniques in light of the problem under study before determining which one to use. 



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