The Quantitative-Qualitative Controversy in Marketing Research

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**Abstract**

A critical point in the process of establishing a research methodology is represented by the choice related to the type of analysis that should be used: quantitative or qualitative. The arguments in favor of quantitative or qualitative research have been the subject of a large number of scientific articles. The difference that can be made between the two research methods refers to each article’s technical specificity and style. In a marketing research, in order to respond to the requirements of validity and reliability, the quantitative and qualitative methodologies should be correlated so that the problem is resolved in a logical way.

**Key words:** quantitative research, qualitative research, validity, reliability, trustworthiness

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1. Primary concepts

According to the selection method and the nature of the information, the marketing research can be [1]:

- **Quantitative research** – leads to quantitative results (statistics), using a series of specific techniques: surveys based on questionnaire, market investigations or panels;
- **Qualitative research** – identifies consumer’s attitudes, perceptions and motivations, offering precise explanations pertaining to their behavior and decisions (the results cannot be directly measured from a statistical point of view and also cannot be extrapolated for the entire population. It is an exploratory research or one that regularly precedes a quantitative study adding new information. The techniques employed in a qualitative study are: free or individual dialogues; focus groups; projective tests (the exposal of the subjects to stimuli that make them project their needs, motivations, preferences or intentions); associative tests (word association or filling in a phrase, a story or a drawing); experimental tests (allow the measurement of the interest manifested by a person towards a product, advertising or subject).

The origin of the qualitative approach comes from the historian Grambattista Vito in the second half of the XVIII century. He considered that through “intuitive understanding” people can only understand each other. Sociologists claim that the intuitive experiment and the use of empathy have been the basis of major discoveries in this field [2].

Qualitative research allows a better understanding of the investigated marketing phenomenon, without the use of quantitative research or quantifications. For example, a quantitative research study can identify the statistically significant differences among the people who use a certain product in comparison to the ones who don’t use it or uses it less. On the other hand, a qualitative research study offers information about the consumer’s attitudes towards a product or related to the motives that make a client buy a certain product [3].

Quantitative research uses numbers and statistical methods for testing research hypothesis. The results of this kind of study
can be easily generalized.

According to the type of information generated by a certain study, the specialists make a difference between quantitative and qualitative research.

Taking into account the nature and content of the information, these can either be quantitative or qualitative [4]:

- **Quantitative information** refers to observing the consumer’s general behavior in the marketplace. The important aspects speak about the awareness of the products and brands, the bought quantities, purchase locations and the ways of informing about the products. This information is the answer to the “how?” and “how much?” questions and can be considered relative, objective and controllable.

- **Qualitative information** refers to the individual’s behavior and is usually obtained by answering the “why?” question. Opposed to quantitative information the qualitative one has a strong subjective nature. In this category one can include motivations, perceptions and arguments.

The results of a quantitative research can be enriched using the instruments of a qualitative research. Dubois and Jolibert, (1993) consider that the two types of studies are correlated and not opposed.

Emilio Bartezzaghi (2007) states that the problem doesn’t consist in establishing which type of research is the best but to determine which is the most suitable method in a certain decisional situation taking into account the purpose of the research. The quality of a research project and its results don’t depend on the proportion of the quantitative or qualitative methods used, but on the coherence of their implementation.

The difference between the two types of research can be, however, made for theoretical purposes [5]. Therefore the objective of a qualitative research is to understand a certain market phenomenon in order to identify the consumer’s motivation. In the case of the quantitative research the goal is to quantify the information and to generalize the results for the entire target population.

The analyzed sample in a qualitative research is made out of a small number of cases whereas in a quantitative research one can process the data obtained from a large number of subjects [6].

The data analysis in a qualitative research is a content, subjective and interpretative one, while the quantitative research uses statistical methods.

The results of a qualitative research means understanding a marketing phenomenon, while by using qualitative methods one can recommend a way of acting [7].

The qualitative research is an exploratory study and the quantitative research uses descriptive and causal methods.

### 2. Quantitative versus qualitative - literature review

The relevant aspects identified using qualitative methods are defined and characterized exactly by means of quantitative research. Groucut (2006) states that quantitative research becomes absolutely necessary when we want to know and quantify the market segments for goods and services that are in the growth or maturity stage and the way in which consumers define the position of goods and services in the marketplace.

Dubois and Aroujo (2007) consider that qualitative research methods are not better than the quantitative ones. They emphasize that the way in which researchers highlight the theoretical aspects of every subject is very important in choosing the proper research method.

Damien McLoughlin (2007) has a different point of view related to the controversy between quantitative and qualitative. The arguments of this debate represent a starting point in making a “very interesting” research with the purpose of enriching the state of knowledge in a certain field. The author analyses the opinions of some Purchasing Supply Management specialists and considers that the studies which use quantitative methods thoroughly statistically tested are more difficult to implement and not always used as references for other studies [8]. On the other hand qualitative studies contain ideas and concepts that raise our interest, invite us to dialogues and can influence the reader’s way of thinking [9]. The author considers that
qualitative studies are used more as references and are more often cited in other articles.

Wilson and Natale (2007) think that the distinction between the two methods is so evident that any attempt to separate the two can become useless in certain cases. The methodology that stands for the research comes from the research question. According to the author’s opinion the so called distinction between qualitative and quantitative has only the purpose of prejudging the work models and procedures which should be left “opened”.

Authors support their opinion according to which the distinction between quantitative and qualitative has no sense using an example: if you want to find out if A loves B, you can count how many times he calls her honey (even if he had done this when he was angry) or you can count how many times they walked or danced together (quantitative research). This statistical information can be relevant when it helps identify the link between “true love” and these three activities (qualitative research). Therefore the quantitative information is useless without being interpreted.

The qualitative-quantitative research paradigm dates back to the philosophical thinking of the XX century [10].

Qualitative empirical studies are part of a positivist traditional research frame. This frame focuses on the development of valid theories for the studied population.

Quantitative studies use constructivist and naturalist approaches (Lincon and Gruba 1985), interpretative (Smith 1983) or post-modern perspectives (Quitz, 1992) [11].

3. Validity and reliability in quantitative and qualitative research

There are certain differences in estimating the quality of a quantitative study in opposition to a qualitative one.

In the case of qualitative studies Guba and Lincon (1985) used the notion of “trustworthiness” in order to evaluate the quality of the research. This concept has four attributes: credibility, transferability, dependency and certainty.

In the last two decades the concepts of validity and reliability in a qualitative research have been replaced with evaluation and criteria standards for the impact of the significant relevance and the utility of marketing research [12].

Validity refers to the accuracy of the representations and generalizations made by the researcher and to the authenticity of his statements written in the research report [13].

In the results of a research study, reliability appears when these results are the same as in the case in which the analyzed situation repeats itself [14].

The “validity and reliability” terminology is used for the studies conducted in Great Britain and Europe [15]. In North America there are a few authors who agree that this terminology should be extended to qualitative studies because the ultimate goal of research is to generate credible and plausible results [16].

When appreciating the quality of a qualitative study we use the concepts of “internal validity”, “external validity” and “objectivity” [17].

4. Conclusions

Both the quantitative and the qualitative research should be correlated in a study and they must contribute to generating valid and reliable results. The differences between the two research methods are theoretical and refer to the objective, sample, data analysis, research results and the type of research.

In the marketing literature authors have almost the same opinion regarding the theoretical differentiation criteria. When choosing the analyzed method, the type of qualitative or quantitative information that the researcher has at his disposal is very important.

Apparently the qualitative research is more often cited because it is easier to read. At the same time the quantitative research is offering a greater amount of information and is more strictly structured [18].

At the basis of the qualitative-quantitative controversy lie totally different philosophies. The essence of qualitative research is to present life as it is lived [19]. The qualitative researchers watch people in their environment and interact with them in certain conditions. They consider that the best way to understand a phenomenon is to get into it [20]. They state that the quantitative research is limited and it analyses people in an
artificial environment, seeing only a part of the reality. They argue that human experience cannot be described by using numbers or explained by controlling, measuring and manipulating variables.

Qualitative researchers demand flexibility. Instead of doing a structured study which contains fixed questions and answer categories, they allow questions to appear and to be modified as they become more and more familiar with the subject [21].

On the other hand, the base principal of the quantitative philosophy is represented by the objectivity obtained by enumerating, adding and causality. Kerlinger states that “there is no quantitative information. Everything is either 1 or 0”. Knowledge means measuring, cause and effect and reduction.

The design of a quantitative research is a detailed plan using predetermined hypothesis. The use of sampling statistic techniques for questioning representative samples allows the extrapolation of the results for the entire population.

Quantitative researchers pride themselves that they are not bias, analyzing the subject objectively. They criticize the qualitative researchers, accusing them of being bias and influenced by the prejudged opinions of the researchers and of the study participants. The excessive particularity and the analysis of a certain questioned subject without establishing connections with broader situations are also criticized by the quantitative researchers.

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5. References
