The use of Triangulation as a tool for validation of data in qualitative research in Education.

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1 Abstract

The process of Triangulation of data has over the years expanded its collaboration in qualitative research, mainly by the adhesion of several researchers and scientists who are dedicated to the field of research in Education. Known mainly for its ability to combine different methods of data collection, Triangulation has consolidated itself as an effective tool for both textual analysis and empirical data analysis, grouped into its different universes. In addition to its traditional use, this resource has also been used as a viable instrument for the validation and comparison of data collected in field studies, qualitative, which lack reliability and checking, when dealing with collections involving structured interviews or semistructured.

The field of qualitative research, which deals with data validation, has a wide debate about its assumptions, ranging from theories of use of quantitative methods to qualitative research, the use of mixed methods, to discussions that purge any perspective of validation for qualitative data. In view of this situation, the Research, Education and Technologies Group of Tiradentes University (GPETEC), in the state of Sergipe, Brazil, has developed in recent years successful experiences in the field of validation of research data in the field of Education and its Technologies, using triangulation as a way to promote greater reliability to the inputs obtained from various sources of data collection, such as case studies, focus group research, systematic observations, bibliographic data comparison, and so on.

Triangulation is one of the analytical procedures for the interpretation of qualitative data, which can be used in three different dimensions, depending on the context in which it is used, and thus has conceptual differences, which can lead to misunderstandings in its interpretation and understanding. According to Coutinho (2011), in a first dimension, Triangulation is used for evaluation applied to programs, projects, disciplines, etc. In the evaluation process, its conceptualization becomes comprehensive and complex, encompassing different variables, among them, the need to have external evaluators, in addition to the internal ones, and that, preferably, they are of different formations, allowing the combination and crossing of multiple points by sight. In a second dimension, related to data collection, Triangulation allows the researcher to make use of three or more techniques, with a view to expanding the informational universe around its research object, using, for example, focus group, interview, questionnaire application, among others. In a third dimension, we have the use of Triangulation to analyze the information collected. In this sense, the technique predicts two distinct moments: validation and confrontation.
These two moments are articulated dialectically, favoring a perception of totality about the object of study and the unity between the theoretical and empirical aspects, being that articulation responsible for printing the character of scientificity to the study, and, finally, to confer information security collected, analyzing and excluding external factors that may have interfered during the data collection process.

Galeffi (2015) analyzes, in the contemporaneity, the reliability of the variables as a movement of consistency of the qualitative research, believing that this is the only way to obtain a Scientific Rigor, so that it is possible to reveal its usefulness and its generative dynamics in the living fabric of current existential relations, according to specific contexts and favorable material and educational conditions. Validity in qualitative research is a delicate field, discussed and interpreted by several researchers as a challenge to be overcome by scientists in this field.

In the area of Education, for example, validation of data and collected data and confirmation procedures for these data may result in the development of misguided pedagogical plans, and time wasting to complete analyzes and diagnoses. Creswell (2017) treats data validation in qualitative research as the ability to know whether a given object and set of subjects can obtain important and useful inferences from the comparison of these data.

The three traditional forms of validity to be sought, through Triangulation, are: content validity, preventive validity, and construction validity.

The validity of content, applied especially for bibliographical investigations, is based on the assembly of specific comparative tables, called analytical tables, that favor the brief visualization of the information, in a single space, allowing the researcher to identify the divergences or convergences of the various authors researched The preventive validity, especially applied when the data collection is done through interviews and questionnaires, is the one in which certain characteristics of the group studied are previously raised that may interfere with their responses.

Thus, for the preventive validity, it should be used in the questionnaire wild questions that intends to verify this aspect. The validity of construction is the use of the crossing of several data collection means, such as interviews and observations, and the dialogue of the results found with the studied group itself. In this model of validation, Triangulation is only conducted by the researcher, insofar as the data collected are confirmed or not by the hearing and debate of the group studied, which in this technique can identify several research deviations, the group's lack of understanding of the objectives and real implications of the proposed study. Thus, Galeffi (2015) believes that Triangulation is consolidated in contemporary times as an effective resource in the conduction of tensions that present valid solutions to the science of Education, allowing the approximation of an epistemological understanding articulated in segmental totalities, in the whole and in the parts, or moments of totalization in the levels of constitution of the lived research experience.

Thus, in this study, the researchers of the Research, Education and Technologies Group of the Tiradentes University (GPETEC), analyzed through a research carried out by a graduate student, where, during the elaboration of his thesis, he used Triangulation in his three (Validity of Content, Preventive Validity and Construction Validity), and verified the collaboration of this resource for reliability in the process of analysis of variables carried out in public and private educational institutions in Brazil, and greater safety of the researcher when producing inferences regarding the study.

**Keywords:** Triangulation. Reliability. Variables. Research method.
References

