



EVALUATION INSTRUMENTS: FROM CREATION TO VALIDATION AND APPLICATION

INSTRUMENTOS AVALIATIVOS: DA CRIAÇÃO A VALIDAÇÃO E APLICAÇÃO

INSTRUMENTOS DE EVALUACIÓN: DE LA CREACIÓN A LA VALIDACIÓN Y APLICACIÓN

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The purpose of the book *Construção e Validação de Instrumentos de Avaliação: da teoria à exemplificação prática* is to present products from the Graduate Program in Evaluation (PPGA) of the Cesgranrio Foundation. With a multidisciplinary characteristic, the program is aimed at different graduate professionals and its area of concentration is the evaluation of systems, programs, and institutions. The PPGA, approved by the National Board of Education in 2008, is structured as a professional master's degree, and its curricular requirement is the elaboration of an intervention project capable of being guided by a problem defined from a social space to which it intends to improve reality. In this sense, the work offers elements for the reader to explore aspects related to different diagnoses involving public policies, services and actions considered essential to the elaboration of the project.

The work, organized by Professors Drs. Ligia Gomes Elliot - current coordinator of PPGA - and Lúcia Regina Goulart Vilarinho - a full professor in the program - presents the development of studies and research focused on the theme of Evaluation, an innate human action that makes it possible to judge, adding value to something.

The works compiled in this work culminated in the proposition, revision and/or validation of evaluative instruments, applied in different researches. Such instruments are used in several fields of action (health, social projects, and education, for example). The intention is to demonstrate the wide range of possibilities of this work and the consequent necessary action to validate and re-evaluate instruments for data collection. Attending to the title of the book, it is possible to get to know aspects of the theory behind the theme, as well as explore the components that surround the planning of the work, the application of the instruments, the evaluation, and the feedback of the results.

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Each chapter of the work deals with different research. Thus, it is possible to get to know different studies, produced between 2015 and 2016, and their authors are graduates of PPGA. As premise of professional programs, the researches present a proposal of intervention to a real situation. The work is divided into an introduction followed by seven chapters.

In chapter one, Lúcia Vilarinho presents a theoretical review on evaluative instruments. Titled "Validity and reliability in evaluative studies: a theoretical review", the author promotes dialogues with other authors to corroborate the chapter's intention, which is to give reliability to the process of application and validation of evaluative instruments. It is possible to follow the explanation about the legitimacy of qualitative research involved in the use of instruments such as questionnaires, measurement scales, and checklists, among others. The text explores the specificities between two distinct actions (the action of evaluating and the action of researching) as well as exploring definitions for validity and reliability. It is based on the following authors: Martins (2006); Paiva Júnior, Souza Leão and Mello (2011); Ullrich (2012) and Basso Júnior (2015).

The following chapter (2), written by Renata Melo Nascimento (Master in Evaluation) and Andreia Ferreira de Oliveira (Post-doctorate in public health - epidemiology), is about research to update the instrument Post BMT Nursing Consultation, applied to patients in the period after the procedure of Bone Marrow Transplantation (BMT). In use since 2000 in a federal public hospital in Rio de Janeiro, an institution specialized in the procedure in question, the nursing consultation instrument aims to monitor the evolutionary process soon after the patient undergoes BMT. After 15 years of use, with technological and therapeutic advances, the patient follow-up tool needed updating and new validation (which motivated the development of this research). The general objective of the research is to adapt the instrument to the present time and to attend the patient in his particularities, personalizing a listening that offers specificity in each post-surgery process. In the article it is possible to follow the stages of revision and validation of the instrument, its application, and results.

Another evaluative instrument, researched in the health area, is offered in chapter 3. Titled "*Lista de verificação para avaliar ambiente e cuidado seguro em hospitais: atualização e validação*", the authors Ana Paula D'Oliveira dos Santos (Master in Evaluation) and Glauco da Silva Aguiar (Doctor in Education), present the research they developed based on checklists used to promote safety in hospital procedures (from hygiene to complex medical procedures). The chapter begins with theoretical questions about patient safety and procedures to be adopted to avoid failures in hospital environments. Then, a *check-list* is presented, in *check-list* format, used by professionals working in hospitals (mostly nurses) for the maintenance of processes





developed in that environment. Finally, the methodology for reviewing and validating the checklist, the object of the research, is presented. It is worth pointing out that the research culminated in a new proposal for this checklist, based on the research "findings" in line with the legislation that regulates the health service. In short, the final product is composed of 34 items divided into 5 categories (1 - prevention and control of hospital infection; 2 - waste management; 3 - high surveillance drugs and controlled substances; 4 - environmental organization and; 5 - worker safety).

Chapter 4 describes an evaluation tool for social projects, its formulation and validation proposed by the chapter's authors (Luciane Pires da Silva - Master in Evaluation and; Ligia Gomes Elliot - Post-doctorate in Education/Evaluation). The instrument aims to evaluate social projects focused on Education and it is used by Petrobras managers in technical visits to projects supported by the state company's Socio-environmental Program. The chapter begins with a brief history of the program and the company's social action. Next, there is the presentation of studies on the literature that subsidizes the theme "Social Projects", proclaiming a chance for the action of evaluators in the area. The research meanderings are reported in the sequence with the presentation of the instrument and its validation process, which went through the criteria of: 1 - uniqueness; 2 - clarity; 3 - no overlapping; 4 - comprehensiveness; 5 - relevance; 6 - organization and; 7 - graphic layout. The instrument is presented in detail at the end of the chapter.

The construction of an evaluative instrument for didactic material is the theme of the research presented in chapter 5 of the book. Developed by Lúcia Regina Goulart Vilarinho (Ph.D. in Education) and Alexandre Ferreira de Oliveira (Master in Evaluation and Undergraduate in History), its objective is to "build and validate an instrument to be applied in the evaluation of contents related to the presence of Black people and related subjects" in books used in the discipline of History during elementary school. The chapter begins by presenting aspects of the National Textbook Program (PNLD) and discussing the valorization of Black people and afro-descendants in the educational context. Next, the research discusses the legislation that regulates the National Curricular Parameters (PCNs) and the Law of Directives and Bases of National Education (LDBEN). The stages of the study and the instrument (from its formulation, formatting, and validation) are presented in the chapter.

The master's research: "*Avaliação da fluência tecnológica de alunos de curso de graduação à distância*", developed by Margareth Braz Ramos to obtain her master's degree, is the theme of the sixth chapter of the work, written in conjunction with Professor Dr. Lígia Silva Leite. The work proposes to share experiences coming from a questionnaire applied to students



of the courses of Pedagogy and Tourism, in the distance modality, in a public institution of Rio de Janeiro. Unlike the other chapters, the authors begin their writing emphasizing the theme of evaluation and the development of instruments. In the sequence, an instrument is detailed that aims to verify the technological fluency of students who dedicate themselves to distance learning (which necessarily requires greater use of technological digital media for success). The instrument has indicators that determine the technological fluency of the target audience. As examples we can cite: the ability to use technologies; the ability to give and receive *feedback*; and the ability to access e-mails and websites, among others. The validation process of the questionnaire, and its stages, are also described in the chapter. At the end, the results and analyses arising from the application of the questionnaire are presented, followed by the final considerations.

Chapter seven (7), written by Lúcia Vilarinho, was dedicated to the closing of the work with special attention to the validation procedures of the instruments developed in the researches presented. A collection of relevant information is made for the development of each work under Vilarinho's external view, with special attention to the intention of claiming that all validation processes are following the existing literature on the subject. Vilarinho also points out, for each research described in the work, the importance of the Criteria Framework for the evaluation of all the instruments formulated or reviewed in the scope of the selected researches that make up this work. It discusses the path taken by all researchers in the intention of validating the proposed or revised instruments: the consultation with experts. The literature review on evaluation points to the importance of knowing what and how to measure the object to be analyzed. And, in this approach, consulting experts to develop the instruments promotes their validation.

The work, in general, presents the importance of validation for evaluative instruments besides corroborating the intention that evaluating is a human action that contributes to the improvement of the work developed in several areas of society. Presenting the theory and showing its applicability reminds students and readers of the success of those who use the action of evaluating to guide their professional activities, for example. Another point to highlight is the importance of the proposals of interventions that the students of professional *stricto sensu* programs present. The university-society connection must be continuous, in mutual collaboration for the development of research and the forwarding of decision-making based on scientific data.



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