

# On the Research Methodology of Education Sciences

*Darvai Tibor\**

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Csíkó Csaba (2020). *A neveléstudomány kutatómódszertanának alapjai*. ELTE Eötvös Kiadó.

The classical fields of educational science, didactics, educational theory, and history of education have been developing dynamically, quantitatively and qualitatively. The same fact can be established about the new fields that slowly and gradually integrated into Hungarian educational science from the mid-1980s, such as educational politics and educational sociology (Nagy, 1997; Sáska, 2018). However, research methodology seems to be a little-frequented, "orphaned" area of educational science, at least from a publishing point of view. After all, only a few authors deal with this research area.<sup>1</sup> The classic work of the Hungarian educational science on research methodology is a volume edited by Iván Falus (1993) or Éva Szabolcs's work (2001), which deals with qualitative pedagogical research. Besides, we can highlight the

books by Kálmán Sántha (2006, 2009, 2022), who mostly deals with the qualitative paradigm. Also, in his works, Csaba Csíkó (2009, 2012), as the antipode of the former author, thinks more in the quantitative paradigm.<sup>2</sup> It is also worth mentioning József Kontra's volume of 2011 (Kontra, 2011). That is why it is gratifying that Csaba Csíkó's work on the methodology of education science was published by ELTE Eötvös Publisher (Csíkó, 2020).<sup>3</sup>

The author of the volume is a member of the József Nagy School,<sup>4,5</sup> though he wrote his peer-reviewed work as an instructor at ELTE TÓK. The volume was primarily written for university students. Still, it is also worth reviewing volumes for such a target audience since it is not unimportant what kind of knowledge is taught to students. At the same time, it is also possible that a student chooses a teaching-researcher career in educational sciences.

\* Adjunktus, Eötvös Loránd Tudományegyetem Bárczi Gusztáv Gyógypedagógiai Kar, [darvai.tibor@barczi.elte.hu](mailto:darvai.tibor@barczi.elte.hu)

1. This tendency is not only a feature of education science, but also of the science of history, since it is mostly Gábor Gyáni (2020) that is specialized in the methodology of the researches of history science.
2. I note that the volume of Csaba Csíkó (2009) dealing with the issue of sampling was also reviewed by the author of these lines (Darvai 2009).
3. It is worth noting that Csaba Csíkó also wrote the research methodology chapter of the new Didactics volume (Falus & Szűcs, 2022).
4. Csíkó published an article on the topic of metacognition in the József Nagy commemorative issue of *Iskolakultúra* (Csíkó, 2022).
5. From the point of view of the sociology of knowledge (Mannheim, 2000), it is worth noting that the reviewer is not a member of the previously mentioned scientific school, but belongs to the school of educational researchers. Accordingly, he wrote his review from this point of view.

The first chapter of the volume deals with the basic questions of educational research, including the place of educational science in the system of sciences, the characteristics of scientific cognition, and the quantitative-qualitative research paradigm. Csíkos imaginatively describes the relationship between education science and pedagogy with the analogy of medical science and healing, where the former helps practical action with scientific results. Just as in the relationship between education science and pedagogy, science delivers achievements in the direction of practical pedagogy – in a lucky case.

Csíkos correctly defines education science as a multidisciplinary science, and based on József Nagy, he argues that education science is "a system of knowledge and procedures for the development of human personality (Csíkos, 2020, p. 9)". Of course, this definition is relevant and legitimate at the same time, but it raises questions for a researcher coming from another scientific school. If the science of education is "only" the "science of dealing with the development of human personality" as defined by Csaba Csíkos, then it may be asked to which field of science the otherwise educational science fields belong that deal with the education system as a whole, its history or its sociology. The same is true for the researches that focus on the problems of education and economy. Csíkos's definition, in theory excludes educational sociology, education policy, and education economics from the field of education. It is certain that the volume's author does not think so, as he emphasises the relevance of the "scientific dialogue community" in several of his volumes (Csíkos, 2009). However, to avoid this, it would have been worth noting that there is a "narrower" and a "broader" definition of education science. The former thinks in the traditional fields of education science – the definition used by Csíkos – while the latter concept leaves a "broader" space for the sociological, educational political and educational economic approaches. It logically follows from all of this – from the narrower interpretation of educational science – why the terms education policy, education sociology or education economics are not included in Csíkos's volume. This hiatus can be called one of the problematic points of the volume, which consistently appears in the work.<sup>6</sup>

The novelty of this chapter is that, in accordance with international and indigenous trends, Csíkos deals with the ethical issues of educational research. Within this very broad area, the issues of references, plagiarism and forgery are also presented. Perhaps it would have been worthwhile to explain here the ethical requirement of anonymity, that is, that the data of persons participating in educational research (students, parents, teachers, etc.) cannot be identified and cannot be retrieved, although the principle of anonymity appears in the section dealing with empirical research.

In the second chapter of the volume, educational research strategies are presented. From a narrower interpretation of the definition of educational science, it follows that in Csíkos's systematics, educational history research, surveys, internet-based research, case studies, pedagogical experiments and action research are included here. As a result, it is challenging to include in these strategies such analysis of educational sociology or educational policy that examine the educational policy decisions of the period from the 2010s to the present day and their role in the reproduction or reduction of social inequalities. This finding is also true for educational economics research.

Another difficulty of this chapter is that the author of the volume, willingly or not, equates research on the history of education with the genre of document analysis. According to this, a researcher in the history of education is essentially a person who lives and thinks under the "enchantment of sources". Perhaps this statement should have been better minced. Probably here it is the most apparent – and this should not influence anyone

6. It is not by chance, and the dilemma is revealed, that the title of the official study volume of the National Conference on Educational Sciences shows the term "educational sciences" and not "educational science".

– that although the author is familiar with the wide spectrum of educational research, the field of educational history research is not a "home ground" for him, but rather an uncharted territory, if I may use these terms. It is methodologically difficult that, although Csíkos does not write it, in his interpretation, document analysis means source analysis and source criticism.

After the research strategies, Csíkos describes the methods of data collection, such as questionnaire, interview, observation and test method. As we mentioned earlier, it can also be said here that the classification is very logical and without contradictions as long as we proceed from a narrower interpretation of the science of education. After all, a typical didactic or educational theoretical research works with one of these methodologies. However, if we use the broader concept of education science, the situation is less clear. For example, we may ask where in these methodological categories we can place a multidisciplinary educational research work that is simultaneously a work of education policy, history of education and sociology of education. Although the author of the volume sees it clearly, he does not mention that there are also researchers that use several types of methods at the same time, for example, interview and questionnaire methods.

The data analysis methods chapter is structured on the logic of the qualitative-quantitative paradigm, where during the presentation, the focus seems to shift to quantitative, statistical methods, in contrast with the qualitative approach. One of the symptoms of this is that quantitative studies, correlation studies or the basic concepts of mathematical statistics were presented with the help of detailed examples. The author's scientific orientation probably appears in this shift as well. In the qualitative-quantitative dichotomy, the author classifies content analysis with the qualitative direction; otherwise, I note, correctly. However, it would have been worth mentioning that there is also a quantitative direction of content analysis (Neuendorf, 2001). However, it should be also noted that in Hungarian education science, the qualitative direction is more decisive (Sántha, 2022). It does not only apply to this chapter that it would have greatly increased the interpretive framework of the research if not only the foundations of the different methods are presented, but also the limits, advantages and disadvantages of each methodology.

In the last fifth chapter, the author discusses the structure of scientific publications. It is problematic in the sociology of knowledge that, although the author tries to avoid generalisation, he still seems to argue in favour of the structure of empirical research, willingly or not, in contrast with theoretical research. It is not by chance that problems arising from sampling are mentioned as an example of the limitations of research work. For example, the problem of the limitations of research is also a relevant issue in educational history research. Interestingly, the reference system is based on Kinga Gyöngy's research, but this work cannot be found in the reference list. Besides, it would have been worthwhile to mention at least the Chicago style in addition to the APA referencing system or explain the essence of the DOI.

As mentioned in the introessentially research methodology-centred volumes rarely appear in educational science, unfortunately, so it can be concluded that Csíkos' volume fills a gap.

As I mentioned several times during our analysis, Csíkos focused his words on the narrower and not the broader sense of education science. It was also mentioned that this could mostly be due to the sociology of knowledge. It also means that pedagogy is mostly a didactic or educational theory question and little of educational sociology or educational economics. Taking this logic further, the interdisciplinary-multidisciplinary data collection methods also become an exciting question since the broader interpretation of education science offers a greater opportunity to include relevant approaches from other sciences than the narrower interpretation offers.

Besides, reading the text, it can also be seen that Csíkos feels most at home in the quantitative paradigm, and this can also be seen from the fact that most of the practical examples are related to the quantitative and not the qualitative paradigm.

Reviewing the work of Csaba Csíkos and examining the title of his current volume, I suppose that it is quite likely that he will publish methodological papers which will probably not only expound the basics of research methodology but will be realised in a deeper and broader spectrum. I may hope that some of my comments will, if not be accepted, at least be considered.

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