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The New Ecological Paradigm Scale from the Perspective of the Pre-Service Primary and Preschool Teachers' Ecological Narratives²

Extended summary

The New Ecological Paradigm scale (NEP scale) examines the environmental view of the world and the results can be used for assessing the effectiveness of environmental education and planning future educational policies. Despite its widespread use, the scale is subject to criticism. In order to check the researchers' assumptions about the problematic nature of the statements in the scale, and encouraged by the broader context of the NEP scale application, we decided to conduct a qualitative research. The goal was to gain a better insight into the respondents' thoughts underlying their evaluations of the statements in the NEP scale. More precisely, we wanted to find out: 1) what kind of environmental narrative (pro-environmental, non-environmental or undefined) is reflected in the respondents' answers, and whether their responses in the scale and the respondents' environmental narratives in the interview are mutually consistent or not; 2) what characteristics of the claims expressed in the scale influence respondents' narrative in the interview. The sample consisted of the students of the Teacher Education Faculty, University of Belgrade. The NEP scale and the interview protocol were the instruments used in the research. After completing the NEP scale, a guided semi-structured interview was conducted on the reasoning underlying the respondent's evaluations of the statements in the scale. The research was conducted individually. The data were processed using the program for qualitative research MAXQDA 12. In the first part of data processing, for the

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purposes of conducting the 1st research task, in accordance with the principles of the deductive thematic analysis, the interviewees' narratives were classified into the pre-constructed categories: pro-environmental, non-environmental or unspecified. With the help of the program, by cross-checking the answers in the scale (neutral, NEP or DDP oriented), on the one hand, and the narrative in the interview (unspecified, pro-environmental or non-environmental), on the other hand, we determined whether there was a discrepancy between what the respondents had answered in the scale and in the interview. For the purposes of conducting the 2nd research task, that is, to detect the characteristics of the claims that influenced the narrative of the respondents, and in accordance with the principles of the inductive thematic analysis, we undertook the following steps: 1. content analysis of the transcripts; 2. creating codes; 3. unification of the codes that have a common meaning into appropriate categories. In the paper, we present a part of the results of a wider research. A comparative analysis of the responses in the scale and the respondents' narratives indicated a frequent discrepancy between these two categories of the responses in the 1st, 6th and 11th statements of the NEP scale. This means that there are respondents who remain "under the radar" of the NEP scale with their (un)environmental or ecologically indeterminate reasoning and arguments. The problematic nature of the examined claims is indicated by a large number of neutral answers in the scale, as well as environmentally vague narratives in the interviews of the respondents who (dis)agree with the claim in the scale, but are unable to argue their point of view in the interview. In other words, in all the mentioned cases, it was not possible to determine with the NEP scale the actual attitudes of the respondents regarding these claims. Using a qualitative analysis of the respondents' narratives during the conducted interviews, we identified the characteristics of the claims which are the basis of the mentioned problems. These include the absence of the environmental context (in the 1st claim), the vagueness of certain parts of the claim (in the claims 1 and 6), the complexity of the formulation (in the claim 6) and the problematic nature of the metaphor used (in the claim 11). The characteristics of the mentioned NEP claims that were identified in this research as problematic are of a linguistic-semantic nature and they led to a poor understanding and differences in interpretation. The results of the NEP scale have been used in our country and in the world, among other things, for the purposes of assessing the effects and efficiency of environmental education and for designing educational policy regarding this important educational concept. The identified problems in understanding three of the fifteen statements in this instrument question the validity of the scale. The results of the conducted research indicate that the data on the ecological views of the respondents collected by the NEP scale should be used cautiously for the stated purposes. The research, on the one hand, only included the pre-service preschool and primary school teachers and the fact is that the results of this research should be checked on a different sample of respondents. On the other hand, given that during their previous education they were in contact with environmental education, as well as they are professionally preparing to promote and implement the goals of this educational concept in working with the youngest population, the students of the Teacher Education Faculty are an ideal sample that can help us understand, by means of a review of the scale, its (potentially controversial) characteristics. The reasons identified by this research for the disputability of the claims in the scale in order to gain insight into the aspects of the environmental worldview of the respondents certainly raise the question whether the scale really reflects a

realistic picture of the environmental worldview of the respondents from any given population, at any level of education, regardless of the specialist profile for which they are trained. Since we covered the rest of the NEP claims in a broader research, before we reach more comprehensive conclusions, it is certainly necessary to process and analyze the remaining results. The results suggest that, in order to gain a more objective insight into one's environmental worldview, it is necessary to revise the disputed claims in the scale or use it in combination with an interview, given that the conversation with the respondents reveals their genuine environmental attitudes, reasoning, and values underlying their environmental worldview.

Keywords: NEP Scale, qualitative research, environmental education, primary school teachers, preschool teachers

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