Investigating of Preservice Elementary Teachers’ Environmental Self-Efficacy Perceptions in Terms of Various Variables

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Extended Summary

Purpose
Environmental education aims to raise awareness and inform all individuals about the environment (Güler, 2009) and to gain certain behavioral changes. Within the scope of these objectives, by creating a good self-efficacy perception in the environment, it will be ensured to raise generations more sensitive to the environment. Time is running against humanity day by day and depending on the time, the impact of people on the environment increases and differs from year to year and from region to region. The increasing number of problems in the environment becomes inevitable as a result of being insufficient on creating awareness about the environment. So that, it arouses curiosity how the result of Aydın’s (2008) study with pre-service elementary teachers (PET) changes or if they change or not. The aim of this study was to determine the PETs’ self-efficacy towards environmental education in terms of various variables.

Method
In the research, the survey design was used. The sample of the study consisted of 274 PETs who are studying at different grade levels (74 PETs from 1st grade, 72 PETs from 2nd grade, 65 PETs from 3rd grade and 63 PETs from 4th grade) of Bayburt University Faculty of Education Elementary Education Undergraduate Program. In this study, the convenience sampling method was used for sample selection. In order to collect data, Environmental Education Self-Efficacy Perception Scale (EESPS) which was developed by Aydın and Akar Vural (2009) was used. The EESPS consisted of four sub-scales as Academic Competence Perception - ACP, Responsibility Perception - RP, Instructive Competence Perception - ICP, and Guidance Perception - GP. The reliability of the EESPS was calculated again by researchers and the whole reliability of the EESPS found as .81. For subscales, the reliability was calculated and α was found as .85 for ACP and RP, .88 for ICP and .80 for GP. For the analysis of the data obtained from EESPS, firstly, normality analysis was performed, the Kolmogorov-Smirnov normality test was applied. Then, One-way ANOVA, Kruskal-Wallis, and Independent Sample t-test were used for significance analysis.

Results
In this study, PETs’ self-efficacy perceptions about environmental education were examined in terms of grade level and gender variable. In the first sub-problem of the study, self-efficacy perceptions of PETS about environmental education were examined in terms of grade level. Accordingly, no statistically significant difference was observed among the groups in terms of class levels (p > 0.05). Also, in the analysis in terms of sub-scales, there was no statistically significant difference in the perception of environmental self-efficacy of PETs according to grade levels (p > 0.05). In the second sub-problem of the study, self-efficacy perceptions of PETs about environmental education were examined in terms of gender. Accordingly, no statistically significant difference was determined between all male and female PETs at each grade level in terms of environmental education self-efficacy perception (p > 0.05).

Conclusion
Environmental education course is taught at the second-grade level and the fall semester in the elementary teacher education undergraduate program. Therefore, as the research was conducted in the spring semester, only the first-grade students who participated in the research do not have the environmental education course. In this respect, a significant difference was expected among the PETs who have environmental education course and those who do not have. However, there was no significant difference according to grade level. The lessons that the PETs have about the environment beforehand can be effective to arise in this situation. According to the sub-scales it was determined that PETs’ perceptions of academic competence, responsibility, instructional competence and guidance about the environment were similar. Similar results have been reported in Deniş and Genç (2007) and Karademir’s (2016) studies. Parallel to the results of this study, gender did not have an effect on environmental self-efficacy perceptions in Aydın (2008), Kahyaoğlu (2011) and Karademir’s (2016) studies.

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