

**PREDICTORS OF PRO-ENVIRONMENTAL BEHAVIOR: COMPARISON  
BETWEEN PRE-SERVICE TEACHERS AND 9<sup>TH</sup> GRADERS**

By

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**Abstract**

This study examined the extent to which environmental awareness; attitudes toward the environment, personal control, and faith in the power of science and technology to predict the willingness of preservice teachers and 9<sup>th</sup> from two cultures to engage in environmental behavior. Data were obtained from 264 Arab and 201 Jewish pre-service teachers and 364 Arab and 264 Jewish 9<sup>th</sup> graders. The data were collected by a questionnaire constructed for the purpose of this study. Results revealed that the examined variables predicted a smaller amount of the variance in the pre-service teachers' willingness to engage in proenvironmental behavior (27% and 26%, for Jewish and Arab pre-service teachers, respectively) as compared to 9<sup>th</sup> graders (43% and 40% for Jewish and Arab 9<sup>th</sup> graders, respectively). Other differences between the four investigated groups (Jewish and Arab pre-service teacher and 9<sup>th</sup> graders) were also reported and discussed.

**The Aims of the Study:** The general aim of the study was to determine factors which predict the extent of willingness of pre-service teachers and 9<sup>th</sup> graders to act for environmental protection. The predictor variables were: environmental knowledge, awareness of environmental problems, attitudes toward the environment, the belief in

the ability of science and technology to solve environmental problems, while the criterion variable was the willingness to act for environmental protection. Of particular interest in this was comparing the responses of Arab and Jewish pre-service teachers and 9<sup>th</sup> graders concerning the studied variables.

### **Method**

Data were collected from 201 Jewish (91.5% female and 8.5% male) and 264 Arabs (94.1% female and 5.9%) pre-service teachers enrolled in a major teacher training college in Israel. The 9<sup>th</sup> graders sample consisted of 364 Arab students and 187 Jewish students from four Arab and three Jewish schools in the central part of Israel. For the 9<sup>th</sup> grader group there was equal numbers of males and female.

### **Study Instrument**

The data was collected by a questionnaire which was constructed for the purpose of this study. The questionnaire included 10 multiple-choice items measuring factual knowledge ( $\alpha=0.55$ ) and 11 Likert-type items with 5 response points designed to assess the degree of participants awareness of environmental problems ( $\alpha=0.74$ ). The instrument also included 16 Likert-type items measuring attitudes toward environmental issues ( $\alpha= 0.87$ ). In addition the level participants' faith in the ability of science and technology to solve environmental problems was assessed using 9 Likert-type items ( $\alpha=0.84$ ). Seven Likert-type items were used to evaluate participants' perception of their personal control over the state of the environment ( $\alpha =0.69$ ), and 12 Likert-type items were included to examine the degree of willingness to engage in pro-environmental behavior ( $\alpha=0.85$ ).

### **Results and Discussion**

Results of path analysis revealed that the examined variables predicted a smaller amount of the variance in the pre-service teachers' willingness to engage in

proenvironmental behavior (27% and 26%, for Jewish and Arab pre-service teachers, respectively) as compared to 9th graders (43% and 40% for Jewish and Arab 9th graders, respectively). The most important predictors of willingness to engage in proenvironmental behavior for all participant groups were attitudes toward the environment and perception of personal control. Results also indicated that Arab pre-service teachers have shown greater level of environmental knowledge about and awareness of environmental problems, whereas Jewish pre-service teachers expressed higher willingness to act for environmental protection. Furthermore, the results have shown that Arab 9<sup>th</sup> graders possess more positive attitudes toward environmental issues and higher willingness to act for environmental protection than the Jewish 9<sup>th</sup> graders. Nonetheless, the Jewish 9<sup>th</sup> graders exhibited higher level of environmental knowledge. All groups of respondents were skeptical regarding the ability of science and technology to resolve environmental problems. Differences in the participants' responses from two age and two cultural groups were attributed to age (e.g., less experience) and cultural differences (e.g., different norms, needs, and skills).