Gender Differences in Environmentalism: A Case Study of Macedonian Students

Extended summary

This study focuses on the impact of gender on environmental worldview and concern. Environmental worldview can be defined as “the collective beliefs and values that give people a sense of how the world works, their role in the environment, and right and wrong behavior toward the environment” (Gillaspy, 2015: 1). Environmental concern is defined as “the affect (i.e., worry) associated with beliefs about environmental problems” (Schultz et al., 2004: 31). Social scientists are motivated to study environmental concern because if we are to move towards environmental sustainability, we need to better understand the environmental worldviews that influence resource consumption and pollution” (Castro, 2006: 248), as a relevant part of the “circumstances under which individuals and groups make decisions and enact behaviors that affect levels of resource consumption and environmental pollution” (Stokols, 1995: 828).

The following hypothesis was put forward: Because most studies comparing women and men on the revised New Environmental Paradigm scale (NEP) found that women scored higher than men, we expected the same. We used revised New Environmental Paradigm scale also known as the NEP scale developed by Dunlap et al. (2000). This 15-item scale uses a 5-point Likert scale to measure endorsement of an ecological worldview. Each item was measured on a scale ranging from 1 to 5: strongly agree (5), agree (4), neither agree or disagree (3), disagree (2), and strongly disagree (1). Agreement with the eight odd-numbered items indicates pro-NEP orientation, while agreement with the seven even numbered ones indicates pro-DSP orientation. The NEP scale was tested for reliability using Cronbach’s α. For the pilot study, Cronbach’s α for this scale was within acceptable internal consistency (.71).
The sample used in the final analysis consisted of 448 Macedonian elementary and high school students (193 or 43.1% boys, and 252 or 56.3% females). The schools were chosen for reasons of attainability and willingness to cooperate.

The principal components factor analysis (PCA) with varimax rotation was carried out in order to find out the existence of dimensions. In order to test the equality of two population (or treatment) means by examining the variances of samples that are taken, we used a hypothesis-testing technique or analysis of variance (ANOVA).

Mean total pro-NEP% of females and boys are almost identical (56.63% and 56.80%, respectively). The chi-square tests provided no support on 11 items for the hypothesis. Chi-square test results showed that females and boys significantly differ in 4 out of 15 items. There were significant differences of opinion on two statements at .05 level and two at .01 level.

There is no difference in worldviews of boys and females on pro-NEP statements ($\chi^2=0.267$). Although mean total pro-DSP% of females and boys are also almost identical (48.02% and 47.96%, respectively), there is marked difference in worldviews of boys and females on these statements ($\chi^2=21.71$, $p=.01$). Principal components factor analysis (PCA) with varimax rotation, showed four dimensions named “Balance of Nature”, “Humans over Nature”, “Anti anthropocentrism” and “Limit to growth”. There is a (statistically) significant difference among the population means (Mean female = 3.84, SD=0.61; Mean male = 3.71, SD=0.70) in terms of forth dimension (Limit to growth, $F (1.44) = 4.12$, $p<.043$).

Empirical findings suggest that no firm and clear conclusions can be drawn about the effects of gender on (NEP) environmental concern in a sample of Macedonian students. In general, these findings suggest that genders do not differ on the NEP scale. A large majority of both female and male students agree on all pro-environment statements. These findings support Davidson and Freudenberg’s (1996) claim that gender differences in environmentalism are not universal (Davidson and Freudenberg, 1996: 302). We cannot say whether existing differences are due to gender socialization and gendered roles but we can say that more research are needed on gender and the environment in environmental psychology and environmental sociology. From that, future studies should focus on all factors that create gender differences in environmental worldview. The number of these influences suggests that understanding pro-environmental concern is far more complex than previously thought (Gifford and Nilsson, 2014: 114).

In general, across-gender differences do not exist between two groups. Few gender differences in environmental orientations are limited on some items and one factor (dimension). From that, results do not support hypothesis. Our findings also suggest that equal attention should be paid to the role of both genders in the promotion of sustainability, although according to some studies, women tend to score higher on the environmental values that underlie environmental action.

**Key words:** environmentalism, NEP scale, students, gender, Macedonia.
References


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