Systematic review of research on pro-environmental behavior in Russia

Research problem

Global risks associated with environmental degradation are among the most serious problems of our time. Solving these problems requires an active participation of all actors in a society. One of the roles of environmental psychology is to contribute to solving the problem of negative anthropogenic impact on the ecosystem [Nestik, Zhuravlev, 2018; Clayton et al., 2016]. In this regard, the study of pro-environmental behavior and its determinants play a primary role. Today there is an extensive base of international research on pro-environmental behavior and its determinants. Research results show that pro-environmental behavior can be explained by psychological, social, cultural, demographic and other variables [Schultz, Kaiser, 2012].

Even though in Russia less attention has been paid to the study of pro-environmental behavior, there is a sufficient amount of research that needs to be analyzed. The main goal of our research is to analyze this evidence base in a systematic review. Our aims are to search and identify empirical studies of pro-environmental behavior conducted on Russian samples, analyze their methodology, analyze and synthesize the results regarding the types and predictors of pro-environmental behavior, and determine the directions for the development of future research in this area in Russia.

Method

Our research uses systematic review methodology [Petticrew, Roberts, 2006]. The studies were selected for inclusion and independently reviewed by all authors. Research quality was assessed based on the provided descriptions of research methods (design, data collection and analysis) and results. The results of the included studies were analyzed categorically.

Search using keywords in online databases (elibrary.ru, cyberleninka.ru, The Russian State Library Dissertation Fund, DisserCat, Web of Science, Scopus, Google Scholar and ResearchGate) identified 321 sources (articles, dissertations, monographs), of which 273 were excluded due to the absence of empirical data on pro-environmental behavior in Russia.

Results

This review included 48 sources (articles in Russian and English and dissertations in Russian) published between 1999 and 2021, of which 31 were published in the last 5 years.

The methodological advantages of the studies include the use of primary data and large samples (the sample size varied from 38 to 1500 respondents). Among the shortcomings, the studies were based on survey data that used self-reports, 47 out of 48 studies used correlation designs, data analysis in 31 studies was limited to descriptive statistics, while many studies unreasonably used the terms “significant” and “not significant”, inferential terminology, etc. Nevertheless, in recent years, the quality of Russian studies of pro-environmental behavior has been steadily growing: 17 studies used modern types of research methods (experimental design, methodology for the development and validation of scales), and for data analysis, correlation analysis, regression analysis, factor analysis, ANOVA and other methods were used.

The results of our research show that the most common categories of pro-environmental behavior in Russia are: 1) waste management and reduction (recycling, use of reusable bags), 2) social behavior (planting trees, discussion of environmental issues with others), 3) resource saving (electricity, water, use of energy-saving equipment and lamps) and 4) purchase and consumption of environmentally friendly products and goods.

Today, there is an active interest in the study of socio-demographic, psychological and contextual determinants of pro-environmental behavior in Russia. Research results show that pro-environmental behavior is more often observed among women than among men, as well as people with a higher level of education. With regard to the role of age and income level, research shows mixed results. Variables such as biospherical values, independence values, self-transcendence values, environmental concern, moral emotions, environmental motivation, personal and descriptive norms are significant positive predictors of all major categories of pro-environmental behavior. Negative predictors of pro-environmental behavior are: hedonic values and extrinsic motivation. Among contextual variables, the role of infrastructure availability was discussed in studies as an important factor in pro-environmental behavior, and for company employees, pro-environmental leadership of management was an important contextual condition.

Conclusions

In our study, we made the first attempt to analyze data from empirical studies of pro-environmental behavior in Russia in a systematic review. Results indicate a significant increase in attention to the topic of pro-environmental behavior in our country.

In the future, it is necessary to conduct research using improved methods of collecting and analyzing data, building and testing models that explain pro-environmental behavior, conducting natural experiments and lab-experimental research.

Currently, in Russia, some of the most relevant categories and types of pro-environmental behavior are being studied, however, with a growing attention to the climate change issues, it is also necessary to consider the category of climatic behavior in future studies. In addition, it seems necessary to expand the knowledge base on psychological (social, personality and cognitive) and contextual (political, economic and infrastructural) determinants of pro-environmental behavior.

References

Nestik T.A., Zhuravlev A.L. Psikhologiya global'nykh riskov [Psychology of Globa Risks]. Moscow: Publ. Institut psikhologii RAN, 2018.

Clayton S., Devine-Wright P., Swim J., Bonnes M., Steg L., Whitmarsh L., Carrico A. Expanding the role for psychology in addressing environmental challenges // American Psychologist. 2016. Vol. 71. №3. P. 199–215.

Petticrew M., Roberts H. Systematic Reviews in the Social Sciences: A Practical Guide. Oxford, Blackwell. 2006.

Schultz P.W., Kaiser F.G. Promoting pro-environmental behavior. In S.D. Clayton (Ed.), The Oxford handbook of environmental and conservation psychology. Oxford University Press. 2012. P. 556–580.