

Inhabitants of Poland experience one of the highest levels of air pollution in the European Union which contributes to approximately 46,000 premature deaths annually. Exceptionally high air pollution results mainly from the country's dependence on fossil fuels for energy production. Particulate matter suspended in the air of Polish cities is especially harmful to the youngest, in whom it negatively affects the condition of the respiratory tract and learning outcomes. At the same time, in the process of burning fossil fuels, greenhouse gases are emitted into the atmosphere. This further increases the threat for future generations as it exacerbates the climate crisis. Given the continuing trend of record-low fertility rates, children's health and well-being are a priority area of activity for the Polish public sector. At the same time, recent reports indicate that strong concerns about the state of the natural environment are linked to the intention of low fertility. Potential future parents, aware of the ecological threats resulting from climate change and the level of pollution, are unwilling to introduce their children to the world where one could be e.g. deprived of access to fresh air.

The main objective of this project is to examine the impact of fertility intentions on the differences in preferences for interventions that improve air quality in Poland, in the case of programs varying in terms of the assumed time horizon of implementation and effects for particular age groups. Adults planning a larger family or becoming parents shortly are probably more sensitive to the postponement of air quality interventions and their effects on the youngest. The proposed survey will include questions about fertility plans in the form of the perceived likelihood of starting or expanding a family at a given time, allowing participants to communicate their level of uncertainty regarding this issue. In addition, a separate psychological questionnaire will determine respondents' general reproductive attitudes.

The structure of the study, in which values from the sphere of the sacred, such as value of statistical life and health, are traded with the financial dimension of environmental interventions, raises questions about the respondents' sensitivity to taboos related to such comparisons. Another aim of this study is to investigate how the consideration of taboo trade-offs affects the valuation of air quality improvement programs in the case of various choice scenario presentations. Participants in the study are likely to differ in their propensity to be morally engaged in choices, which may result in different sensitivities to taboo trade-offs and the way choices are presented. This hypothesis will be tested by including a dedicated moral disengagement questionnaire.

Generalization of conclusions from the results of the study requires a properly selected and sufficiently large sample and the use of an appropriate data collection tool. Therefore, the planned study will be conducted in the form of a survey by a reputable public opinion research agency on approximately 1,000 people of reproductive age. The study will take the form of a discrete choice experiment. After learning about the negative effects of poor air quality and the state of air pollution in their area of residence, respondents will be asked to make a series of choices between alternatives describing possible air quality interventions. The alternatives will differ in attributes such as health risks for different age groups, impact on the condition of buildings and impact on tax burdens.

Despite the request for honest answers and information about the submission of the survey results to the public administration, there remains a risk that some participants will treat the survey as inconsequential. The last aim of this study is to check whether the perception of the study's consequentiality is related to the presence of the taboo trade-offs. The conducted literature review indicates that subjects may be disbelieving that the choices in a 'taboo' scenario will be communicated to public decision-makers by well-meaning researchers. Respondents might doubt that researchers would allow morally unacceptable scenarios to be realized. In turn, the perceptions of the lack of survey consequentiality significantly reduce the credibility of the results and their applicability in optimizing the allocation of public funds.

The study will result in the valuation of air quality improvement, the cost of postponing it and the reduction of health risks for various age groups by residents of Polish cities of reproductive age. Determining the desired level of public investment in the protection of natural resources such as clean air is a priority area in the era of progressive environmental degradation and alarming climate change. Taking into account the fertility intentions allows us to interpret the results of the study in the context of the future family perspective adopted by the respondents. The study should further enrich the understanding of behaviour in the case of difficult moral choices from the taboo sphere and the perception of the survey consequentiality in the case of surveys that suggest considering universal taboo trade-offs. The results of the study might constitute the basis for updating the recommendations regarding the construction of preference elicitation questions in the context of morally burdensome choices.