

Sustainability | Poster

PP - (21125) - MICROPLASTICS: MENTAL MODELS AND PERCEIVED RISK

Marcos Felipe Rodriguez¹; Gisela Bohm^{1,2}; Rouven Doran¹

1 - University of Bergen; 2 - Inland University of Applied Sciences

Research or practical problem and objectives

Microplastics are a potential planet boundary threat. Previous literature points towards the need for an interdisciplinary approach combining natural and social sciences to address the problem effectively. This includes an understanding of the role of the public in aggravating and /or mitigating the problem, particularly regarding risk perceptions and mental models, which have both been shown to predict environmental behavior.

Methods and process (for empirical research)

A survey questionnaire was developed and distributed through the Norwegian Citizen Panel, which is a web-based survey where the participants represent a cross-section of the Norwegian population. The survey included: 1) Open ended questions about the perceived main source of microplastics and the perceived best way to tackle the problem of microplastics. 2) An question to indicate, among a list of different agents (e.g., national governments, individual consumers, etc.), the ascribed responsibility for causing the problem, responsibility for solving the problem, competence and motivation to tackle the problem. 3) A psychometric scale to assess risk perception about microplastics. 4) A rating scale to indicate the degree in which different emotions are felt when thinking about microplastics. 5) A rating scale with a list of different possible sources, consequences and ways to help solve the problem of microplastics. The (ongoing) factor analysis will reduce the number of items to fewer dimensions and regression analysis will reveal how the different measures associate.

Main results preview and importance (or main arguments in the case of critical reviews)

The results will shed light on the perceived risk and mental models of microplastics. Moreover, they will show how emotions, ascribed responsibility, competence and motivation associate with mental models and risk perceptions of microplastics. This addresses some existing knowledge gaps in the social science literature on microplastics, has implications for risk communication, and may assist in finding a societal response to an eminent environmental problem.

Palavras-chave : microplastics, risk perception, mental models, plastic pollution