

Abstract

A world without chemicals is unimaginable, yet many of us perceive them negatively. This bachelor's thesis focuses on chemophobia, the unfounded fear of chemicals and chemistry as such, its possible causes, and the groups of substances most commonly associated with it. Chemophobia occurs throughout the population, but its extent is influenced not only by family and cultural background but also by the level of education and occupation. In the practical part of this thesis, differences in the occurrence of chemophobia among selected occupational groups are examined along with an assessment of their knowledge of basic chemistry, using a simple questionnaire. The occurrence of chemophobia and the level of chemical knowledge are also compared with the results of a study published in the journal *Nature Chemistry*, conducted in selected European countries (Siegrist & Bearth, 2019). The respondents in this thesis show low levels of chemophobia, and compared to the respondents of the aforementioned *Nature Chemistry* study, that included respondents from countries such as Switzerland, Austria, or Germany, they are among the least chemophobic. When comparing the prevalence of chemophobia across different occupational groups, healthcare workers and, understandably, science teachers appear to be the least chemophobic. Similar to the *Nature Chemistry* study, it was found that the level of education attained has a significant influence. When assessing the knowledge of basic chemistry, the highest frequency of correct answers was again recorded among healthcare workers and teachers, despite the surprising fact that science teachers often made mistakes on a question related to the structure of salt. However, compared to the respondents of the *Nature Chemistry* study, the respondents in this thesis showed a higher frequency of correct answers. In this part of the study, a significant influence of the level of education on the correctness of answers was found (Siegrist & Bearth, 2019).

Key words

Chemophobia, chemistry education, chemistry and society