122 How to survey on the "Last child in the woods" – Danish experiences with who and how to ask about children's use of nature

Soeren Praestholm¹, **Soeren Andkjaer²**, ¹University of Copenhagen, Denmark. ²University of Southern Denmark, Denmark

In 2005 Richard Louv described children's decreasing contact with natural environments under the headline "Last in child in the woods". The title accords with the notion of "extinction of the experience" and a reported drop in frequency of visits and activities in nature among children in Western world societies (Soga & Gaston, 2016). Also in Denmark, falling numbers of visits and time spend in nature across generations has been reported (Fjeldsøe 2018).

However, it is not methodologically straight forward to survey on children's use of nature. Children's capability to understand questions and provide answers varies, not least between different age groups. Hence, questionnaires are often provided to the parents instead of the children themselves leaving the researchers with secondary data about the children's activities, motives, preferences, perceived constraints etc. There are other obstacles causing potential bias. Ambiguous terms like "nature" or "green space" which could be understood very differently across the respondents. Frequency of visits and/or time spend outdoors are reported, but the questions behind the results often represent challenges to the respondents: they are asked to generalize about children's/their practices over a very long time span e.g. "How often would you say that your child visit nature during summer season" (translated from Fjeldsøe 2018).

This paper compares and discusses pro and cons regarding choice of different survey methods based on recent surveys about children's use of nature and green spaces in Denmark (data collected 2015-2019). The paper focus on differences between asking the children or the parents. The primary data origins from a survey with two thousand children aging 10-15 years (Andkjær et al. 2016). Children in 5th and 8th degree answered a digital questionnaire during school time under technical supervision by their teacher. The secondary data comprises parent's responses from a national survey with responses about more than four thousand children aging 1 through 15 years (Præstholm et al. 2020). Responses regarding the same age groups as the primary data were retrieved.

The paper will further discuss the influence of terminology regarding identifying use of "nature" and various ways of questioning about the duration and frequency of visits in nature. Here two other resent Danish surveys accompanies the mentioned surveys. The aim of the paper is to support sound choice of methods and awareness of the limitations in the data used when children's use of nature, "extinction of the experience" and "last child in the woods" are discussed.

References

Andkjær, A. et al. 2016. Børn og unges hverdagsfriluftsliv. Fjældsøe, C.K. 2018. Natur i generationer. Louv, R. 2005. Last Child in the Woods. Præstholm, S. et al. Danske børns aktiviteter og ophold i naturen. Soga, M. & Gaston, K.J. 2016. https://doi.org/10.1002/fee.1225