

## THE CONCEPT OF SENSE OF PLACE IN ENVIRONMENTAL EDUCATION

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### Abstract

In recent years, research on the “sense of place” (SOP) concept has gained importance in both the international environmental and geographical literatures. The formation of a student’s relationship to place is one key challenge of the educational process in today’s globalized society. Although the concept is part of the cross-cutting area of environmental education, its implementation in schools is widely insufficient. To some extent, this situation might be rooted in the lack of theoretical research on this topic in Czechia. Thus, the main aim of this paper is to offer an overview of foreign research that deals with this concept in the context of education, discuss its conceptual definition, and present the results of the research that deals with children’s SOP in Czechia and Slovakia. The respondents consist of upper-primary school pupils ( $n = 8,653$ ). Their responses to an open-ended questionnaire were evaluated via inductive content analysis. The findings suggest that pupils’ relationships to specific places exist in the psychological, sociocultural, and biophysical dimensions and that it includes the cognitive, conative, and affective domains. Furthermore, the results provide evidence that a pupil’s SOP exists at different scales. The results of this research can contribute to improving the efficiency of implementing the SOP concept in the educational process.

**Key words:** children; relationship to place; recreation; education

### Introduction

In the process of building pupils’ environmental literacy, forming a relationship to place is an essential component. According to the model of recommended expected outcomes for the cross-cutting area of environmental education in the Czech curriculum (Pastorová, ed., et al., 2011), one’s relationship to place is a connecting theme that should permeate all key topics of this field. The home is usually where pupils begin to form their relationship to place, which then extends gradually to the local region. This part of the geographical space is first recognized by the pupil. It offers not only opportunities for cognitive development but also opportunities for forming emotional attachment to the territory and the places within it. However, scant research has been conducted on this issue. The aim of our research was to answer two research questions: (1) *which types of places in their region do pupils relate to most*, and (2) *what are the reasons for pupils’ relationships with these places?*

### Theoretical Background

The term “sense of place” (SOP) has been used in the foreign literature to describe one’s relationship to place. Lynch (1960), among the first to use the term SOP, referred to the symbolic and memorable aspects of the urban environment. Subsequently, geographers have elaborated on this concept (e.g., Relph, 1976). Tuan (1977) considers SOP to comprise the emotional bonds that develop between a person and an environment and emphasizes the process when people by observing, experiencing, etc. attach meanings to their environment and thus transform the abstract space into a unique place. The concept has also been explored in fields such as psychology (Proshansky, Fabian, & Kaminoff, 1983), anthropology (Altman & Low, 1992), sociology (Brehm, Eisenhauer, & Krannich, 2006), and architecture (Hashemnezhad, Heidari, & Mohammad Hoseini, 2013). According to the International Encyclopedia of Human Geography, “SOP refers to the emotive bonds and attachments people develop or experience in particular locations and environments, at scales ranging from the home to the nation. Sense of place is also used to describe the distinctiveness or unique character of particular localities and regions” (Foote, Azaryahu, 2009, pp. 96–100).

Environmental literacy, which is the main goal of environmental education, is considered a concept that comprehensively encompasses all the framework goals of such education (Hollweg et al., 2011).

The components of this literacy are (affective) dispositions, (cognitive) knowledge, and (psychomotor) environmentally responsible behavior. The SOP concept is a suitable means to shape all three parts of environmental literacy.

## Methods

Data for the research was collected using an online questionnaire that was sent to all primary schools in Czechia and Slovakia in June 2022. The questionnaire was filled out by 8,653 upper-primary school pupils in Slovakia 3,980 (i.e., 1.8% of all pupils (ŠÚSR, 2022)) and in Czechia 4,673 (i.e., 1.1% of all pupils (ČSÚ, 2022)). All regions of Czechia and Slovakia and all age categories were represented. In Czechia, those who completed the questionnaire were 49% boys and 51% girls, in Slovakia 48% boys and 52% girls.

Answers to the research questions were gathered from the following questionnaire item: "Which specific place in your region do you have the closest relationship to and why?" The open-ended responses to the questions were subjected to inductive content analysis, resulting in a categorization of the types of places to which the respondents have the closest relationships and a categorization of the reasons for their close relationships to these places.

## Results

The results show that the reasons for the pupils' relationships to certain places exist in several dimensions (psychological, sociocultural, and biophysical) within which the cognitive, affective, and psychomotor domains of the relationships can be defined.

**The psychological dimension** is based on one's personal relationship to and feelings about the place. The respondents expressed their long-term experience with the place ("because I was born there," "I spent my childhood there," "I have lived there all my life," "because I spend most of my time there," "because I have lived there the longest," "I am there almost every day"), its familiarity (*cognitive domain*) ("because I know it"), emotional attachment to the place or its connection with memories (*affective domain*) ("I have experienced many great things there," "I have many memories of something I enjoy," "I spent my childhood in the beautiful countryside"), or influence on the place (*psychomotor domain*) ("the Boskovice trails because I designed them myself").

**The sociocultural dimension** is based on the pupil's relationship with other people living in the place. Often these are family members ("because I have my grandmother there," "I have my family there") or friends ("I have lots of friends there," "because I have met lots of new people there and we are meeting them now").

**The biophysical dimension** is determined by the properties of the site. It can express feelings about a place (*affective domain*) ("it is peaceful and quiet," "it is a magical place full of mysteries"), the general familiarity of a place or its interestingness (*cognitive domain*) ("there are famous sights," "the Wolf Pits because I find it fascinating that there is snow all year round"), or the fact that the place allows one to do certain activities, to experience something (*psychomotor domain*) ("because I can do whatever I want there and nobody goes there," "because I can watch wild animals there", "I go fishing there").

In addition to the abovementioned dimensions and domains, the third area of SOP is its spatial scale. In the responses, local, regional, and national levels were noted. At **the local scale**, the students declared their greatest relation to the spatially smallest locations (e.g., "my room," "my house," "to the bench in the forest," "the pier in Vrbica," "to the meadow near Důlnák," "Petra Bezruč park," "Gabinec forest," "the dirt road lined with young trees leading to the cross with a lime tree and a bench"). **The regional scale** was most often represented by the mention of a specific region (e.g., "Pošumaví," "South Moravia," "Krkonoše," "Jizerské hory," "Český ráj"). To a lesser extent, there were also answers at **the national scale** (e.g., "Ukraine, I was born there," "Vietnam").

The results of the content analysis suggest that SOP is a multidimensional concept that encompasses many areas. On the basis of these areas, in the following section, we focus on the conceptual definition of SOP.

## Discussion

Research on students' SOP is mainly devoted to exploring their relationship with the place where they learn (e.g., forest school: Harris, 2021; field trips: Goralnik et al., 2021; outdoor environmental education programs: Sedawi, Assaraf, & Reiss, 2021) and focusing on the relationship between

residential mobility and affect place attachment (Vidal, Valera, & Peró, 2010) or the connection between SOP and a particular instructional design or strategy (place-based education: Grimshaw & Mates, 2022; environmental education: Chen, 2020; science learning: Lim & Barton, 2006). Other research on SOP focuses on reflecting on students' experiences with places in their childhood (Tani, 2017). One review on SOP in environmental education is presented by Kudryavtsev, Stedman, and Krasny (2012). However, few studies focus on pupils' relationship with their region, to specific places in it, and why these places are popular. Our research sought to add to this under-emphasized area of research, and based on the research findings, we defined the concept as follows. SOP is a multidimensional relationship to place that arises by observing, experiencing, living, imagining, and dreaming humans who attach meanings to their environment and thus convert abstract spaces into unique places filled with meanings. SOP includes sub-concepts such as place attachment (place identity, place dependence) and place meaning and can have a local, regional, national, or global scale. SOP consists of the affective (emotional bonds), cognitive (knowledge, thinking), and psychomotor (behavior, action) domains and includes the biophysical, psychological, and sociocultural dimensions.

Based on the Regional Identity Scale instrument, Asún, Zúñiga, and Morales (2018), in their quantitative research, revealed three dimensions of regional identity (could be classified as a regional SOP): awareness of regional belonging (BEL), identification with the regional territory (TER), and identification with the regional culture and history (CUL). The given dimensions can be identified with those revealed by the content analysis in our research: psychological (BEL), sociocultural (CUL), and biophysical (TER). Similar dimensions are defined by Ardoin, Schuh, and Gould (2012), who, however, in addition to the dimensions we have identified, have also distinguished a political-economic dimension.

## Conclusion

Based on the research conducted, this paper presents the concept of SOP as multidimensional, consisting of psychological, sociocultural, and biophysical dimensions as well as cognitive, affective, and psychomotor domains on the local, regional, and national scales. The paper then presents and discusses a conceptual definition of SOP as well as highlights some international research that addresses this issue in relation to education. The need to address the formation of pupils' relationship to place is evident nowadays in such content, among others, as domestic and foreign curriculum documents.

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## Souhrn

Výzkum konceptu SOP nabývá v posledních letech v zahraniční environmentální a geografické literatuře na významu. Formování vztahu žáka k místu je v dnešní globalizované společnosti jednou z výzev výchovně-vzdělávacího procesu. Vztah k místu je v Česku ukotven v modelu průřezového tématu Environmentální výchova pro základní školy. Přesto je implementace konceptu SOP do vzdělávání v Česku problematická. Zároveň v Česku chybí teoretické výzkumy na toto téma. Cílem příspěvku je nabídnout přehled zahraničních výzkumů, které se konceptem zabývají v souvislosti se vzděláváním, diskutovat jeho konceptuální definici a prezentovat výsledky výzkumu, který se zabýval vztahem k místu českých a slovenských žáků. Respondenty tohoto výzkumu byli žáci 2. stupně základních škol (n = 8,653). Odpovědi na otevřenou otázku dotazníku, který byl v online formě rozeslán do všech základních škol v Česku a na Slovensku, byly vyhodnocovány pomocí induktivní obsahové analýzy. Zjištěné dimenze vztahu k místu jsou diskutovány s výsledky zahraničních výzkumů. Ukazuje se, že vztah žáků k místům existuje na úrovni psychologické, sociokulturní a biofyzikální dimenze a zahrnuje kognitivní, konativní i afektivní doménu. Dalším zjištěním je, že dětský vztah k místu existuje v různých měřítkách – od lokálního, přes regionální až po národní. Potenciálem výzkumu konceptu je zefektivnění jeho implementace do výchovně-vzdělávacího procesu a přispění k výchově environmentálně gramotných občanů.

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