

PERCEIVED CONSEQUENCES OF CHILDREN'S SENSE OF PLACE: A FOUR-PATHWAY DEVELOPMENTAL MODEL

Dominik Rubáš^{1, 2}, Eliška Prokopová¹, Magdalena Pohlová¹, Anežka Nejedlová¹, Tomáš Matějček^{3, 4}

¹ *Department of Primary Education, Faculty of Science, Humanities and Education, Technical University of Liberec, Univerzitní nám. 1410, 461 17 Liberec, Czechia*

² *Department of Geography, Faculty of Science, Humanities and Education, Technical University of Liberec, Univerzitní nám. 1410, 461 17 Liberec, Czechia*

³ *Department of Social Geography and Regional Development, Faculty of Science, Charles University, Albertov 6, 128 00 Praha 2, Czechia*

⁴ *Department of Geography, Faculty of Science, J. E. Purkyně University in Ústí nad Labem, Pásteurova 3632/15, 400 96 Ústí nad Labem, Czechia*

<https://doi.org/10.11118/978-80-7701-087-0-0282>

Abstract

Sense of place is widely associated with pro-environmental attitudes and behaviour. However, considerably less attention has been devoted to how children themselves perceive the consequences of their relationship to place. This study proposes a four-pathway developmental model grounded in qualitative data from 339 fifth-grade pupils in Czechia. Pupils provided written responses to an open-ended question exploring whether and how their attachment to the local region influences them. Using inductive thematic analysis, we identified four interrelated pathways through which children perceive the impact of place: (1) an emotional-regulative pathway, in which place shapes emotional well-being, safety and everyday comfort; (2) a moral-normative pathway, where place serves as a moral lens for evaluating social and environmental behaviour; (3) a behavioural-agency pathway, linking place to participation, everyday practices and environmental responsibility; and (4) an identity-formative pathway through which children connect place to belonging, future aspirations and possible selves. The findings indicate that children conceptualise sense of place not merely as emotional attachment, but as a multidimensional developmental structure that actively shapes self-concept, values and action orientations. The model advances theoretical discussions in geographical and environmental education and provides a framework for strengthening place-based and sustainability-oriented learning in primary education.

Key words: sense of place; primary education; environmental education; landscape protection; sustainability

Introduction

Sense of place (SOP) represents an important concept studied across multiple disciplines and describes the relationship between people and places. In geography and environmental education, this concept is understood as a multidimensional relationship to place consisting of affective, cognitive, and behavioural domains (Rubáš, Matějček, Řezníčková, 2024). Research in this field frequently works with related sub-concepts, such as place identity, place dependence, and place meaning, which capture different aspects of SOP (Brandenburg, Carroll, 1995). Previous empirical studies suggest that strengthening relationships to place may support environmental awareness, value orientations, and pro-environmental behaviour among pupils and students (Rubáš et al., 2026; Činčera, Kroufek, Bogner, 2022). At the same time, the literature indicates that SOP research has so far focused more strongly on adult populations, while children's perspectives and their own interpretations of place relationships remain less explored (Farber, Puttick, 2026). Understanding how children themselves perceive the significance of their local environment may therefore contribute to a deeper understanding of the role of place in their personal, value-related, and environmental development.

Methods

The study was designed as qualitative research based on an inductive interpretative approach. The aim was to understand how children themselves reflect on the consequences of their relationship to place without imposing predefined theoretical categories.

The research sample consisted of 339 fifth-grade pupils (approximately 10–11 years old) from 18 primary schools in Czechia. The sample included schools from both urban (9 schools) and rural (9 schools) settings in order to capture the diversity of settlement and environmental contexts.

Participation was voluntary, and the research was conducted in accordance with ethical principles for working with minor participants.

Data were collected through written responses to an open-ended question administered during classroom instruction. Pupils were invited to describe whether and how their relationship to the local region influences them. The written format enabled individual reflection and allowed pupils to formulate their responses in their own words without the immediate influence of peers.

The data were analysed using inductive thematic analysis (Braun, Clarke, 2006). The analysis proceeded through iterative cycles involving open coding, the gradual development of categories, and their continuous comparison across responses. Codes were generated directly from the data and subsequently clustered into broader thematic units. Based on recurring patterns of meaning, four interrelated dimensions were identified and conceptualised as developmental pathways. Although analytically distinguished for the sake of clarity, these pathways frequently overlapped in the pupils' responses. The proposed model therefore represents a conceptual synthesis of recurring structures of meaning rather than a set of mutually exclusive categories.

Results: A Four-Pathway Developmental Model of Children's SOP

Based on the inductive thematic analysis, we proposed a developmental model grounded in the children's own accounts (Figure 1). The analysis suggests that children perceive the consequences of their relationship to place through four interrelated pathways: emotional-regulative, moral-normative, behavioural-agency, and identity-formative. These pathways do not operate in isolation but frequently overlap and mutually reinforce one another.



Fig. 1: A four-pathway developmental model of the consequences of children's SOP.

Source: Authors' elaboration (visual model prepared by the authors with AI-assisted graphic support).

Emotional-regulative pathway

The emotional-regulative dimension captures how children describe the influence of place on their emotions, sense of well-being, and feelings of safety. Many respondents associated their local environment – particularly the proximity of nature, silence, clean air, and familiar surroundings – with feelings of calmness, joy, and security (*"I live near meadows and forests. The air is clean and it is quiet there... It feels cosy and pleasant to me. I like walking around because it is peaceful and calm."*). By contrast, noise, pollution, unsafe streets, or negative school experiences were linked to anger, fear, or sadness. In this pathway, place functions as a regulator of emotions: it stabilises mood, provides a sense of safety, and enables the restoration of psychological balance (*"I feel safe here"; "I am happier here and would like to live here all my life."*). A number of responses also revealed anticipated

emotional reactions – for example, the idea that the destruction of a familiar place would lead to a significant deterioration in feelings (*“If someone tried to destroy the alley, my relationship to this place would change from neutral to negative.”*). The relationship to place therefore shapes not only children’s present emotional experience but also their expectations of future emotions. In this sense, the emotional dimension represents a foundational layer upon which value orientations and behavioural responses may further develop.

Moral-normative pathway

This dimension captures how children interpret their relationship to place through value judgements and ethical evaluations. A substantial proportion of responses expressed strong disapproval of environmental pollution, tree cutting, factory construction, or harm to animals. These attitudes were often accompanied by explicit moral reasoning, for example through references to damage caused to nature, animals, or future generations (*“People throw rubbish away and it harms animals and nature.”*). In this pathway, place appears to intensify moral sensitivity. Environmental damage is not perceived as an abstract problem but as a violation of children’s own places (*“If someone destroyed my nature, that would be wrong.”*). In some responses, the normative dimension also extended into the social sphere, for example through criticism of aggressive or antisocial behaviour (*“I do not like drunk people hanging around here, and I do not like people who are mean to others.”*). At the same time, some responses reflected moral ambivalence or resignation (*“I cannot change all the people on the planet.”*), suggesting that the activation of the moral-normative dimension is not equally strong across all children.

Behavioural-agency pathway

This pathway describes how children connect their relationship to place with specific activities, participation, and a sense of responsibility. Many children reported engaging in nature clean-up activities, taking part in environmental events, drawing others’ attention to inappropriate behaviour, or intervening in cases of damage to the local environment (*“I like being able to take part in different activities, for example the Clean Up Czechia campaign, tree planting, and so on.”*).

Beyond explicitly environmental activities, this pathway is also reflected in the structuring of everyday practices. Sports, outdoor activities, membership in clubs or hobby groups, and time spent outside were often directly linked to the character of the local environment (*“The forest also influences me because my friends and I have a bunker there, we play hide-and-seek in the woods, and the water has influenced me too because I now go rafting.”*).

In some responses, children explicitly expressed their willingness to intervene if someone was damaging their environment (*“If someone was destroying monuments or meadows, I would probably stop them.”*). This suggests that the relationship to place may foster a sense of personal responsibility and readiness to act. At the same time, some statements also expressed helplessness, indicating that action is not universal for all children.

Identity-formative pathway

The identity-formative pathway emerged as a particularly salient dimension of the model. Children repeatedly reflected on how the place where they live influences who they are – or who they would be if they lived elsewhere. Their responses included reflections on future occupations, lifestyle, sporting careers, educational opportunities, and social relationships (*“I want to live here because there is a hospital here, and because I want to become a doctor, I want to work there.”*). Counterfactual scenarios were especially frequent (*“If I lived somewhere else, I would be different”*), suggesting that even at this age children already perceive place as a factor shaping their future life trajectories (*“If I lived in the countryside, I would probably be different.”*). Place therefore emerges not merely as a physical environment, but as a formative framework that structures social relationships, opportunities, and aspirations (*“I have friends here without whom life would not be possible.”*). In this sense, place can be understood as an environment that provides meanings, relationships, and conditions contributing to the formation of the self. Children do not describe place merely as a backdrop to their experiences, but as a significant factor shaping who they are becoming.

Interrelations Between Pathways

Although the individual pathways are analytically distinguished, they frequently overlap in the children’s accounts. Emotional attachment to nature (the emotional-regulative pathway) is often linked to moral disapproval of its destruction (the moral-normative pathway) and to a willingness to intervene or participate in clean-up activities (the behavioural-agency pathway). Identity-related aspirations are similarly intertwined with both value orientations and specific practices. The proposed model therefore

does not describe isolated consequences, but rather a multilayered developmental process in which the relationship to place operates through mutually interconnected mechanisms. The model thus suggests that place relationships do not function merely as isolated emotional bonds, but as a developmental nexus in which children's emotions, values, actions, and identities converge.

Discussion

The findings of this study resonate with recent curriculum discussions emphasising the role of community and place in learning. The concept of Community Curriculum Making highlights the educational value of “going places, meeting people and doing and making things”, thereby connecting students' learning with their local environment and community (Leat, Thomas, Whelan, 2026). Such approaches suggest that encounters with local places and community actors can support students' well-being, their actions, civic awareness and identity development. From this perspective, the four pathways identified in this study may represent complementary mechanisms through which place-related experiences become educationally meaningful for children.

These findings are also consistent with emerging research exploring children's environmental relationships. For example, Farber, Puttick (2026) show that environmental emotions and experiential learning play a mediating role between children's local ecological knowledge, place attachment and pro-environmental behaviour. Similarly, the present findings indicate that children's relationships with place are not limited to cognitive knowledge or emotional attachment alone, but involve a dynamic interplay of emotions, moral evaluations, behavioural engagement and identity formation.

The proposed model extends existing SOP frameworks by shifting the analytical focus from dimensional description toward child-perceived developmental consequences of place relationships. The four pathways identified in this study can also be interpreted in relation to existing conceptual frameworks of place relationship research. The identified pathways broadly correspond to the affective, value-oriented, behavioural, and cognitive dimensions described in the literature, while also partially resonating with key SOP sub-concepts such as place meaning, place dependence, and place identity (Brandenburg, Carroll, 1995). These parallels suggest that the proposed model may offer an integrative perspective linking the emotional, moral, behavioural, and identity dimensions of children's relationships to place.

Conclusion

This study explored how children perceive the consequences of their relationship to place through qualitative analysis of pupils' written responses. The findings suggest that children interpret their SOP through four interconnected pathways: emotional-regulative, moral-normative, behavioural-agency and identity-formative. Together, these pathways illustrate how children connect their local environment with emotions, values, everyday practices and future aspirations.

The four-pathway model proposed in this study therefore extends existing perspectives by conceptualising SOP as a developmental structure through which children interpret and experience their local environment. Rather than functioning merely as an affective bond with place, SOP can be understood as a developmental nexus linking emotional well-being, moral reflection, everyday practices and emerging self-concept. In this way, children's experiences of place may contribute not only to environmental awareness but also to broader processes of personal and social development.

These findings highlight the potential of educational approaches that connect learning with local environments and everyday experiences. Place-based and community-oriented learning may therefore play an important role in supporting children's emotional well-being, environmental responsibility and identity development.

References

- Brandenburg, A. M., Carroll, M. S. (1995). Your place or mine? The effect of place creation on environmental values and landscape meanings. *Society and Natural Resources*, 8, 381–398. <https://doi.org/10.1080/08941929509380931>
- Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Činčera, J., Kroufek, R., Bogner, F. X. (2022). The perceived effect of environmental and sustainability education on environmental literacy of Czech teenagers. *Environmental Education Research*, 29(9), 1276–1293. <https://doi.org/10.1080/13504622.2022.2107618>
- Farber, A., Puttick, S. (2026). Exploring Galápagos children's place attachment, local ecological knowledge, and pro-environmental behaviour. *Oxford Review of Education*, 52(1), 211–234. <https://doi.org/10.1080/03054985.2026.2617945>

Leat, D., Thomas, U., Whelan, A. (2026). Community Curriculum Making. In: Manyukhina, Y. (Ed.). (2026). *The Future of the Curriculum: Toward Child-Centred, Democratic Education* (1st ed.). Routledge, London. <https://doi.org/10.4324/9781003774648>

Rubáš, D., Nejedlová, A., Matějček, T., Kroufek, R. (2026). Children's Sense of Place – Case Study from the Bohemian Paradise in Czechia. *Folia Geographica*, 68(2), OnlineFirst.

Rubáš, D., Matějček, T., Řezníčková, D. (2024). Sense of place in geography and environmental education: a literature review of empirical research. *GeoScape*, 18(1), 37–52. <https://sciendo.com/article/10.2478/geosc-2024-0003>

Acknowledgement

This work was supported by the Student Grant Competition of the Technical University of Liberec: SGS-2025-4531 Geographic Fieldwork Education in Schools in the Liberec Region.

Souhrn

Příspěvek se zaměřuje na to, jak děti vnímají důsledky svého vztahu k místu. Přestože je koncept sense of place v odborné literatuře často spojován s environmentálními postoji a chováním, menší pozornost byla dosud věnována tomu, jak samotné děti interpretují význam svého místního prostředí. Studie představuje vývojový model založený na kvalitativní analýze písemných výpovědí 339 žáků 5. ročníku základních škol v Libereckém kraji. Data byla získána prostřednictvím otevřené otázky a analyzována pomocí induktivní tematické analýzy. Výsledky ukazují, že děti vnímají důsledky svého vztahu k místu prostřednictvím čtyř vzájemně propojených dimenzí: emocionálně-regulační, morálně-normativní, behaviorálně-agentní a identitotvorné. Tyto dimenze se projevují v pocitech bezpečí a pohody, hodnotových soudech, konkrétních aktivitách i vnímání místa jako faktoru ovlivňujícího budoucí aspirace, sociální vztahy a sebepojetí. Navržený model naznačuje, že vztah k místu nepředstavuje pouze emocionální vazbu, ale komplexní vývojovou strukturu propojující emoce, hodnoty, jednání a identitu. Výsledky zároveň poukazují na význam vzdělávacích přístupů propojujících učení s místním prostředím a každodenní zkušeností žáků.

Contact:

RNDr. Dominik Rubáš, Ph.D.

E-mail: dominik.rubas@tul.cz

Open Access. This article is licensed under the terms of the Creative Commons Attribution 4.0 International License, CC-BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

