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Early childhood memories of animals: reflections and considerations in relation to posthuman education

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ABSTRACT

This study focuses on literary arts education, especially childhood memories of pets and other more-than-humans. Memory writings were collected as data using the Pritney method among students in early childhood teacher education. The written memories were analysed through the lens of bibliotherapy. Practices with reflections provide also perspectives on posthumanities and offer a sense of wellbeing. Bibliotherapy approach and posthuman theory allow exploring our position as humans and more-than-humans in the educational system. Students ($n = 200$) are recalling their primary memories related to animal/pet contacts, toys, play, and characters in literature. Memories through close readings illuminate how the animal theme and bibliotherapy approach are employed in this project. Students may develop an awareness of the value of animal geographies and literary arts in education, thus moving towards posthuman education and fostering different ways of caring and wellbeing, ethics, and education that also encompass more-than-humans.

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Animals; bibliotherapy approach; creative writing; memories; pritney method

1. Introduction

There is a growing interest in human – animal interactions across different age groups and scientific disciplines (Lahtinen & Löytty, 2022; Le Juez, 2023; Rautio et al., 2021; Rosenberg, 2023; Young & Rautio, 2024), including education (see Gee et al., 2017; Ratamäki & Tynkynen, 2006; Somerville, 2018; Suvilehto et al., 2023; Värrä, 2018). At the same time, we are witnessing biodiversity loss, with many animals and plants on the verge of extinction. In Finnish early childhood education, animal literature and soft toy animals play central roles in pedagogy and learning environments. However, actual contact with animals may be limited to visits to nearby zoos or interactions with reading dogs.

Prior research confirms that contact with animals offers societal, physical, and physiological benefits. Interactions with animals in rural environments may support our immune system (Böbel et al., 2018), petting an animal can decrease human blood pressure

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(Johnson et al., 2002), and animals serve as effective antidepressants (Rimer et al., 2012). Coping with tough times in the company of a pet may ease pain, as pets, such as dogs, can pick up on emotions, moods, and behaviours (Rimer et al., 2012). The American Heart Association has linked pet ownership with a reduced risk of heart disease and greater longevity (Kramer et al., 2019). In general, the company of an animal may have both direct and indirect effects on humans (Fine, 2006; Julius et al., 2012; Wohlleben, 2016). According to Schuurman and Laurén (2016), multiple studies regard animals (pets) as family members and see this as an established phenomenon in Western societies. Animals are used in therapies, especially dogs, horses, cats, and birds (American Humane Association, 2024; Suvilehto, 2023).

Experiences with animal encounters may have the potential to increase human well-being (Friedmann & Tsai, 2006; Yerbury & Lukey, 2021), but is this visible in animal memories or fictional animals in stories? This study aims to investigate the early animal memories of early childhood education teacher students (hereafter referred to as students) via creative writing. The assignment was to create a narrative that tells a true story based on childhood memories of animal contact. By asking the students to write about their early experiences with animals, the aim was to draw their attention to the significance of animal contact in early childhood and to find ways to promote such encounters in early childhood education based on these stories. Feelings and thoughts can be expressed through creative writing, which, as a method, may have effects on people's cognitive, emotional, social, and biological levels (Deveney & Lawson, 2022; Lepore & Smyth, 2002; Pennebaker, 2004).

In this context, we formulated the following research questions:

1. What are the students' animal memories based on their creative writings? What meanings do the students give to their childhood animal experiences?
2. What could these animal memories tell us about childhood animal experiences in general, and what could their meaning be from the point of view of early childhood education, approaching even posthuman early childhood education?

2. Memories and the value of connecting with animals in early childhood

Animals, with their vast variety of species and representations, play a significant role on our planet as an integral part of the landscape and daily life in both the countryside and cities, as well as in literary landscapes. Posthuman studies (Wolfe, 2010) in education are linked to human – animal studies, and there have been concrete changes in the position of animals alongside humans. To understand ecologically sustainable human wellbeing, there is a need to comprehend humans as part of a network of cooperation that includes non-humans (Nurmi, 2023), and by that, the emotional bond between humans and pets and the significance of multispecies relationships (Rosenberg, 2023; Suvilehto, 2019).

The distant moments of childhood encounters with pets, nature, and wild animals, including those in animal parks or zoos, may resonate in adults' lives, habits, perceptions, values, and attitudes towards animals. This raises questions such as how we should value and respect our animal companions and maintain companionship with them (see Nurmi, 2023). Children who have close relationships with animals at an early age are more likely to grow up with an interest in animals than those who lack the experience of shared

moments with pets. Attachment is facilitated by compassion, caring, and pet-directed friendship behaviours, and thus, attachment to pets significantly predicts positive attitudes towards animals (Hawkins & Williams, 2017). This means that living with an animal develops a person's ability to care for and ensure the wellbeing of the animal/pet (Rosenberg, 2023). Since a child may have a more open way of looking at different environments and making contact with others, the way a child forms their identity and behaviours also contains significant seeds of cultural renewal (Nurmi, 2023).

New animal research shows that many animals (non-humans) have abilities once thought to be exclusively human (De Waal, 2018), challenging the perceived uniqueness of humans (Lummaa & Rojola, 2014). This phenomenon includes studies with animals in classrooms during reading and other learning activities (Gee et al., 2017; Suvilehto, 2023). The effects of the presence of an animal on learning among young children indicate changes in affect and increased motivation in learners (Odendaal, 2000). Being in the presence of an animal, stroking it, or even just looking at a picture or video of an animal may trigger the release of oxytocin, a pleasure hormone, in both humans and animals (Beetz et al., 2012; Beetz & Bales, 2016). Animals may enhance experiences of joy and curiosity, as well as physiological effects, including engagement (Zak & Matzner, 2005), a decrease in stressors, and an increase in attention during human – animal interaction (HAI).

Although the death of an animal/pet is not discussed much in the literature, the Finnish Literature Society (SKS) has gathered writings about pet ownership, which often touch themes of loss and grief (Rosenberg, 2023; Schuurman & Laurén, 2016). An animal relationship is delicate and meaningful. For a child, an animal plush can be a safety item, which can symbolise a real animal in times of grief (Aerila et al., 2019). The child may seek an animal toy as a substitute. Many children also miss the animal, and as a representative of this, their own stuffed animals and animal play can be significant emotional factors. With a real animal, the relationship is more multidimensional. Animal games and childhood animal experiences illustrate the necessity of animals for everyone, and the relationship with a real animal is even more profound.

3. Research design, data, and method

3.1. Data collection and the context of the study

The data for the study were collected during a literary art course that applied the Pritney method (Suvilehto, 2019; 2020b; 2021) among early childhood teacher education students from 2018 to 2020 at a university in Northern Finland. The Pritney method (Figure 1) connects literature and representations of animals in books and soft toys, self-reflection enhanced by arts-based activities, and communication with animals while discussing post-human ideas of humans and more-than-humans. The activities in the Pritney method are inspired by a real Shetland pony (owned by the first author and called Pritney), applications related to this pony (soft toys and children's stories), and animal stories. During the literary art course, the students gained knowledge and engaged in activities using picture books, the bibliotherapy approach, and puppeteering (animal-shaped hand puppets).

The literary art course also included a form of creative writing called animal writing, and the data for this study consisted of these writings: the participants recalled and creatively wrote about their early animal memories. This activity started with writing in a

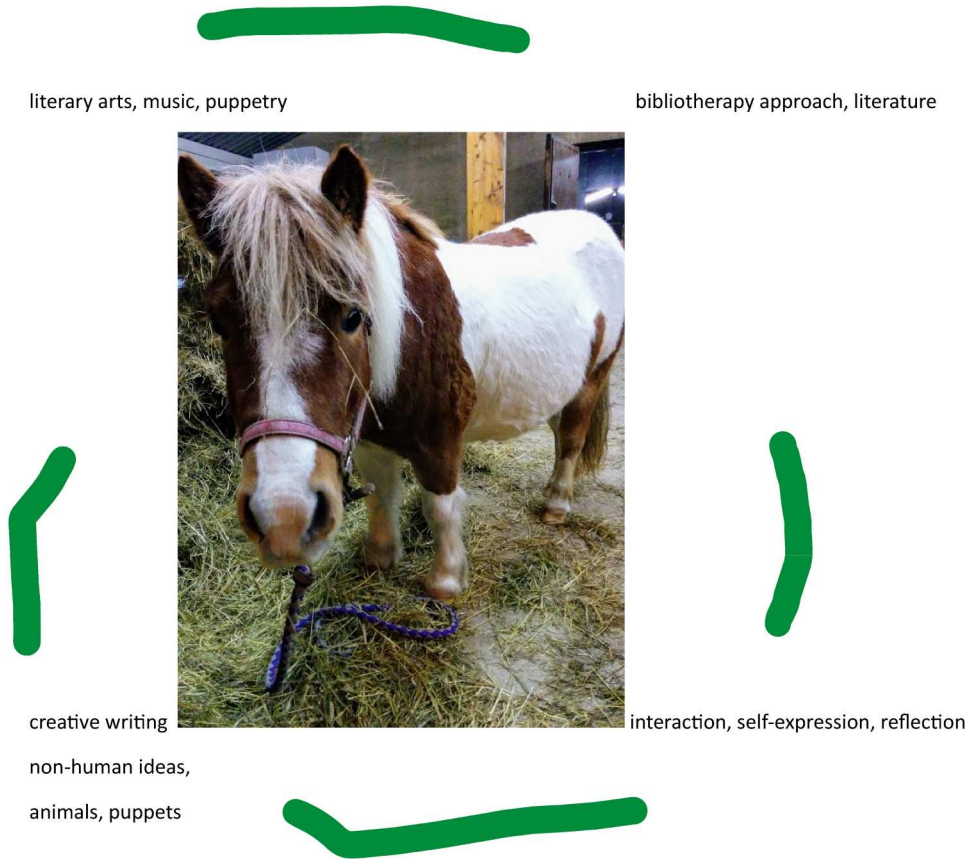


Figure 1. The Pritney method.

stream of consciousness for at least three minutes, with no rules or limitations on length or specific content. The aim was to evoke individual histories of experiences related to animals and nature in childhood, whether they involved real animals, childhood play, visits to zoos or animal parks, or literature, such as childhood fairy tales and stories. The starting point for writing was the following: “Can you remember what your animal history is like? Make the time journey to childhood as far as possible through creative writing using the stream of consciousness method.” By giving students complete freedom over the kind of animal memories they would write about, we sought to ensure that students had the opportunity to make choices about how deeply or superficially they would approach their own animal history.

This study was conducted in accordance with the General Data Protection Regulation (GDPR). Prior to collecting the data, informed consent was obtained from the 200 students participating in the study. This included written consent to use the animal writing for research purposes and ensuring that the participants were fully informed about the study, the data being collected, and how it would be used. The researchers coded the participants and scanned the outcomes, ensuring the anonymity of each writer. In this study we have not acknowledged students’ gender, socioeconomics, and location of upbringing (suburban vs. urban) to ensure the anonymity of the data.

3.2. Data and data analysis

The data consist of 200 students' animal writings based on their memories. For the analysis, the individual writings were coded and compiled into a shared document, resulting in 173,000 characters, including spaces, amounting to 66 pages of written material.

To answer the first research question, the data were analysed using qualitative thematic analysis (Braun & Clarke, 2006). However, as the data consisted of themed memory stories, this study included elements of narrative analysis (Felluga, 2003) and memory work (Ojala, 2021; see Suvilehto, 2020a). The analysis was implemented in several phases. First, the researchers individually coded the data guided by the first research question. Next, the individual codes were assembled into potential themes, which were then confirmed individually via data-driven analysis and examples. Finally, the themes were specified by naming them together. In Table 1, the first column contains the theme of the stories, and the second column outlines the characteristics of the theme.

The second research question was answered by investigating the results of the first research question by developing thematic analysis (Teräs & Toiviainen, 2021), which represents a dialectical process of connecting and interpreting the findings of the thematic analysis in a social and cultural context.

In each phase of the analysis, we tried to take the nature of the data into account, as memories always involve a choice: Which memory do we want to share with others, and how do we make it meaningful? (Hyvärinen, 2007). Furthermore, writing memory stories is always more than just bringing things back to mind because imagination and the narrator's point of view are used, and the aim is to form a narrative. Presenting a memory in the form of a story can also protect the memoirist, since in writing a story one can make choices about the scope of the text, the details to be described, the description of the inner world of the characters, and even add partly fictional elements (Jalongo, 2019).

4. Results

The early childhood animal memories were rich in mentioning many animal species, and the relationships with these animals were diverse, deep, and respectful. Negative emotions also arose.

Table 1. The themes aroused by the analysis.

<i>Stories of animal relationships forming commonality</i>	Playing together with a friend and his/her pet studying nature and the animals pet moments together with a family/with friends
<i>Stories of strong emotions of animal memories</i>	Missing dear pet, taking care of a cat, a pet is important, fear for a bear, nightmares, emotions, tenderness, pet's death, sadness, a pet as a guardian angel, death, and grief, sadness, distress, overcoming the fear for bugs, reptiles, taking care of bees. holding a snake in hands
<i>Stories of reflecting the meaningfulness of the animal relationships in childhood</i>	Nurturing, importance of pet, animals give strength responsibility, passing the love for animals in adulthood going to give good practices and experiences later to own kids, forest trip and daycare; love for animal is passed on to the second generation, the importance of upbringing

4.1. *Stories of animal relationships fostering community*

In many animal stories, the students described how a community was formed around or with the animal. In these communities, the members shared memories and common interests and engaged in animal-related activities together. The animals forming this communal feeling varied from horses and dogs to bugs and even stuffed animals:

[...] every summer, my friends and I tried to catch bugs in a jar as summer pets. We fed them all kinds of leaves and flowers and made holes in the lid of the stall jar with needles to give them oxygen. Then, days later, we wondered how on earth the bugs had died, even though we had taken such good care of them.

I have taken a beginner's riding course since I was five years old. [...] In my mother's words, since I was 10 years old, I have "lived" in the stable all evenings after school and sometimes all weekend. Back then, I knew nothing better than horses and stablemates.

Besides interacting with and taking responsibility for animals with friends, the sense of being a member of a community was illustrated by playing with an animal. One student wrote about her dog in outdoor play: "there was a cage outside for the dog, which served as a childhood playground when dog play was the theme. We "slept" in the doghouse, barked, jumped on the door, and, of course, ate dog food". Besides the significant "dog play or games", there were memories about playing with imaginary animals in a nearby forest: "Playing a dog was a significant part of my childhood games. We played a lot in the nearby woods, where we imagined bears and wolves chasing us".

Access to nature and the possibility of experiencing the proximity of a living animal are not always possible. In these cases, the surrogate experience may well be a stuffed animal, which can be the best friend for a trip to the hospital, for example. The dog toy was firmly on one student's mind when they wrote about their childhood animal memories:

- a. was with me everywhere: abroad, at home games, in kindergarten, and at swimming school. In other words, B. always went with me wherever I went. The best memory with B. is related to the hospital. When I was little, I underwent surgery for appendicitis, which really scared me. Fortunately, B. was involved. The doctor sensed my fears: he told me that B. would also have heart monitors on its chest and be anaesthetised at the same time as me. This made me feel that B. would come along and that we could sleep together for a while. The surgery went well.

Another memory also highlighted how valuable a stuffed animal figure may be. One student wrote about taking their stuffed dog friend wherever they went. The toy dog was like their best friend and a secure object to lean on. Stuffed animal figures can substitute for a real pet, and for many children, they provide significant support and refuge:

I have always liked stuffed toys; towards the end of elementary school, I remember counting that there were about 60 of them, and all of them slept in bed next to me. The most important ones were also transported when I moved into my own home and are in a special place in the glass display case. The rest are still stored at my parents'.

In kindergarten, my most important toy was a teddy bear, which I got from my grandfather. It is brown and cuddly and has a cute round stomach, which is why it was named P. I don't remember any more than small individual memories of my time in kindergarten, but my mother told me about my adventures with P. I reportedly took it everywhere, especially to kindergarten; it always had to be brought with me. All my stuffed animals were important to me, and 99 percent of my toys were animals, so there should be something to write about.

4.2. Stories of strong emotions in animal memories

The memory stories of the students illustrate how animals can evoke strong emotions, such as fear, sadness, and distress. This is partly due to the fact that not everyone feels drawn to any or all animal species, except perhaps in the safe environment provided by literature. Additionally, being allergic to animals can bring limitations to animal encounters and childhood dreams of having pets. Some students seemed to understand that their emotions related to animals date back to childhood experiences and can be influenced and conquered:

I was afraid of everything, from birds to dogs to horses. There has never been any reason to be afraid, or at least we haven't noticed one, because I've never had any incidents or other frightening experiences with animals. When I went to primary school, my parents were very worried about how I would get to school if, for example, there was a large flock of birds in the way because I would not dare to go through it.

Our relative had a big old dog. That dog I wasn't afraid of at all. From then on, I gradually got used to the fact that there is nothing scary about dogs, although some situations I still found distressing. At the age of 10, I surprised my parents and wanted to start riding. They couldn't believe their ears when I told them this. That's how I got to ride. The fear disappeared, also towards dogs.

In the stories, the source of the emotions of fear and distress was sometimes caused by the environment, such as a nearby forest, or some piece of information, such as news reports. It is noteworthy that in many cases, the fear was caused by an adult. One student wrote about how a newspaper story about a bear caused their fear of wild animals:

I became afraid of bears, and I still am. The fear started sometime when I was five or six years old, when in our small town, one of the family's yard garbage bins had been scratched by a bear. It had been the subject of a newspaper article with a picture of the bear's marks on that dumpster. I still remember that picture. After that, I started having a few different nightmares about bears, one of which I still remember very clearly but is hard to explain. I had those same nightmares for quite a long time. At some point, the nightmares stopped, but the fear remained. Whenever I go into any kind of forest, whether it's very sparse, familiar, small, or close to a settlement, I have a slight fear that there might be a bear.

Furthermore, fear of animals can arise from incidents. In one story, a student wrote about a memory of spending time with their friend in a deserted house where they encountered a wild cat. Since then, the student has felt haunted by cats: "The cat we encountered ran and hissed around us like crazy, and I was just afraid that it would jump on our faces and scratch and bite our eyes. Since then, I've avoided cats as best I can".

In the memory stories, death and grief were major themes. These stories concentrated on depicting how it felt to lose a loved one, how getting over the grief may take years, and

how there are different ways to go through the grief. In general, a pet's death is shocking (see Cacciatore et al., 2021; Schuurman & Laurén, 2016) and leaves many open questions and deep uncertainty about the beginning of life and the finality of death. Deveney and Lawson's (2022) study explored the emotional aspects of creative writing. Their findings revealed that creative writing provided unexpected and significant benefits in helping participants process emotional difficulties. Additionally, they discovered that engaging in creative writing positively impacted participants' mood and overall mental well-being. Early experiences are often difficult to remember, but fundamental experiences remain in the body and mind, and from there, they can be lured out by the method of creative writing. The death of an animal seems to be a very fundamental one:

When I turned six, I got my very own dog, N. We grew up together and took care of each other. One summer in high school, N. died. It was one of the most horrible days of my life. N. was already old, blind, and could not hear properly. However, it was important to me that N. didn't have to be alone in its final moments. I held it in my arms, and it was lying on my heart. It always loved it when N. lay on me. After the first moments of calm, it could still lift its head and lick a tear from my cheek. That's what it always did. I will probably never get over that sadness, and fortunately, I don't have to. I can still feel the swipe of N.'s tail on my leg from time to time. My own little guardian angel.

Our bunnies C. and L. lived a happy rabbit life, and they were so tame that they spent their days in our yard frolicking and eating grass. One day, C. bounced around the yard and watched our hunting dogs eagerly bark in the cage. C. mistook our dogs for friends and decided to dig into the cage, causing one of our dogs to kill my little bunny. This taught me even more about the cycle of nature and was a sad decision for my bunny's life.

Cohen and Clark (2019) also argued that animal contact is often discussed in the context of grief: the role of animals in supporting humans through periods of loss. The authors considered the special challenges of losing an animal companion, the meaningful place of animals in the lives of vulnerable people, what the loss of those relationships brings, how animals can support those in bereavement, and how the loss of a beloved animal can cause trauma (Tedeschi & Jenkins, 2019).

4.3. Stories reflecting the meaningfulness of animal relationships in childhood

The students' memory stories highlight the meaningfulness of animal encounters in childhood. These interactions can have positive or negative effects, emphasising memorable encounters and periods of growth with animals. Many students want to ensure that their own children will have positive encounters with animals: "When I think back to the importance of my own pets to myself, I think that I want to give similar experiences to my own children in the future. I like to nurture animals because they give me a lot of strength".

It seems that even in their childhoods, the students realised that pets had to be looked after, and that meant responsibilities for everyone in the family. Pets also often formed family members in their own way: "I've grown into an animal-loving person". One student was taught in early childhood where milk, eggs, and meat come from. The family has always hunted, so the child was also involved in hunting animals: "I think I have a huge appreciation for animals, even if someone might say otherwise when they hear about my hunting hobby". Another student described their relationship with animals as diverse and very deep:

We have had pets all our lives, and my family and I have always been out in nature. An important thing I learned as a child from my parents is to appreciate nature and animals. In my life, we have had dogs, cats, bunnies, chickens, fish, pheasants, a hamster, a cockatiel, horses, and a pony.

Mostly, students wrote about good memories that continued into adulthood, except for one student's account, where their experiences with animals were generally negative, as was the case with their mother. There was a phase when the student wanted a dog, but the mother refused: "I have never felt like an animal-loving person. [...] However, our mother didn't give up on it because she doesn't like animals at all because of her own childhood experiences. Nowadays, I'm on the same page as my mom, and I bet I'll never get myself a pet".

5. Discussion

All these animal-populated families and experiences in students' written childhood memories are a testimony to biophilia (see Wilson, 1984). What one learns in childhood can also be remembered as an adult – for better or for worse. We need to develop new ways and ethics that encompass non-humans (Braidotti, 2020; see Gaard, 2020). This is why we need awareness of our attitudes, actions, and educational pedagogies towards nature and the fantastic variety of animal species. Early memories captured through creative writing related to interactions with animals enable gains in perspective: nature connectedness encourages humans to reassess a constraining and restrictive anthropocentric focus. This study does not explicitly shift the focus from anthropocentric to ecocentric views, but it expands the discussion to include animals and provides space for mutual reflections among students about nature perspectives. This may lead to increased reciprocal understandings and behaviours towards ecocritical teaching attitudes and conscious respect, solidarity, and connectedness with more-than-humans.

In the students' memory writings, animal contacts were mostly desired and pleasant, although for some, the experiences were frightening. Similar to Pennebaker and Francis's (1996) study, which showed that writing about upsetting experiences can improve physical health, the students also experienced positive outcomes by safely exploring the topic. Getting to know the animal through writing, drawing, and discussing with peers broadened their perspectives and offered a way to engage with multiple simultaneous phenomena: joy, wonder, emotions, and surprising memories. Understanding and articulating early memories through creative writing may reconnect humans with their innate voices and external stories, thus offering insight into thinking beyond one's own needs. According to Vygotsky (2004) creative writing involves reproducing what is in front of us or what we have previously mastered and developed. We believe that creative writing, particularly reimagining the past through writing, can help foster respectful and equal relationships with nature and animals. This may also be relevant when considering our relationship with the future. As Vygotsky notes, "To the extent that the main educational objective of teaching is guidance of school children's behavior so as to prepare them for the future, development and exercise of the imagination should be one of the main forces enlisted for the attainment of this goal" (Vygotsky, 2004, p. 88).

Teacher students' animal memories testify to how encounters with animals affect adulthood. Experiential learning is effective; thus, even short animal encounters appear

to be meaningful and have far-reaching effects. Based on the data, a child who had a relationship with animals in childhood tends to have a positive attitude towards animals and nature that continues into adulthood. They also carry this continuity into their own work as early childhood educators, conveying an attitude and actions that respect animals and nature, and highlighting the importance of getting along and having positive experiences with animals.

This study was designed as a qualitative and exploratory investigation using creative writing; thus, the results are limited in their generalisability. The interpretations of the phenomena of memory writings on animal themes are varied: the memories are subjective in nature, and as research, there are anonymity and ethical issues considered. Students' written accounts of lived experiences and memories translated into a creative story offer multiple ways to interpret a phenomenon. It is acknowledged that the participants described wellbeing benefits or long-term anxieties in a creative task completed in only ten minutes. Therefore, the generalisability and transferability of the results require future research to investigate the phenomena with a more varied sample from different contexts, as memory writing may offer insight in the field of education to foster respect for nature and animal species.

6. Conclusion

The early childhood education plan (Finnish National Agency for Education, 2018, p. 46) has set goals for environmental education, including the demand for strengthening children's relationships with nature, encouraging responsible environmental activities, and guiding them to a sustainable lifestyle (see also Hawkins & Williams, 2017; Heggen et al., 2019; Rättyä et al., 2023). We can move towards these dimensions through (1) learning in the environment, (2) learning from the environment, and (3) acting on behalf of the environment (Finnish National Agency for Education, 2018, p. 46). Positive environmental experiences in childhood resonate into adulthood and foster care for the environment, supporting the idea that early childhood lays the foundation for a lifelong relationship with the environment (see Melson, 2013; Parikka-Nihti & Suomela, 2014).

When educators and teachers reflect on their own childhood experiences and emotions through creative memory writing, insights may arise that provide valuable knowledge about nature, animal species, and interconnectedness with the ecosystem that we, as humans, are part of. As we humans are highly social animals, we are obliged to track and interpret our own and others' behavior, and the valuable skills of empathy (see Wagner et al., 2015). We may gain respect for each other as a whole – humans, more-than-humans, and our sense of wellbeing. These are the aspects reflected in the students' memory writings, underscoring the special nature of early childhood as a key developmental period.

Experiences in nature affect children's and young people's appreciation and environmentally responsible attitudes and positive feelings towards nature (Cantell et al., 2020), and these reflections were evident in the students' creative writing about their animal/pet memories. These were the motifs that we were interested in this study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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