The Case for Nature Connectedness as a Distinct Goal of Early Childhood Education

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ABSTRACT

The importance of young children learning about the natural environment has been recognised in policy and curricular frameworks around the world. Moreover, there has been a call for children to spend more time outdoors and to reconnect with nature. However, the distinct construct of nature connectedness has not been examined in detail in relation to early childhood education. This article aims to bring together environmental psychology literature and early years' policy in an attempt to make the case for nature connectedness becoming a distinct goal in early childhood curricular frameworks. Furthermore, it aims to highlight gaps in the research literature and offer clear directions for future research.

Keywords: nature Connectedness; young children; early childhood; curriculum; policy; outdoor learning

It is generally agreed that good quality early education can play an important role towards the optimal development of children (Pianta et al., 2016). The effects of good quality early education are not merely transitory, but can be seen long after that phase of life has finished and well into adult life (Barnett, 1998; Ramey et al., 2000; Reynolds and Ou, 2011). The effects in question include cognitive skills and academic achievement (Ramey et al., 2000), but also encompass aspects of psychological wellbeing, in this case defined as smaller likelihood of depressive symptoms (Reynolds and Ou, 2011).

These advances in our understanding of the effects of quality early education and care have informed both policy and practice in most developed countries. Early years' curricula and frameworks for early childhood are now shaped around children's developmental needs (Kostelnik, Soderman, Whiren & Rupiper, 2007). Moreover, many modern early years' frameworks, such as that of Australia (Australian Government, 2009) and Scotland (Scottish Government, 2008) tend to value wellbeing[1] as a distinct outcome of this educational phase.

The aim of this conceptual paper is to put forward and substantiate the thesis that nature connectedness should be seen as a worthwhile goal, and a possible distinct outcome in early years' education. Nature connectedness is the extent to which a person identifies themselves as being a part of nature, also defined as a "sense of oneness with the natural world" (Mayer and Frantz, 2004, p. 504). To this effect, it will first outline the construct of nature connectedness and its correlates. The aims of early years' education as they are currently articulated in several curricula, will be looked at in conjunction. The argument that nature connectedness is a positive characteristic for both the individual, but also society as a whole will be unfolded, with reference to the current state of the literature.

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[1] For the purposes of this paper the author will use wellbeing in the broadest sense possible, as defined by Dodge, Daly, Huyton & Sanders, 2012). Their multi-faceted definition focuses on a state of equilibrium, or the ability to maintain a state of homestasis. This ability is dependent upon having the psychological, social and physical resources to meet life's challenges. When the term 'wellbeing' is used within the paper in different ways, this will be defined in the relevant section. This is necessary when referring to other studies that have used the same term to describe subtly different constructs.

Ways in which nature connectedness can be promoted in the early years will be explored and, finally, directions for future research in this area will be presented. The central themes of this paper are presented in the image below (figure 1). This paper should be of interest to policy makers and practitioners involved in early childhood education, as well as a useful addition to the existing literature in informing further research.
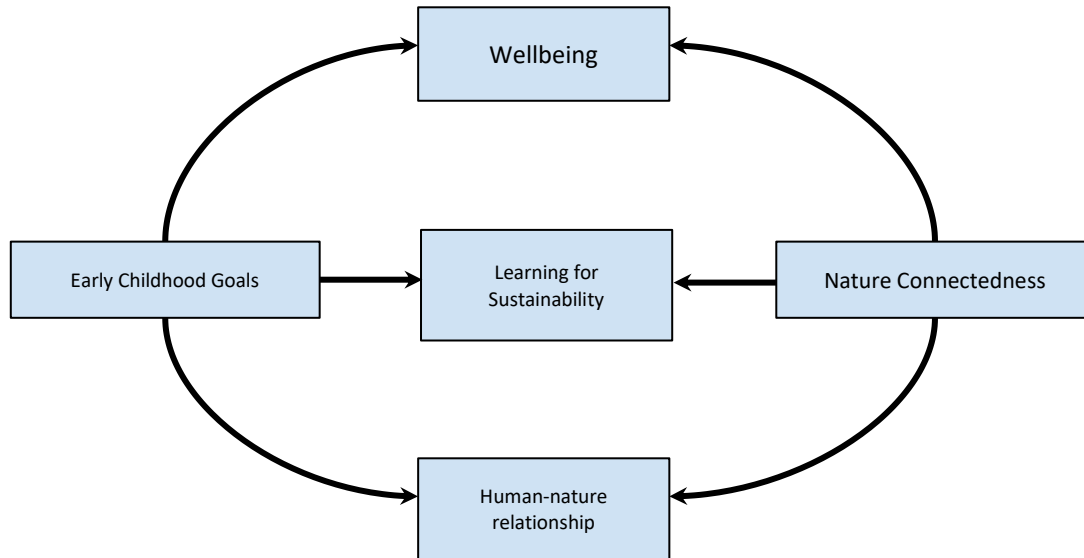

Figure 1. Relationship between Early Childhood Goals and Nature Connectedness.

Nature connectedness

Nature connectedness is the most common term used to describe a positive human-nature relationship. Other terms, such as Nature Relatedness (Nisbet et al, 2009) and Inclusion of Self in Nature (Martin and Czellar, 2016) have also been used and have largely similar characteristics. For the purposes of this article nature connectedness is the subjective perception of the self being a part of nature (Schultz, 2002). Nature connectedness as a construct has several elements, namely cognitive and affective strands (Mayer and Frantz, 2004; Schultz, 2002), as well as experiential and behavioural aspects (Nisbet et al., 2009). The cognitive strands mentioned above relate to the thoughts we have towards the environment (e.g. "I have a deep understanding of how my actions affect the natural world"), while the affective strands towards our feelings and emotions towards the natural world (e.g. "I often feel part of the web of life."; Mayer and Frantz, 2004). The experiential and behavioural aspects, particularly measured through the Nature Relatedness scale (Nisbet at al., 2009) are mostly referring to choosing to spend time outdoors (e.g. "I enjoy being outdoors, even in unpleasant weather" and "I enjoy digging in the earth and getting dirt on my hands.") and pro-environmental behaviours (e.g. "Nothing I do will change problems in other places on the planet[2]").

It should be noted that nature connectedness can be seen both as a personality trait (Kals, Schumacher & Montada, 1999), meaning that is largely stable across time, as well as a state (Mayer, Frantz, Bruehlman-Senecal & Dolliver, 2009), which can be changeable according to our experiences. In fact, positive experiences of nature, as well as learning experiences outdoors, have been found to increase nature connectedness in a host of studies (Barrable & Lakin, under review; Lumber, Richardson & Sheffield, 2017; Mayer et al., 2009; Vining, Merrick & Price, 2008). The kind of experiences that promote nature connectedness will be looked at in more detail in a separate section of the article.

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[2] This item is reverse-scored.

Nature Connectedness and wellbeing

A host of empirical studies strongly suggest that simply being in contact with natural environments[3] is good for both our mental wellbeing (Grinde & Patil, 2009; Russel et al., 2013) and our physical health (Health Council of the Netherlands, 2008; Mitchell & Popham, 2008). Specific research on the benefits of nature contact for children has outlined green and other natural areas as "essential elements of healthy communities for children" (Chawla, 2015, p. 433). A recent large longitudinal study from Scotland has found that access to natural space in the neighbourhood may reduce social, behavioural and emotional difficulties. This effect is stronger in children who have access to private gardens (Richardson, Pierce, Shortt & Mitchell, 2017). Moreover, positive cognitive effects have been observed after exposure to natural and green environments (Faber Taylor & Kuo, 2009), while other studies have discovered the restorative benefits of being in nature (Hartig, Evans, Jamner, Davis & Gärling, 2003; Van den Berg, Hartig & Staats, 2007).

Feeling connected with nature has been found to be associated with more frequent visits to green spaces (Lin et al., 2014), therefore perhaps partially explaining what nature connectedness itself is correlated with increased wellbeing (Nisbet & Zelenski, 2014). However, the element of connection in itself should be highlighted as one of great importance in this relationship (Zelenski & Nisbet, 2014). Although it should be highlighted that all the evidence in the area of wellbeing and nature connectedness is correlational, with all the limitations this has, the relationship has been documented in several studies.

Wellbeing, as a psychological construct, is usually conceptualised in two separate but often interrelated dimensions: hedonic and eudaimonic wellbeing (McMahan & Estes, 2011). Hedonic wellbeing mainly relates to the experience of pleasure and the satisfaction of desires (Kahnemann, 1999), while eudaimonic wellbeing is mainly focused on the 'good life' in the Aristotelian sense, and the finding of meaning in one's life (Ryff, 1995). A large meta-analysis of a total sample size of 8523 found that there was a positive correlation between positive affect and nature connectedness ($r = .22$) and life satisfaction ($r = .17$; Capaldi, Dopko & Zelenski, 2014). Vitality was also used as a measure of wellbeing in the above study, with a correlation of $r=.24$ with nature connectedness. It is worth noting that although this may look like a small correlation it is comparable to that of income and education level in relation to wellbeing (Capaldi et al., 2014).

A 2018 study in preschool children, the first of its kind, found that nature connectedness was positively associated with enhanced psychological functioning (Sobko, Jia and Brown, 2018). The study, which used a parental report measure, found increased connectedness to nature to positively correlate with improved prosocial behaviour, fewer behaviour and emotional difficulties. This study signals the beginning of more research into young children's connectedness to nature, its correlates and hopefully ways to promote such a relationship.

Nature Connectedness and Sustainability

Another positive construct related to nature connectedness is pro-environmental attitudes and behaviours (Nisbet et al., 2011). As environmental destruction and climate destabilisation are most likely to be central concerns for this and the next generation(Sundblad, Biel & Garling, 2007) environmental education is often seen as one of the key ways to enact behaviour change in respect to protecting the environment (Jacobson, Carlton & Devitt, 2012). However, knowledge alone is not enough to initiate the major behaviour changes that are needed and there is a notable gap between acknowledging environmental dangers and acting in a pro-environmental way (Kollmuss & Agyeman, 2010). This is where nature connectedness which comprises of cognitive, affective and behavioural elements (Schultz, 2002) could be seen as gateway to inspiring pro-environmental attitudes and behaviours in the

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[3] While different studies define natural environments in different ways, for the purpose of this paper the author will use the definition of Mausner (1996) to encompass all four types, including 'totally natural', 'civilized natural', 'semi-natural' and 'quasi-natural'. These four types are in contrast to 'non-natural' environments. This kaleidoscope version of the term is used in order to include the maximum possible settings that may be identified as 'natural', as different studies that will be reported in this paper may have present different definitions.

next generation of citizens. Although research to date has not causally linked nature connectedness in early childhood with adult pro-environmental behaviours, there are studies that have demonstrated a correlation in adults between nature connection and both concern for the environment and pro-environmental behaviours (Nisbet, Zelenski & Murphy, 2009). In general connection to nature has been seen as a driver of behaviour, linked to the deep motivation of feeling connected and part of a greater whole, or what Frantz and Mayer call the "we-ness" aspect (2013, p. 85). Finally, adult environmentalism has been shown to have its roots deep in childhood, and positive childhood experiences in nature (Wells & Lekies, 2006).

Early childhood as the time to start developing nature connectedness

It is generally accepted, and usually based on various evolutionary theories, including that of Biophilia (Kellert & Wilson, 1993), that humans have an innate predisposition to connecting with their natural environment. However, it was David Orr (1993) who first put forward the idea that there may exist a 'critical period' during which one's positive experiences in nature get translated into biophilic tendencies, and therefore precede a later positive relationship with the natural world.

If we were to look at nature connectedness as part of one's identity, related to an environmental identity we should keep in mind that the creation of someone's identity, for example a national or ethnic identity, can have roots in childhood, and environmental identity is no different. It is through our personal history and emotional attachment that we develop an 'environmental identity' (Clayton, 2003). This can then often be reinforced through societal, affective and historical affiliations. In a retrospective study, Tam (2013) found that adults with higher nature connectedness recalled spending greater amounts of time in nature during their childhood, than those with lower levels of nature connectedness. Another study of similar design found a correlation between childhood nature experiences, and adult environmentalism (Wells & Lekies, 2006). Both studies indicate that childhood could be an ideal time to start nurturing our connection to nature. Finally, Chawla (2009) further looks into the process of socialisation for care towards nature, in childhood and early adolescence, with childhood experiences playing a central role in later attitudes and behaviours. Evidence from an empirical study that looked at environmental education programme evaluations showed that sustained changes in nature connectedness, measured at a follow-up 4 weeks post intervention, were significantly higher in children aged nine and ten years old, than in older children or university students (Liefländer, Fröhlich, Bogner & Schultz, 2013). The researchers suggest that strengthening nature connectedness are more sustainable when made before the age of eleven. High quality longitudinal studies are needed to confirm this.

Current state of the early childhood policy around the world

The following section will examine current early years' policy in different English-speaking countries around the world, in an effort to make links with the literature on nature connectedness which was outlined above. This section has a two-fold aim: to highlight how there are existing early years' curricula in various countries which implicitly hint at human-nature relationships as a distinct goal, and at the same time to draw out other elements of these curricula that would be directly enriched by the inclusion of nature connectedness as a distinct goal. These elements include wellbeing and sustainability.

Human-human relationships and human-nature relationships in the early years (EY)

Most early years' frameworks place human-human relationships at the centre of early childhood education and care. The Scottish government, in a supporting document for guidance to practitioners places great importance on the early attachment process, most notably with the primary caregiver(s) (Scottish Government, 2014). The document focuses on attachment between child and parent, but also highlights the role of the practitioner in building secure relationships. In the English framework, personal, social and emotional development, and the formation of positive relationships in this respect, consists of its own area of learning, central to the philosophy of the framework (Department for Education, 2017).

The "Practice of Relationships" has a significant role in *Play, Participation and Possibilities*, the early learning curriculum framework for Alberta, Canada (Makovichuk, Hewes, Lirette & Thomas, 2014, p. 11). And yet, although these relationships encompass the relationships between the educator, the child and the family, a meaningful relationship with the environment is not articulated. Current policy in these countries focuses on nurturing human-human relationship, but not on the human-nature relationship.

The Australian Early Years Learning Framework moves closer to identifying a relationship with nature as a worthwhile outcome in itself (Australian Government, 2009). It puts an emphasis on a greater connection with the whole planet when it presents "Children are connected with and contribute to their world" (Australian Government, 2009, p. 28) as one of the outcomes of the framework. Moreover, this particular framework identifies a connection and respect for nature as a worthwhile goal as "children become socially responsible and show respect for the environment" (p. 32). Finally, *Belonging, Being and Becoming* clearly identifies a "connectedness to the land" (p. 32) in the context of different community protocols and interdependence of humans and the non-human world. In this sense, the Australian framework exemplifies the importance of nature connectedness as a worthwhile early years' outcome, although without explicitly articulating it as such.

Wellbeing in EY policy

The World Health Organisation (WHO) places emotional and social wellbeing as a responsibility of educational establishments (WHO, 2003), while UNICEF regularly collects and publishes data on children's wellbeing signalling the importance it places on the construct (Adamson, 2013; Fanzul, 2014; UNICEF, 2016).

Wellbeing is a common desired outcome in early childhood education and is often found in national early years' frameworks. It is explicitly stated in the Australian, Irish and Scottish frameworks (Australian Government, 2009; CECDE, 2006; Scottish Government, 2008), as well as that of Alberta and Nova Scotia in Canada (Makovichuk et al., 2014; Nova Scotia, 2018).

Education for Sustainable Development in the EY

Education for Sustainable Development has been promoted by UNESCO since 1992, and part of the Sustainable Development Goals (SDG) include both wellbeing at all ages, as well as protection of the natural environment in all its forms (UNESCO, 2017). In many ways, education has been seen by UNESCO as the ultimate vehicle to promote the SDG, but education systems and curricular frameworks have not necessarily been quick to respond to this call. The Scottish Government has set Learning for Sustainability as a priority for all sectors of education, and this is reflected on the Curriculum for Excellence, which underpins education from 3-18 (Scottish Government, 2008b).

Other countries, such as Australia have also included some aspects of sustainability education in their early years frameworks (Australian Government, 2009), while Nova Scotia, in Canada has included some aspect of environmental awareness and respect for the environment in its very recent curricular guidance titled Capable, Confident and Curious (Nova Scotia, 2018). Moreover, echoing the Australia early years' document it urges practitioners to "consider the nature of children's connectedness to the land and demonstrate respect for community protocols" (p. 81). Finally, sustainability as a concept is further mentioned as a worthwhile outcome in both of these frameworks (Australian Government, 2014; Nova Scotia, 2018).

Ways to promote nature connectedness in the early years

In this first part of this article, the point has been developed that nature connectedness is a useful and worthwhile goal for all education, but particularly suited to the holistic development of early years' frameworks. In the following second part of this article, we will explore ways in which nature connectedness can be promoted within an early years' setting, as well as examine some areas for further research into childhood experiences and nature connectedness.

Outdoor learning

As mentioned above contact with the natural world is one of the ways to nurture nature connectedness for all ages. Outdoor learning gives the opportunity for such sustained contact and meaningful engagement. The importance of outdoor learning is being recognised by education leaders and has become part of educational policy in England and Wales (DfES, 2006), and part of the Curriculum for Excellence in Scotland (Brown, 2010). National and regional curricula have introduced outdoor learning expectations in Australia (ACARA, n.d.), in New Brunswick, Canada (Department for Education, 2017), and Ireland (CECDE, 2006). Such developments have often sought to address the decline in outdoor play and learning opportunities for young people outside of formal education (Waite, 2010), as well as what has been named as Nature Deficit Disorder (Louv, 2008).

At the same time, outdoor early years education settings have seen a rise in the last decade in several countries around the globe. In Europe, and countries such as Germany, forest preschools (Waldkindergaarten) started in the 1960s, found approval in the 1990s, while today there are more than 1500 (BVNW, 2018). In Denmark more than 10% of preschools are in forests and other natural settings (Danish Ministry of Foreign Affairs, 2017). Different types of nature preschool practice have developed in countries such as South Africa, Portugal, Brazil, Slovenia, India and Italy (Knight, 2013). In the US nature-based preschools are a growing trend, with the rate of growth having greatly increased in the last 5 years. A Natural Start Alliance (NSA) national survey concluded that there are over 250 of them operating in 43 states (NSA, 2017). In Australia, Bush Kindergarten, adapted from European forest school to fit the climate and cultural identity of the country, has also become increasingly popular (Victoria Department of Education, n.d.; Campbell & Speldewinde, 2018).

However, while there is unprecedented growth in outdoor early childhood education and care settings, the frameworks that guide the outcomes for early childhood education are not always applicable to such nature-based establishments. It is, therefore, an aim of this article to encourage both policy makers and educators in nature-settings internationally to embed nature connectedness as an outcome of outdoor learning.

A pedagogy for connectedness

Although time spent in nature has been found to correlate with nature connectedness (Nisbet, Zelenski & Murphy, 2009; Sobel, 1996), further refining the ways that we engage with it can promote lasting changes in the way children relate to the natural environment. Knowledge-based curricula and environmental education programmes have been found to have an effect on nature connectedness (Barrable & Lakin, under review; Ernst & Theimer, 2011). However, other work has highlighted the affective side of our engagement with nature seems to be key in building life-long relationships with it. Kals, Schumacher and Montada (1999) outlined the process through which positive experiences in nature during childhood translate themselves into greater emotional affinity in adolescence and adulthood. Moreover, this is further linked with nature-protective behaviours. Breaking down this affective relationship with nature four aspects emerge: love, feelings of freedom when in nature, feeling secure when in natural environments and being part of or "oneness" with nature (Müller, Kals & Pansa, 2009; p. 60). It is this element of freedom, and child-led pedagogy that can be crucial in creating the positive experiences that will enhance children's connection to nature. Moreover, supporting children's autonomy when playing and learning in natural settings can lead to gains in overall wellbeing too (Barrable & Arvanitis, 2018). More recent studies looking at the pathways towards nature connectedness have attempted to further explore the roles of emotion. An empirical study into nature connectedness determined that beyond knowledge and mere contact, emotionally engaging with nature, as well as compassion, meaning and beauty are all pathways to nature connectedness in adults (Lumber, Richardson & Sheffield, 2017).

Future directions for nature connectedness in early childhood education

As seen above, the current state of the literature provides us with some idea of how a relationship to the natural environment develops through the life-span, with childhood being a crucial time for development (Müller, 2009; Wells & Lekies, 2006). It also provides us with a theoretical background of how nature connectedness can be nurtured in children (Kals et al., 1999), and features empirical studies, mostly performed on adults, on increasing

nature connectedness through various activities (Lumber et al., 2017; Richardson, Cormack, McRobert & Underhill, 2016; Richardson & Sheffield, 2017; Tam, Lee & Chao, 2013). A summary of this research would bring together the following important points: 1) anthropomorphising nature could lead to increases in nature connection (Tam et al., 2013); 2) *noticing* beauty in the nature around us can enhance how connected we feel to it (Richardson et al., 2017) and 3) engaging with nature through emotion, compassion and empathy, as well as with nature's beauty can be pathways to nature connectedness (Lumber et al., 2017).

Although there is nothing to suggest that the above are not also pertinent to children too, there are also a few empirical studies that have focused specifically on children when it comes to increasing nature connectedness. A 2011 study that focused on fifth-grade students in the US found links between time spent outside and nature connection, and found that nature connectedness partially mediated the effect of time outdoors on environmental stewardship (Andrejewski, Mowen & Kerstetter, 2011). However, the types of activities the children engaged in were not looked at in detail.

This was indeed explored in a study of the educational programme Get to Know (Bruni, Winter, Schultz, Omoto & Tabanico, 2017). The Get to Know programme was designed to promote connection to nature through a variety of activities, of which only a subset were evaluated for the article. These included a creative arts competition, an outdoor nature trail treasure hunt and a virtual hike. Of the three interventions, only the creative arts competition showed a significant increase in nature connectedness after participation (Bruni et al., 2017). This is in line with some of the previous studies suggesting that engaging with nature's beauty, through artistic endeavours in this case, can promote feelings of connection. It is somewhat surprising to see that the outdoor trail did not promote changes in nature connectedness, as previous research in adults has indicated increases in nature connectedness after time spent outdoors, but the authors suggest that more time spent during the hike, or more frequent visits may well give different results. The above study was conducted in primary-age children, the youngest of which was 6 years of age. The point stands that what we, as practitioners might believe promotes nature connectedness may not be supported by the evidence. In this respect, more research is needed.

The process and promotion of nature connectedness in early childhood has only been studied in two recent small studies, one a field report (Tsevreni & Tigka, 2018) and another an evaluation of an ongoing forest school programme (McCree, Cutting, & Sherwin, 2018). In the report, which is from a nursery in Greece, the role of the children as agents of establishing a human-nature relationship is emphasised, as opposed to a more official, adult-driven approach (Tsevreni & Tigka, 2018). This may link to previous theoretical suggestions by Müller et al. (2009) and Barrable and Arvanitis (2018) both of which have supported a drive for freedom and autonomy in nature. The evaluation of the forest school programme was a longitudinal mixed methods project that tracked a small number of children (*n*=11), who were between five and seven years of age upon entry, across the duration of the programme, which lasted for three years (McCree et al., 2018). As at the time of the evaluation there was no scale for use with children of that age, the cohort were only measured upon finishing the programme, with no comparison data from the beginning. However, these nature connectedness scores were compared with matched peers from a local schools. The cohort's nature connectedness scores were significantly higher than those of matched peers who had not participated in forest school.

It should be noted that in a systematic review of nature connectedness interventions (Barrable, in preparation) 26 studies were identified. Eleven of those had children as participants, but only one, reported above (McCree at al., 2018) had children younger than eight years of age participating. This may be attributed to the fact that a validated measure did not exist for this age group before 2018.

In conclusion of this section, there is certainly need for further empirical research on the types of experiences that nurture nature connectedness in children. One way of doing that would be through evaluations of nature programmes such as the one described above (McCree et al., 2018). Moreover, research that will focus on promoting the building of an *affective* relationship with the environment in early years' settings would provide valuable evidence with which to build a basis for pedagogical practice in early childhood settings around the world. One of the challenges that practitioners may face in incorporating nature connectedness as an outcome is difficulties in accurately measuring it, as an age-appropriate validate measure does not currently exist.

Measuring nature connectedness in children

A variety of validated instruments exist in order to measure nature connectedness in adults, such as the Nature Relatedness Scale (NR; Nisbet et al., 2009) the Nature in Self Scale (INS; Schultz, 2001) Connectedness to Nature Scale (CNS; Mayer & Frantz, 2014). All of these scales were found to interrelate with each other to a high degree (Tam, 2013). A scale for use specifically in children was developed and validated by Cheng and Monroe (2012) and was named the Connection to Nature Index (CNI).

The other scales mentioned above were initially designed for use with adults, but two of them have since been adapted for use with children, aged 8-12 (Bragg, Wood, Barton & Pretty 2013). These comprise the short-form NR scale (NR-6; Nisbet et al., 2009; 2011) and the single-item INS (Schultz, 2001). Of these measures, both the NR and CNI scales showed good internal consistency and there was a correlation between all three measures. The CNI was found to be the most preferred measure, by the children who took part in the study (Bragg et al., 2013). These measures have since been used in several studies evaluating outdoor learning and other environmental education programmes (Crawford, Holder & O'Connor, 2017; Razani et al., 2016; San Jose & Nelson, 2017).

Sobko, Jia and Brown (2018), acknowledging the need for measuring nature connectedness in young children devised a parental report measure, based on the CNI (Cheng & Monroe, 2012). The measure, termed CNI-PPC was tested for both internal consistency (n= 299) and external validity (n=194). It was, moreover, compared with the Strengths and Difficulties Questionnaire (SDQ; Goodman, Meltzer & Bailey, 1998) to measure convergent and divergent validity. The CNI PPC was found to be a valid and reliable measure for nature connectedness in preschool children. Its use in further research will shed light on the processes through which children's nature connectedness can be nurtured, as well as further associations of nature connectedness in early childhood.

Conclusion

Several decades ago, in the UNESCO declaration of Tbilisi highlighted the role of education in solving environmental problems (UNESCO, 1978). Environmental education that would focus on the learner's environmental sensitivity at "every age, but with special emphasis on environmental sensitivity to the learner's own community inearly years" (UNESCO, 1978, p 26) was stated as a goal. This, however, never came into fruition in relation to early years' policy in the following decades. Perhaps it is time that this is changed.

This paper has attempted to make the case for the inclusion of nature connectedness in early year curricula, as a distinct and valid goal. The author has outlined both the benefits of nature connectedness, as well as the ways in which nature connectedness aligns with current policy and curricular goals in several countries around the world. Moreover, this article brings together evidence on some of the ways that nature connectedness can be promoted in the early years. Finally, we have presented a clear direction for future research in relation to nature connectedness and early years. It is the author's hope that this article will bring attention to nature connectedness well beyond the usual scope of environmental education professionals and that it will be of use to educators, policy makers, as well as researchers in the field of early childhood.

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