Supporting Children’s Wellbeing with Art in Nature: Artist Pedagogue Perceptions

Nicola Walshe1, Elsa Lee2 and Millie J. Smith1

*1Faculty of Health, Social Care and Education, Anglia Ruskin University, Cambridge, CB1 2LZ, UK*. 0845 1965724

*2Faculty of Education, University of Cambridge, 184 Hills Road, Cambridge, CB2 8PQ, UK.* 01223 767611

*Correspondence email:* [*nicola.walshe@anglia.ac.uk*](mailto:nicola.walshe@anglia.ac.uk)

# Acknowledgements

We would like to thank Anglia Ruskin University Faculty of Health, Social Care and Education for the Seed Corn Grant which funded this research and a student internship which funded a co-author’s time. Our thanks also go to artists (Elena Arévalo Melville, Debbie Hall, Susanne Jasilek, Helen Stratford, Sally Todd, Caroline Wendling and Deb Wilenski) and directors (Ruth Sapsed and Jo Holland) at Cambridge Curiosity and Imagination for the time and commitment they have given to this research; we very much appreciate their support, advice and enthusiasm. Finally, we would like to acknowledge Idit Nathan, who originally founded Cambridge Curiosity and Imagination.

Supporting Children’s Wellbeing with Art in Nature: Artist Pedagogue Perceptions

There is increasing concern about children’s mental wellbeing and an urgent need for research into how to support positive mental health; including as part of the United Nations Sustainable Development Goals (SDGs). Alongside this is the heightened awareness about diminished access to green spaces and diminished exposure to the arts for children. Our research aims to show the potential for addressing these three issues in tandem through a qualitative case study exploring the work of one charity, Cambridge Curiosity and Imagination (CCI). The charity undertakes arts-based projects in nature with children. In particular, this paper considers the implications of CCI artist pedagogues’ perceptions of their nature-based practice for children’s wellbeing. Research comprised a ‘talk and draw’ focus group followed by individual interviews with CCI artists. Findings show artist pedagogues’ work has the potential to support aspects of children’s wellbeing through promotion of agency, developing confidence, and providing inspiration to support creativity.

Keywords: wellbeing; nature; art; children; artist pedagogue

# Introduction

In this article, we explore artist pedagogue perceptions of their nature-based practice on children’s wellbeing in a context of increasing concern about children’s mental health, their diminished access to green spaces and the ‘squeezing out’ of the arts from school curricula. Health and wellbeing are a focus of the Sustainable Development Goals (SDGs); for example, Goal 3: Ensure healthy lives and promote well-being for all at all ages. Within these, mental health issues are referred to as non-communicable diseases, for example Target 3.4 aims to reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being; an indicator of success identified by the SDGs is a reduction in suicide mortality. Our research aims to delineate the potential that working with artists *in nature* has for addressing critical mental health and wellbeing challenges through reviewing the pertinent literature and then outlining how our data, gathered through ‘talk and draw’ focus groups with artists, responds to these issues.

We are conceptualising *mental* wellbeing using the field of positive psychology as a starting point, after McLellan and Steward (2015). Within this field Fegta, Machold and Richter (2010) note that wellbeing is subjectively defined, such that individuals with comparative material circumstances might experience differing levels of wellbeing.  Wellbeing consists of two main components, affect (feelings and mood) and life satisfaction (Lucas, Diener & Suh, 1996), relative to specific domains in life (e.g. work, family and so forth). Wellbeing is also described as either hedonic or eudaimonic. Many positive psychologists reject the notion of hedonic wellbeing (e.g. Kahneman, Diener & Schwarz, 1999), arguing that hedonic pleasures such as material wealth do not ultimately make people happy (Ryan, Huta & Deci; 2008).  Instead researchers are turning towards the notion of eudaimonic wellbeing, self-actualisation and fulfilling one’s potential, to conceptualise wellbeing (Deci & Ryan, 2008).  The most influential theory characterising eudaimonic wellbeing is Deci and Ryan’s Self-Determination Theory (SDT) which refers to the notion that wellbeing is dependent on the fulfilment of three core needs: agency, mastery and relatedness (Ryan & Deci, 2000).  An individual with these attributes would feel confident and assured in their ability to achieve their aspirations on their own terms whilst maintaining positive and healthy relationships with others.  Whilst this is not an uncontested approach to defining wellbeing and we acknowledge the potential inadequacies in particular regarding its consideration of social aspects of wellbeing, it suits our purposes in this research.

Mind, a UK-based mental health charity, makes the sometimes-assumed links between wellbeing and mental health explicit by discussing the relationship between low mental wellbeing and mental health problems, stating that low mental wellbeing can lead to mental health problems such as depression or anxiety. One in ten children aged 5 to 16 in the UK have a clinically diagnosable mental disorder (Green, McGinnity, Meltzer, Ford & Goodman, 2004) and somewhere between 50% and 90% of all suicides are thought to be associated with mental illness (Nature, 2014). Indeed the UN Sustainable Development Goals identify suicide as a major cause of death from non-communicable diseases, suggesting that in 2015 nearly 800,000 people died from suicide resulting from low mental wellbeing and mental health disorders (UN, 2017). In particular, the number of *children* admitted to hospital for attempted suicide or self-harm rates has doubled in the US in the last decade (Pediatric Academic Societies, 2017).

Studies of mental health and suicide rates linked to urbanisation have uncovered contradictory findings (Qin, 2005; Kegler, Stone & Holland, 2017). However, there is evidence from longitudinal study that shows that within urban areas, moving from an area with less green space to an area of more green space results in improved mental health over time (Alcock, White, Wheeler, Fleming & Depledge, 2014) and that the impact of life stress is lower among children in rural areas than those with little nature nearby (Wells & Evans, 2003). This is supported by Snell et al. (2016) who found that contact with nature in childhood was a predictor for adulthood depression; retrospective analysis suggested that for those adults who spent more time in nature as a child, nature became an emotional regulation strategy, thereby supporting the fulfilment of self-actualisation and, according to SDT, overall wellbeing. Similar suggestions are made by Milligan and Bingley (2007) who found nature, in particular imaginative play in woodland, to have a restorative effect on children’s wellbeing, and Rudkowski (2014) who argued the case for outdoors to develop emotional wellbeing in early years’ children though imaginary play, risk-taking, development of personal autonomy, and the nurturance of empathy. It is noteworthy that in the majority of these latter studies opportunity for imaginative play within nature appears to enhance potential benefits on wellbeing. Perhaps as a result, there has been some attempt to use nature as ecotherapy to support wellbeing (e.g. Chalquist, 2009; Smith, 2015). At this point it is pertinent to note that nature is a highly contested term and is defined differently (or sometimes not at all) across the literature. Our review of the literature for this article determines an understanding of contact with nature to be time spent outdoors in largely green spaces. However, our own definition of nature is broader (and more philosophically informed) than this very limited view and we explore this further in a separate publication (Lee, Walshe, Sapsed & Holland, *in review*).

Studies show that poverty can also be a predictor of an increase in the risk of mental health problems, both as a causal factor and consequence of mental ill health (Elliott, 2016). A systematic review of the literature by Rehkopf and Buka (2006) found lower rates of suicide among high socio-economic areas; the greater the socio-economic disadvantage, the higher is the risk of suicide (Lorant, Kunst, Huisman, Costa & Mackenback, 2005). Evidence suggests that wealth often determines access to nature, particular in cities (Lee & Maheswaran, 2011); children living in areas with high deprivation are nine times less likely to have access to green spaces and places to play (Marmot, 2013). In particular, inner city and poor populations are less likely to report participation in outdoor recreation activities, being less well served by affordable facilities in which they feel safe. Conversely, living in areas with green spaces has been shown to reduce income-related health inequalities, counteracting the effect of deprivation (Mitchell & Popham, 2008).

Another approach to facilitating improved mental health is through creative arts (Stuckey & Nobel, 2010); despite a worldwide decline in arts provision, the arts continue to be championed in attempts to address wellbeing (Arts Council England 2007; PCAH 2010). However, as with access to nature, there is a general agreement that individuals with low socio-economic status have less access to the arts than their more affluent counterparts (National Endowment for the Arts, 2015) and, therefore, less access to perceived benefits of arts engagement; this can be the result of a combination of both real and perceived barriers (Moore, 1998). Research to explicitly evaluate the use of arts to support wellbeing has highlighted the potential of a range of approaches, such as music therapy or expressive writing (e.g. Puig, Lee, Goodwin & Sherrard, 2006). With vulnerable children in particular, creative arts practice has been shown to support wellbeing, particularly interventions using music and dance (Tielsch & Allen, 2005). However, within schools, there is little reported work on broader artistic practice to support children’s wellbeing, although Sellman and Cunliffe (2012) found improved school attendance, increased motivation to learn, wider transferable skills and increased social confidence with peers for children following involvement in longitudinal arts projects in school contexts.

A review of the literature suggests that while there is a proven link separately between nature and wellbeing, and art and wellbeing, there are very few examples of strategies to support emotional wellbeing through a combination of these approaches. The mental health charity Mind identifies ‘Nature, Arts and Crafts’ as one strand of ecotherapy through which it supports adults with poor mental health (Smith, 2015), but there is a lack of empirical research to show how this might improve emotional wellbeing, particularly in children. Despite this, and alongside increasing marginalisation of the arts and nature in school curricula (Humes, 2011), non-government organisations are increasingly using children’s attachment to their dwelling places as inspiration for linking children, art and nature (Denmead, 2011); one such organisation is Cambridge Curiosity and Imagination (CCI). This paper considers preliminary results from a broader study which explores how the practice of artist pedagogues in nature might support children’s wellbeing and what the potential of this approach might be for contributing to global attempts to reduce suicide rate mentioned earlier with reference to the SDGs. In particular, within this paper we aim to answer the research question: how do CCI artists’ conversations about their nature-based arts practice contribute to research into children’s wellbeing?

# Research Methodology

Our ongoing exploratory case study (Yin, 1993) of CCI aims to produce thickly described data of an ethnographic nature within a constructivist, interpretivist framework (Whitehead, 2004), using observations, document analysis, focus group discussions and individual interviews to generate data.

## Cambridge Curiosity and Imagination (CCI)

CCI is an arts and well-being charity, founded in 2002 by an artist who brought together artists, educators, parents and researchers with a shared passion for how the arts and nature can transform lives, and a belief in the power of democratic forms of community activism. Children are at the heart of CCI’s work, their ideas and questions lead the way; CCI’s carefully considered and articulated approach is committed to deep listening and thoughtful collaboration and artistic co-creation. Whilst they most frequently work with school and community partners, they have been able to develop wider applications for their approach and have recently developed projects for health and social care settings. Common to all of their projects is a focus on developing a sense of agency and voice for all through engagement with the arts, often in nature.

Artists work as independent consultants with CCI such that this work comprises only part of their professional activity. We invited seven CCI artists to be involved in the research; these comprised all the artists currently or recently working on CCI projects and included some founding artists (purposive sampling). In addition, the CCI founding and assistant directors were involved in the research.

## Research Methods

The research initially comprised a ‘talk and draw’ focus group interview with the CCI artists. Conversations with the artists as a group focused on three elements: nature, children and place. Artists were not explicitly questioned or prompted on children’s wellbeing, this is a theme which emerged throughout the conversation. The ‘talk and draw’ focus group was an innovative approach to discussions with the artists, similar in principle to talk and draw interviews (Theron, Mitchell, Smith & Stuart, 2011). Artists were asked to bring along their favourite implement for drawing or painting and we provided them with a large sheet of paper to ‘doodle’ on as we talked; this created a useful focal point for discussion, as well as providing additional data. The focus group was followed by individual interviews with the same artists.

The two directors of CCI were provided with a semi-structured questionnaire comprising open questions (Cohen, Manion & Morrison, 2011) that was designed after the artist interviews (unseen by the directors) to further elaborate on the emerging data. An unstructured interview with the founding director was subsequently also carried out to discuss some of the interview and questionnaire data (Kerlinger, 1970). In undertaking the research we followed the BERA Ethical Guidelines (BERA, 2011) and obtained ethical approval from [AUTHOR'S] University prior to the commencement of the project.

The focus group and interviews were audio recorded and recordings subsequently transcribed; transcriptions were sent to the artists for verification, some of whom made minor amendments which were duly incorporated. The amended transcriptions were submitted to thematic analysis using NVIVO and a process of naturalistic coding to back up our impressions from the interviews (inductive content analysis; e.g. Dey, 1993). Artist drawings were analysed alongside focus group and interview transcriptions using content analysis (Rose, 2005). To support the internal validity of the research and increase the reliability of our conclusions, data analysis was undertaken independently by two researchers and emerging findings discussed with a third colleague who was present during the interviews.

# Findings and Discussion

The focus of this section will be an exploration of emerging beliefs of the artist pedagogues as to the impact of their work on children’s wellbeing. While much of the artists’ individual reflections on the value of their work related to issues of wellbeing, it was only Caroline who explicitly considered children’s wellbeing:

I think for me a lot of my work is to do with wellbeing actually … I'm always interested in children that are not achieving academically and like to give those children a chance to shine, because I think it is terrible for children to not achieve and to see that they're not doing as well as their friends, or sometimes they just have a lot of knowledge and understanding but they're not able to express it, whether it's through writing or through words. So I find that nature helps those children. They often are children that from my observation do express themselves through a bodily experience, it's the body that suddenly enables them to shine, and I often have observed a reversal of rules. The children that are leading in nature are not often the children that do best academically at school, but they are the children that have more of an understanding of the three-dimension and of their body in space, and therefore they are able to inhabit nature … in a more embracing way and they will be then the ones leading the other children who might be a little bit more worried or a little bit shyer. And then they go back to the classroom, and … I find that actually little by little those children are able to gain confidence because you've given them the chance to be and to have a place.

Here Caroline is reflecting on the sense of **confidence** and creative openness that is an outcome of working artistically in nature; the *bodily experience* which can be lacking from classrooms in which children typically spend hours sitting down (Owen, Sparling, Healy, Dunstan & Matthews, 2010), unable to express themselves adequately if they do not have access to words in the same way that others do (for example, Caroline later describes an experience working with a child with dyslexia). This demonstrates how artists’ practice supports children’s eudaimonic wellbeing as it leads children to opportunities for self-actualisation and fulfilling their potential (McLellan & Steward, 2015), particularly those children who are sometimes less able to access more measured and traditional aspects of school curricula. This is something many of the artists reflect on during their interviews; for example, Helen comments:

We've worked in lots of areas of deprivation or with children that have difficult family scenarios … but whenever we go to a school we're not aware of those things, and I think that's something that is really important, and that actually it's just working with the children … then you’re sort of quite surprised if suddenly the teacher says ‘Well, they didn't actually talk very much before, but they're … talking now’…it's recognising ability in some of the children which isn't recognised as ability in other kinds of categories…children which perhaps struggle in certain academic subjects have actually flourished [when working with CCI].

In particular, children who may not always feel confident within a school setting ‘realise this is a safe place …and that's an incredible place to be able to be in order to explore your ideas or how you want to respond to something’ (Susanne). So by opening up possibilities for self-actualisation, children gain in confidence and develop a ‘sense of their own value … through the project’ (Deb). Thus, an iterative process takes place in which artists provide children with a safe place, in nature, in which creative self expression is valued and, thereby, those children develop feelings of competence and self-determination (Shalley & Gilson’s *inner confidence*: 2004) and are more likely as a result to excel and achieve mastery (hence positively reinforcing SDT; Milyavskaya, Ianakieva, Foxen-Craft, Colantuoni & Koestner, 2012; Ryan & Deci, 2000). This is illustrated particularly well through an account given by Debbie in her interview:

I was working in a school … where they'd come and asked me to make a giant nest with a particular class and they were taking it in turns to send groups of about eight out at a time … so I had four groups over the day. In the first group there was this young lad who came out and he just loved it, and he said at the end of his session ‘Can I stay? Can I stay?’ And so I said ‘Well it's not up to me, you go and ask your teacher, if you come back out with the next group I know that it's okay for you to stay for the day’, so by the end of the second lesson I'd put him in charge of the loppers. We went away and had lunch, when he came back for the third one he was teaching the other kids what to do, because he'd been there all the time and had got confident in knowing what he was doing. At the end of the day … I went to talk to the teacher and she said ‘I’m just absolutely gobsmacked…stunned’, because the reason she sent him out in the first group is that she knew that if he hadn't gone he would have been a complete nightmare sat in the classroom, fidgeting, being desperate to go outside, because he was just really not suited to being in the classroom.…

In addition to building confidence, artists reflect on how their practice gives children time through which to develop creativelyand with limited structure (so **creative openness** and flow: Csikszentmihalyi, 1997); Susanne comments ‘they got to actually spend two hours in a space being creative and the teacher said there's no other space in the school curriculum where they could ever do that’. This reflects research which suggests high stakes testing has resulted in a narrowing of the curriculum and, as a result, restricted access to creative, enjoyable activities in English primary schools (e.g. Berliner, 2011). CCI and its artists have a strong collective commitment to the Reggio Emilia work on open spaces (e.g. Edwards, Gandini & Forman, 2011); this then encourages creative openness in children who respond to opportunities provided by the artists. Ruth, CCI founding director, justifies creativity as an approach ‘because it matters – without access to this skill the world can feel a bleak and overwhelming place, with it there is a sense of possibility and optimism… creativity can overcome social and moral boundaries and bring people together’. Sally exemplifies this creativity:

One of the children drew one of the playground areas because they were showing me around their playground and they drew the blank space, they called it the blank space, and it was this in a way constructed outdoor landscaped space for play, but the drawing was described as the blank space and I thought that was so beautiful. And someone else said ‘The not really…the nothing really there circle, there's nothing really there’, and then I thought ‘Wow, that's amazing’, and then another child filled it immediately with a knight and a dragon. So that sense of the open, the open space.

Debbie also explains how her choices about creating willow structures are determined by their potential to inspire creativity:

Part of what I aim to do if I'm going into a nursery or a space like that is to make some…to bring something in to their very defined spaces, if you've got play equipment that is like it’s a house or it’s a slide or whatever it is, it's kind of been given and said ‘This is a whatever it is’, but I would go in and make like a dome or something like that out of willow and then if you can then hear what the kids can imagine what it is. Because it isn't a fire engine and it isn't…but it can be if they want it to be, it's a container for whatever their imagination wants to provide.

While the spaces in which the artists work are usually very familiar to the children (and, thereby, feel safe), the artist practice encourages them to engage with these spaces in a very different way, thereby inspiring creativity. As Helen sums it up, ‘I think it's about finding those open spaces where children can be inspired and they’re not kind of defined by other people.’ This also identifies the role of **inspiration** in wellbeing which has also been noted in the literature (Thrash, Elliot, Maruskin & Cassidy, 2010) as creating a springboard for creativity and wellbeing. Thrash and Elliot (2003) suggest that inspiration is evoked rather than consciously initiated, resulting in motivation to change behaviour. For the artists, it is often the place *in nature* within which they work that provides a trigger for the inspiration (Thrash and Elliot, 2003); for example, Helen notes ‘We went to this beach and that in a way was kind of like this wild space, […] it was a space where…imagination, children could really be inspired.’ Deb agrees with this significance of place in nature acting as a source of inspiration (e.g. Fredrickson & Anderson, 1999; Williams & Harvey, 2001), commenting:

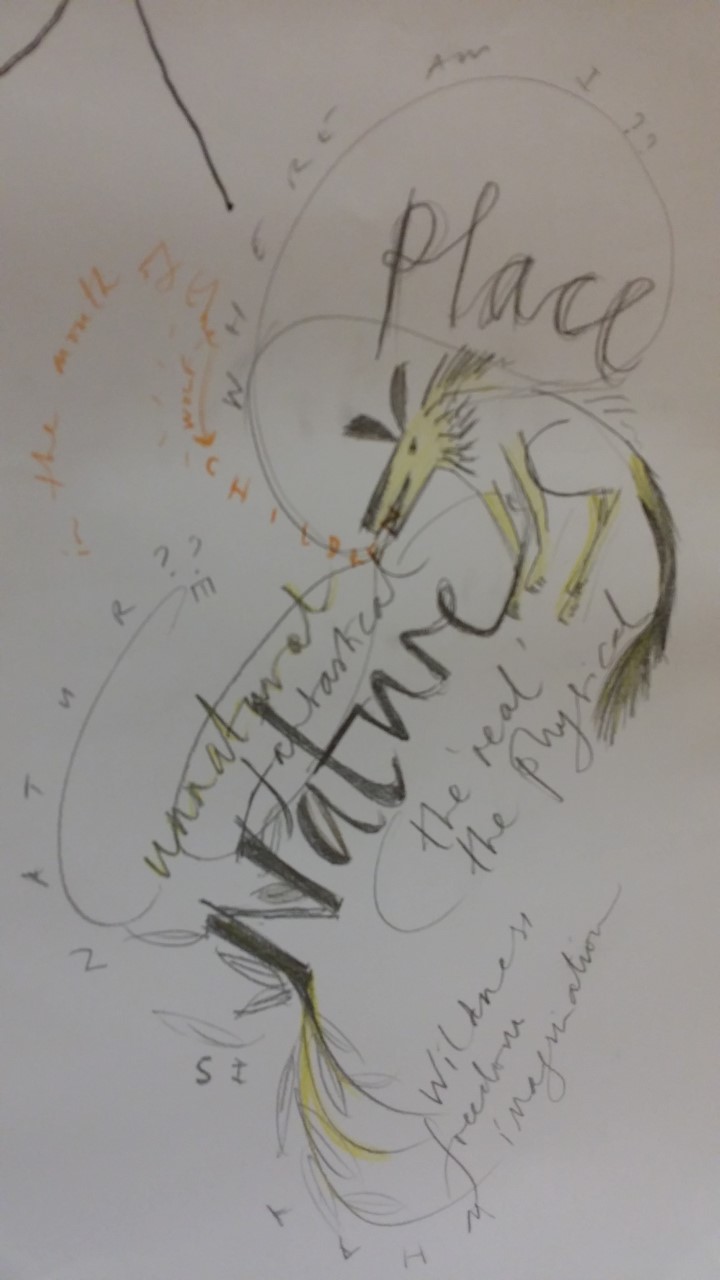
where ideas come from, how they put things into words, often comes out of their physical freedoms to explore in the morning, in a way that if we took out that outdoor experience or made that part shorter, I don't think we’d get the same degree of creative response.

In this way, artists articulate that nature is acting as a source of inspiration; this correlates with a range of research which has identified exposure to natural environments (i.e. time spent in, and engagement with, nature-rich environments: Swami, Barron, Weis & Furnham, 2016) can reduce negative emotions, such as anger, anxiety and stress, and improve mental health and wellbeing (Bowler, Buyung-Ali, Knight & Pullin, 2010; Russell et al., 2013). This is particularly the case when nature facilitates social contact and cooperation with others, such as is the case with this artists’ collaborative practice (Holt-Lunstad, Smith & Layton, 2010). Within nature, the artists themselves can also act as a catalyst to inspiration; for example, Deb reflects on her role with children stating:

I am really concerned that they re-imagine themselves, they have a sense of who they could also be. So when we first started working in the orchard […] we did have a conversation about who I was that I was sort of an artist, sort of a scientist, sort of a writer, sort of an inventor, and that you can be all of these things, you don't have to be one or the other. And I remember at the end of that morning some of them would come up and say ‘I’ve been an engineer and I've been doing this and I've made a map and I’ve…’, that sense of all the people that you could be is a massive thing isn't it?

As such, Deb is inspiring children not only to be creative in the traditional sense, but to think creatively about themselves in an open way; this is reflected in her drawing (Figure 1) which she describes as ‘‘In bocca al lupo’, or something like that, it means in the mouth of the wolf, and it actually means good luck, but it's about getting right into the mouth of the wolf and being fearless and being daring.’ Deb articulates her role as to engender a fearless sense of confidence into the children, giving them a ‘sense of ownership’, and, thereby, supporting wellbeing through self-actualisation and agency.

PUT FIGURE 1 HERE

Figure 1: A clip from the group ‘talk and draw’ activity depicting children the fearlessness of children by Deb Wilenski.

Deb’s reflection also highlights a significant theme emerging from the focus group discussion which is a commitment to giving children **agency** by enabling them to lead; as Helen comments ‘that's something that we do […] as practitioners going into schools, is to give value to the children's ways of interpreting the world and reimagining it’. For example, in the focus group they discuss the way that children sometimes name places or phenomena within their work, Susanne reflecting:

it then gives them a sense doesn't it of […]empowerment[…]. Especially when it's acknowledged by adults around them and taken up…they have their voices heard, and often in a busy school that's really hard… I think they feel they are heard and that we really value what they say and that we are taking seriously the things they have to say from their imagination.

Sally reiterates this, stating ‘sharing that acknowledgement and valuing of what they've then named something with, so I think that's really empowering isn't it? That the children then have a sense of ownership, of claiming the space’. It is not just through acknowledgement of children’s ideas that they are given agency through artists’ practice, but in being given leadership of that practice. Deb describes:

the openness of the projects to just be led by the children and what interests them and where they’re going with it... it is definitely from the children and what they're picking up on and what they're […] being motivated by.

Caroline develops this idea, talking about how she consciously walks behind children as they explore new green spaces within her practice:

by trusting the child you can walk behind a child, you know that the child won't sort of drown and you know the child won't hopefully fall … the child is exploring nature in the front seat. And so then nature becomes discovered and experienced through that child’s eyes and experiences, rather than mine…Children lead and the way we work and give them the chance to be themselves and to be creative and they've really created a sense of place and it was their own and it was so powerful and strong that they were able to tell it to other children, tell it to their parents and to their teachers.

Again, this sense of agency is perceived as being particularly powerful for some children; Debbie comments:

often the outdoor stuff does work with difficult children, so you do quite often end up having some of the difficult kids picked out for that … but if you've got a two day thing, if somebody shines in day one … then I will put them in a pedagogy role … so they become kind of like a mentor…they can show other kids what to do, […] it just changes all the […] power relationships.

Evidence suggests that leadership can support wellbeing on measures of life satisfaction and happiness (Toner, Haslam, Robinson & Williams, 2012) and the fulfilment of agency is fundamental to Ryan and Deci’s SDT (2000). As such, in empowering children through their practice, artists appear to be further supporting their eudaimonic wellbeing.

# Conclusions

Children’s mental health and wellbeing is of increasing concern and, while the majority of teachers recognise the need for supporting children’s emotional health and wellbeing, many feel ill-equipped to do so (Kidger, Gunnell, Biddle, Campbell & Donovan, 2009). It is significant then that this research shows how artists working with children in nature through the school and community based projects of the charity, CCI, clearly articulate their work as having an impact on these children’s wellbeing. Although only Caroline explicitly considers aspects of wellbeing in her interview, analysis of other artist transcriptions highlight how CCI’s work gives children opportunities to work creatively collaboratively and individually, with agency; ultimately supporting them to fulfil their potential and thus positively influencing their wellbeing (Ryan & Deci, 2000). Artist pedagogues express a belief that this had particular impact for those who were either from more disadvantaged backgrounds or had additional learning needs which meant that they struggled with traditional classroom environments; as our literature review identifies (Lee & Maheswaran, 2011; National Endowment for the Arts, 2015), this is of particular interest because it is precisely these children who are generally less likely to have opportunities to engage with nature or creative arts, particularly with any agency, and whose wellbeing and mental health may be of particular concern. Further research is now needed to substantiate the perceived impacts of this work on children’s wellbeing, exploring the extent to which individual or holistic measures of wellbeing develop across artist pedagogue practice.

But why, if artist pedagogues are correct, does this particular kind of innovative practice with art in nature appear to have such positive impact on children’s wellbeing? It seems that the fact that these artists predominantly work *in nature* (broadly conceived) is significant. Substantial benefits for wellbeing may be derived from contact with nature (Cervinka, Röderer & Hefler, 2012; Nisbet, Zelenski & Murphy, 2009). According to psychological theory, natural environments have a positive effect on multiple aspects of wellbeing because they support emotional restoration by reducing negative emotions (Psychophysiological Stress Recovery Theory: e.g. Barton & Pretty, 2010) and promote effective cognitive functioning (Attention Restoration Theory: Bratman, Daily, Levy & Gross, 2015). It is perhaps also relevant that these natural environments are familiar, local places such that artist site-specific practice reflects many aspects of the place responsive pedagogy that is well-known within environmental education (Mannion, Fenwick & Lynch, 2013). Although place responsive pedagogy practiced by CCI artists is not aimed at instilling pro-environmental behaviours as might traditionally be the case, it does engage and, thereby, connect children with familiar places in often unfamiliar ways. Ruth (CCI director) states:

Always there is an interest in working with the familiar and the everyday and inviting ways to make it strange and wonderful and intriguing whether that be the school playground, a local wood, the walk into a new development, a graveyard, a new museum in a hospital or even a hospital waiting room area.

Research has shown that people who have a higher degree of connectedness to nature not only report greater life satisfaction (Tam, 2013) but also stronger pro-environmental behaviour (e.g. Gosling & Williams, 2010). In this way, this artist practice, through its equitable, place-based approach, may indirectly develop more environmentally sustainable attitudes in children. As Ruth suggests, ‘being enabled to be confidently curious, securely playful or imaginative in a safe space are crucial to the future of our world’ (this is explored further in Lee et al., *in review*).

This preliminary research exploring CCI artist pedagogue perceptions of the impact of their practice is a small-scale, interpretive study drawing only on the perceptions of one group of artists; however, its results have the potential to be significant in that it shows clear evidence that this work supports children’s wellbeing. In so doing, this charity’s pedagogical approach has the potential to contribute positively to global attempts to reduce death from non-communicable diseases, such as depression and anxiety as identified by the SDGs. Further research is now needed which empirically evaluates the impact of CCI artist pedagogue practice on children from their own perspective, by engaging with children to explore the processes through which artists work and the mechanisms by which this may impact children’s wellbeing.

# References

Alcock, I., White, M.P., Wheeler, B.W., Fleming, L.E., & Depledge, M.H. (2014). Longitudinal effects on mental health of moving to greener and less green urban areas. *Environmental Science & Technology, 48*(2), 1247. doi:10.1021/es403688w

Arts Council England (2007) *The arts, health and wellbeing.* London: Arts Council England. Retrieved from file:///C:/Users/Nicola/Downloads/2.%20The%20Arts,%20Health%20and%20Wellbeing.pdf.

Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental Science & Technology, 44*(10), 3947. doi:10.1021/es903183r

Berliner, D. (2011). Rational responses to high stakes testing: The case of curriculum narrowing and the harm that follows. *Cambridge Journal of Education, 41*(3), 287-302. doi:10.1080/0305764X.2011.607151

Bowler, D.E., Buyung-Ali, L.M., Knight, T.M., & Pullin, A.S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health, 10*(1), 456. doi:10.1186/1471-2458-10-456

Bratman, G.N., Daily, G.C., Levy, B.J., & Gross, J.J. (2015). The benefits of nature experience: Improved affect and cognition. *Landscape and Urban Planning, 138*, 41-50.

BERA (British Educational Research Association) (2011) *Ethical Guidelines for Educational Research.* London: BERA.

Cervinka, R., Röderer, K., & Hefler, E. (2012). Are nature lovers happy? On various indicators of well-being and connectedness with nature. *Journal of Health Psychology, 17*(3), 379-388. doi:10.1177/1359105311416873

Chalquist, C. (2009). A look at ecotherapy research evidence. *Ecopsychology Journal, 1*(2), 64-74. Retrieved from http://online.liebertpub.com/doi/pdfplus/10.1089/eco.2009.0003

Cohen, L., Manion, L. & Morrison, K. (2011) *Research Methods in Education.* Abingdon: Routledge.

Csikszentmihalyi, M. (1997). *Finding flow. the psychology of engagement with everyday life*. New York: Basic Books.

Deci, E.L., & Ryan, R.M. (2008). Hedonia, eudaimonia and wellbeing: An introduction. *Journal of Happiness Studies*, 9(1), 1–11.

Denmead, T. (2011). Meeting and extending participants: Exploratory case studies of community artist pedagogy. *Journal of Arts & Communities, 1*(3), 235-246. doi:10.1386/jaac.1.3.235\_1

Dey, I. (1993). *Qualitative Data Analysis: A User-Friendly Guide for Social Scientists.* Abingdon: Routledge.

Edwards, C., Gandini, L., Forman, G., & Reggio Children, S R L. (2011). *The hundred languages of children: The Reggio Emilia experience in transformation* (3rd ed.). US: ABC-CLIO.

Elliott, I. (2016). *Poverty and mental health: A review to inform the Joseph Rowntree Foundation’s anti-poverty strategy*. London: Mental Health Foundation.

Fegter, S., Machold, C., & Richter, M. (2010). In Andresen S., Diehm I., Sander U. and Ziegler H. (Eds.), *Children and the Good Life*. Springer Science + Business Media. Retrieved from http://ebooks.ciando.com/book/index.cfm/bok\_id/268133

Fredrickson, L.M., & Anderson, D.H. (1999). A qualitative exploration of the wilderness experience as a source of spiritual inspiration. *Journal of Environmental Psychology, 19*(1), 21-39. doi:10.1006/jevp.1998.0110

Gosling, E., & Williams, K.J.H. (2010). Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers. *Journal of Environmental Psychology, 30*(3), 298-304. doi:10.1016/j.jenvp.2010.01.005

Green, H., McGinnity, Á, Meltzer, H., Ford, T., & Goodman, R. (2004). *Mental health of children and young people in Great Britain, 2004*. London: HMSO.

Holt-Lunstad, J., Smith, T.B., & Layton, J.B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine, 7*(7), doi:10.1371/journal.pmed.1000316

Humes, W. (2011). Creativity and wellbeing in education: Possibilities, tensions and personal journeys. *TEAN Journal, 2*(1) Retrieved from http://194.81.189.19/ojs/index.php/TEAN/article/viewFile/69/125

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being; foundations of hedonic psychology*. Russell Sage Foundation.

Kegler, S.R., Stone, D.M. & Holland, J.M. (2017). Trends in suicide by level of urbanization - United States, 1999-2015. *MMWR. Morbidity and Mortality Weekly Report, 66*(10), 270. doi://dx.doi.org/10.15585/mmwr.mm6610a2

Kerlinger, F.N. (1970) *Foundations of Behavioral Research.* New York: Holt, Rinehart and Winston.

Kidger, J., Donovan, J.L., Biddle, L., Campbell, R., & Gunnell, D. (2009). Supporting adolescent emotional health in schools: a mixed methods study of student and staff views in England. *BMC Public Health,* 9(403), 1-18. doi:10.1186/1471-2458-9-403.

Lee, A.C.K., & Maheswaran, R. (2011). The health benefits of urban green spaces: A review of the evidence. *Journal of Public Health (Oxford, England), 33*(2), 212-222. doi:10.1093/pubmed/fdq068

Lee, E., Walshe, N., Sapsed, R., & Holland, J. (*in review)*. ‘The positionality of children in relation to nature by artist eco-pedagogues’. In: Cutter-Mackenzie, A., Malone, K., Barratt Hacking, E. (Eds) *International Research Handbook on Childhood Nature: Assemblages of Childhood and Nature Research*. Springer: London.

Lorant, V., Kunst, A.E., Huisman, M., Costa, G., & Mackenbach, J. (2005). Socio-economic inequalities in suicide: A European comparative study. *The British Journal of Psychiatry : The Journal of Mental Science,* doi:10.1192/bjp.187.1.49

Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology, 71*(3), 616-628. doi:10.1037/0022-3514.71.3.616

Mannion, G., Fenwick, A., & Lynch, J. (2013). Place-responsive pedagogy: Learning from teachers’ experiences of excursions in nature. *Environmental Education Research, 19*(6), 792-809. doi:10.1080/13504622.2012.749980

Marmot, M. (2013). *Review of Social Determinants and the Health Divide in the WHO European Region: Final Report*. World Health Organization.

McLellan, R., & Steward, S. (2015). Measuring children and young people’s wellbeing in the school context. *Cambridge Journal of Education, 45*(3), 307-332. doi:10.1080/0305764X.2014.889659

Milligan, C., & Bingley, A. (2007). Restorative places or scary spaces? The impact of woodland on the mental well-being of young adults. *Health and Place, 13*(4), 799-811. doi:10.1016/j.healthplace.2007.01.005

Milyavskaya, M., Ianakieva, I., Foxen-Craft, E., Colantuoni, A., & Koestner, R. (2012). Inspired to get there: The effects of trait and goal inspiration on goal progress. *Personality and Individual Differences, 52*(1), 56. doi:10.1016/j.paid.2011.08.031

Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: An observational population study. *The Lancet, 372*(9650), 1655-1660. doi:10.1016/S0140-6736(08)61689-X

Moore, J. (1998). Poverty and access to the arts: Inequalities in arts attendance. *Cultural Trends*, 8, 53-73.

National Endowment for the Arts (2015). *Annual Report.* Retrieved from https://www.arts.gov/sites/default/files/2015%20Annual%20Report.pdf.

Nature (2014). Suicide Watch. *Nature*, 506(7487), 131.

Nisbet, E.K., Zelenski, J.M., & Murphy, S.A. (2009). The nature relatedness scale: Linking individuals’ connection with nature to environmental concern and behavior. *Environment and Behavior, 41*(5), 715-740. doi:10.1177/0013916508318748

Owen, N., Sparling, P.B., Healy, G.N., Dunstan, D.W., & Matthews, C.E. (2010). Sedentary behavior: Emerging evidence for a new health risk. *Mayo Clinic Proceedings, 85*(12), 1138-1141. doi:10.4065/mcp.2010.0444

PCAH (President’s Committee on the Arts and Humanities) (2010). *Reinvesting in Arts Education. Winning America’s Future through Creative Schools.* London: Washington. Retrieved from http://www.pcah.gov/sites/default/files/photos/PCAH\_Reinvesting\_4web.pdf

Pediatric Academic Societies. (2017, May 20,). Children's hospitals admissions for suicidal thoughts or actions double during past decade. *Pediatrics Week.* Retrieved from http://search.proquest.com/docview/1897486313

Puig, A., Lee, S.M., Goodwin, L., & Sherrard, P.A.D. (2006). The efficacy of creative arts therapies to enhance emotional expression, spirituality, and psychological well-being of newly diagnosed stage I and stage II breast cancer patients: A preliminary study. *The Arts in Psychotherapy, 33*(3), 218-228. doi:10.1016/j.aip.2006.02.004

Qin, P. (2005) Suicide risk in relation to level of urbanicity—a population-based linkage study. *International Journal of Epidemiology, 34(4),* 846-852.

Rehkopf, D.H., & Buka, S.L. (2006). The association between suicide and the socio-economic characteristics of geographical areas: A systematic review. *Psychological Medicine, 36*(2), 145-157. doi:10.1017/S003329170500588X

Rose, G. (2005) *Visual Methodologies.* London: Sage Publications.

Rudkowski, M. (2014). Fostering emotional wellbeing: Personal reflections from an early childhood forest program. *Children, Youth and Environments, 24*(3), 80-91. doi:10.7721/chilyoutenvi.24.3.0080

Russell, R., Guerry, A.D., Balvanera, P., Gould, R.K., Basurto, X., Chan, K.M.A., . . . Tam, J. (2013). Humans and nature: How knowing and experiencing nature affect well-being. *Annual Review of Environment and Resources, 38*(1), 473-502. doi:10.1146/annurev-environ-012312-110838

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037//0003-066X.55.1.68

Ryan, R.M., Huta, V., & Deci, E.L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies, 9*(1), 139-170. doi:10.1007/s10902-006-9023-4

Sellman, E. & Cunliffe, A. (2012) Working with artists to promote mental health and wellbeing in schools: an evaluation of processes and outcomes at four schools. In: Stickley, T. (ed.) *Qualitative research in arts and mental health: contexts, meanings and evidence.* PCCS Books: Monmouth. 140-169.

Shalley, C.E. & Gilson, L.L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, 15, 33-53.

Smith, J. (2015). *Making sense of ecotherapy.* London: Mind.

Snell, T.L., Lam, J.C.S., Lau, W.W., Lee, I., Maloney, E.M., Mulholland, N., . . . Wynne, L. J. (2016). Contact with nature in childhood and adult depression. *Children, Youth and Environments, 26*(1), 111-124. doi:10.7721/chilyoutenvi.26.1.0111?seq=1&cid=pdf

Stuckey, H.L., & Nobel, J. (2010). The connection between art, healing, and public health: A review of current literature. *American Journal of Public Health, 100*(2), 254-263. doi:10.2105/AJPH.2008.156497

Swami, V., Barron, D., Weis, L., & Furnham, A. (2016). Bodies in nature: Associations between exposure to nature, connectedness to nature, and body image in U.S. adults. *Body Image, 18*, 153-161. doi:10.1016/j.bodyim.2016.07.002

Tam, K. (2013). Concepts and measures related to connection to nature: Similarities and differences. *Journal of Environmental Psychology, 34*, 64-78. doi:10.1016/j.jenvp.2013.01.004

Thrash, T.M., & Elliot, A.J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology, 84*(4), 871-889. doi:10.1037/0022-3514.84.4.871

Thrash, T.M., Elliot, A.J., Maruskin, L.A., & Cassidy, S.E. (2010). Inspiration and the promotion of well-being. *Journal of Personality and Social Psychology, 98*(3), 488-506. doi:10.1037/a0017906

Theron, L., Mitchell, C., Smith, A. & Stuart, J. (Eds) (2011) *Picturing Research: Drawing as a Visual Methodology.* Rotterdam: Sense Publishers.

Tielsch, A.H., & Allen, P.J. (2005). Listen to them draw: Screening children in primary care through the use of human figure drawings. *Paediatric Nursing, 21*(4), 2005. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/16229131

Toner, E., Haslam, N., Robinson, J., & Williams, P. (2012). Character strengths and wellbeing in adolescence: Structure and correlates of the values in action inventory of strengths for children. *Personality and Individual Differences, 52*(5), 637-642. doi:10.1016/j.paid.2011.12.014

UN (2017). *Progress Towards the Sustainable Development Goals: Report of the Secretary General E/2017/66.* Retrieved from http://www.un.org/ga/search/view\_doc.asp?symbol=E/2017/66&Lang=E.

Wells, N.M., & Evans, G.W. (2003). Nearby nature. *Environment and Behavior, 35*(3), 311-330. doi:10.1177/0013916503035003001

Whitehead, T.L. (2004) ‘What is Ethonography? Methodological, Ontological and Epistemological Attributes’. *Ethnographically informed community and cultural assessment research systems (EICCARS) Working Paper Series*. Retrieved from http://www.cusag.umd.edu/documents/workingpapers/epiontattrib.pdf

Williams, K., & Harvey, D. (2001). Transcendent experience in forest environments. *Journal of Environmental Psychology, 21*(3), 249-260. doi:10.1006/jevp.2001.0204

Yin, R.K. (1993). *Case study research: Design and methods*. London: Sage.