

First International Forest School Symposium



Extended Abstracts
June 26th – 28th 2024

Editor
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Introduction

In June 2024 the Forest School Association (FSA) held the first Forest School Research Symposium, kindly hosted by the University of Liverpool. This was a landmark in the development of Forest School. For the almost-thirty years that Forest School has existed in the UK in its current form, there have only been a few academic papers examining, investigating and questioning why it is popular, whether it is effective, and who should be delivering it. And all the while, the number of practitioners, settings and participants has steadily grown. It has spread to other countries, been criticised for cultural appropriation (of an approach found across Scandinavia), and imitated with varying degrees of success. It was a cause for great celebration, therefore, that over 40 academics and practitioners presented research findings at the Symposium, including some international studies.

It is important to share the information that was presented, and to that end we asked presenters to send us extended abstracts of their work to share with the wider Forest School community and interested others. Not all were able to do so, particularly where studies were at a critical point or where there was a peer-reviewed paper in the pipeline. But approximately half of the presentations are represented here, and each one has a contact point for readers to get in touch with the researchers, should there be a particular interest to follow up.

We considered grouping the papers under the headings used at the Symposium to create parallel sessions, but decided that these were artificial at best and misleading at worst. Most papers touch on pedagogy, research methodology and outcomes, and it therefore made more sense to just list them alphabetically by first author. More controversially, we decided to allow abstract longer than requested to stand, as interest outweighed convention.

We hope that you are inspired by the abstracts to start or to continue your research journeys, and will be ready to contribute to the next Symposium organized by the FSA.

Dr Sara Knight
on behalf of the Academic Committee.

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An exploratory study of Forest School practitioners' views on the benefits of and barriers to children's participation in Forest School

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Author Autobiographies

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Caroline Edmonds is Professor of Experimental Psychology at the University of East London. Her research interests are multi-faceted, comprising studies on how participating in regular Forest School affects children, the impact of drinking water, and children who experienced adverse events around birth. She enjoys spending time in green spaces and is particularly happy in the woods.

Introduction

A unique feature of Forest School is the role of the Forest School leader. In the UK, Forest School practitioners are highly trained in both theory and practice via routes accredited by the UK Forest School Association, according to their six good practice principles and pedagogy (Forest School Association, 2011; Knight, 2011). Forest School practitioners facilitate child-centred and child-initiated learning (Cree, 2009) and provide an important learning space that is different to the traditional indoor classroom (Harris, 2018; Waite & Goodenough, 2018). In the UK, primary school aged children who attend Forest School, rarely do so full time, but instead attend sessions as part of their mainstream schooling and Forest School leaders may be independent of the school, or may be a trained teacher or teaching assistant (Waite & Goodenough, 2018).

Regular participation in Forest School benefits children in many different ways, as outlined by two recent systematic reviews (Dabaja, 2022; Garden & Downes, 2021). Dabaja (2022) focused on educational and other impacts and reported seven areas in which children were positively impacted by participation in Forest School. These include social and cooperative skills, physical skills, self-confidence and self-esteem, learning performance and cognitive skills, emotional and mental wellbeing, environmental awareness and sense of belonging, and risk management skills. Garden and Downes (2021) focused solely on Forest School and education and grouped the benefits of Forest School by age group and whether children had special educational needs and Disability (SEND). For children with SEND, areas improved by Forest School participation included risk and relationships. For those in the Early Years (under 5 years), benefits were found in natural and risky play and development. For those in Formal education (5 years to 18 years), physical activity, mental health and environment awareness all benefitted from Forest School participation. The benefits identified in these reviews overlap and we chose a subset to examine in the present study.

Research has also identified a number of barriers to children's participation in Forest School. These include an already busy curriculum, inflexible timetabling, and pressures related to pedagogical ideology (Bentsen, Jensen, Mygind, & Randrup, 2010; Waite, Bølling, & Bentsen, 2016). Some schools may have an appropriate green space on their site for Forest School, but many will need to travel, and the costs and time associated with this may be prohibitive, or may limit the number of children and/or sessions that are possible (Bentsen et al., 2010). Costs associated with appropriate outdoor equipment, including clothing for inclement weather, may also be problematic (Bentsen et al., 2010). Some schools may experience, or perceive, negativity from parents, who may not recognise the benefit of Forest School for their children (Waite et al., 2016).

Much of the evidence on the benefits of participating in Forest School, and the barriers to participation, comes from studies that interview practitioners and use qualitative methods of analysis (Dabaja, 2022; Garden & Downes, 2021). As quantitative researchers, we trialled the use of rating scales, which if successful, could subsequently be used on a larger sample. Alongside this, we asked participants for additional written comments. In the present, exploratory, study, Forest School practitioners were asked to rate on Likert scales the extent to which they felt that participating in Forest School benefited children's learning through play, self-esteem, nature connection, concentration, language, and cooperative skills and the extent to which they felt the following barriers were an issue for participation: poor weather, curriculum demands, lack of outdoor space and parents' expectations.

Methods

Participants

Ten qualified Forest School practitioners (8 female, 2 male) aged between 36 and 63 years ($M = 48$ years, $SD = 8$ years) took part. Eight of these participants ran Forest School within mainstream schools and a further two ran Forest School sessions in Essex Country Parks. All worked with primary school aged children.

Materials

Participants were asked to rate six potential benefits and four potential barriers to children's participation in Forest School. The potential benefits questions asked, "How much do you think attending Forest School affects children in the following ways?". The potential benefits included, "Giving the children an opportunity to learn through play?", "Raising children's self-esteem?", "Improving children's language skills?", "Improving children's collaboration skills?", "Increasing children's engagement with nature?" and "Improving children's concentration?". The potential barriers questions asked, "How much do you think the following reasons form barriers in preventing children from participating in Forest School?" and included, "Bad weather?", "Curriculum demands?", "Lack of outdoor space?" and "Parents expectations?". Each was rated on a 5-point Likert scale ranging from (1) "Not at all", (2) "Slightly", (3) "Moderately", (4) "Very", to (5) "Extremely". The questionnaire ended with an opportunity for participants to provide written comments to support their answers.

Procedure

The ten participants were met with individually and given the information sheet, opportunity to ask questions about the study, and if they wished to proceed, a consent

form. They then completed the rating scales and provided any additional comments. This study ran in parallel to a larger study that examined the impact of attending twelve weeks of Forest Schools on 151 primary school aged children and was also part of the first author's MSc thesis (Hepworth, Haddad, & Edmonds, 2024).

Ethical Considerations

The project was approved by the ethics committee of the School of Psychology, University of East London. All participants provided informed consent before taking part in the study.

Results

Perceived benefits to children of participating in Forest School

Figures 1 to 6 present Forest School leaders' ratings on the perceived benefits of children participating in Forest School. The data presented in these figures show that there was strong agreement on the benefits. Median scores were the maximum score of 5 for Forest School offering the "opportunity to learn through play" (range = 0), "raises self-esteem" (range = 0), "improves collaborative skills" (range 4 to 5) and "engagement with nature" (range = 0). The two benefits related to cognitive development, "improves language skills" (range 4 to 5) and "improves concentration" (range 4 to 5) also had high agreement across participants, but slightly lower median scores of 4.5.

The comments about views on Forest School were few both in number and length, and a formal qualitative analysis was not planned, but we include a few here to elaborate on the rating scale data. While the rating scale data suggests specific ways in which children's behaviour can be improved by participation in Forest School, the comments suggest that some children behave differently in the Forest School compared to the traditional indoor classroom. For example, children may be more engaged:

"Forest School is fun, we play and learn outside and the children seem much more engaged than they are in class."

Taking children out of their usual environment can also lead to changes in their social behaviour and self-confidence:

"Forest School gives children a chance to connect with nature, they can also make friends outside with children they never sit near in the classroom. Some of the quieter children become louder and some of the louder children become quieter!"

"It's interesting to see how Forest School brings out different traits of children that they don't show in class. Reserved children become more outgoing, and those children who seem confident in class, can't always cope with the outdoor activities and opportunities to choose their own learning activities"

Perceived barriers that prevent children participating in Forest School.

Figures 7 to 10 show Forest School leaders' ratings on the perceived barriers to children participating in Forest School. There was a wide range of ratings across all barriers, thus indicating less agreement amongst participants in comparison to the perceived benefits. There were minor differences in median ratings across perceived barriers. There were median scores of 2 for both "Bad weather" (range 1 to 4) and "parents' expectations" (range

1 to 4), while there were median scores of 3 for both “curriculum demands” (range 1 to 5) and “lack of outdoor space” (range 1 to 4). This indicates that the former two were perceived to be slightly less of a barrier to children’s participation than the latter two.

Practitioner comments offer more detail on how parental attitudes may, in some cases, be a barrier to children’s participation. One practitioner reported that parents’ views can be negative about Forest School:

“Forest School should be part of the curriculum and part of ‘normal’ school life. A lot of parents don’t see the importance of Forest School. If parents are informed from the beginning, they will get used to it and understand the ethos.”

One noted that the views, emotions, or perhaps fears of parents can affect how children engage with Forest School, and that it can be a learning experience for parents as well as children.

“Our Forest School is a preschool where parents attend as well. To start parents are extremely nervous to leave children to decide what they want to do, lots wanted to guide children. Now parents sit by the fire and children are left to explore, play, learn.”

One practitioner sounded a note of caution about the way in which Forest School may become diluted:

“Forest School approach can be very popular aide for children to learn to connect to nature. However, there is a danger of it being hijacked by mainstream education as a tick box exercise”

Discussion

We found that there was a strong consensus amongst our sample of Forest School practitioners on the benefits of Forest School. They were very confident that participation in Forest School improves children’s self-esteem, concentration, collaboration, learning, language skills and nature engagement. The illustrative quotes suggest that practitioners observe children behaving differently in the classroom and in Forest School in their self-confidence, social behaviour and engagement with nature. Our findings support the literature. Many studies have reported that Forest School benefits children’s self-esteem (see for example, (Swarbrick, Eastwood, & Tutton, 2004). Perceived benefits on collaboration have been reported in studies of both Forest School leaders (O’Brien, 2009) and by direct assessment in children (Hepworth et al., 2024). There is less research on learning and cognition, but some have shown benefits (McCree, Cutting, & Sherwin, 2018), while others have not (Hepworth et al., 2024). Engagement with nature is considered to be a route to nature connection for children in Forest School (Harris, 2021), but we might expect to find this, as developing a relationship with the nature world is one of the six underlying principles (Forest School Association, n.d.).

With regards to barriers to participation in Forest School, overall, our study suggests that bad weather and parents’ expectations were less of a barrier to participation than curriculum demands and lack of outdoor space. However, there was less consensus on the barriers compared to the benefits. This may suggest that there is something about individual Forest School settings that is less conducive to offering these sessions, such as differences in available resources. For example, the availability of an appropriate space in which to

provide a Forest School varies from location to location, and from school to school, alongside the pressure of using school funds for travel to and/or hiring a space (Whincup, Allin, & Greer, 2023). The pressure of curriculum demands to make space in the week for children to participate in Forest School may lead to ideological tensions between education policies based on measurement and accountability and the child-led approach of Forest School (Pimlott-Wilson & Coates, 2019). This was alluded to in a comment by one practitioner in our study who feared Forest School becoming a “tick box exercise”, which could be interpreted to mean a version of Forest School that does not fulfill the six principles. Parental expectations were reflected in two comments describing both indifference and potential learning about Forest School as their children participate.

An additional question asked by this study was whether the ratings scales method was successful and if it could be rolled out to a larger sample. The answer to this is yes; participants were comfortable using the scales and the free text comments support the scale findings. However, where there is complete agreement, this may be because the question is too broad and more nuance may be needed. Further research could also consider other benefits and barriers.

The strengths of our study include the use of Likert rating scales with anchors at each point of the scale, and uniformity of the age range with whom the Forest School leaders in our study work. The limitations include the small sample size of this exploratory study, which means that the findings should be interpreted with caution. As some of the benefits are well publicised, we should also be cautious about the potential for confirmation bias from passionate practitioners.

Conclusions

In conclusion, there was strong consensus in our sample of Forest School practitioners that participation in Forest School benefits children’s learning, self-esteem, collaboration, nature engagement, language skills and concentration. However, there was less consensus on the barriers to participation in Forest School. Rating scales provide a promising way to assess the views of a future larger sample of Forest School leaders.

Figures

Perceived benefits

Figure 1. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children’s self-esteem

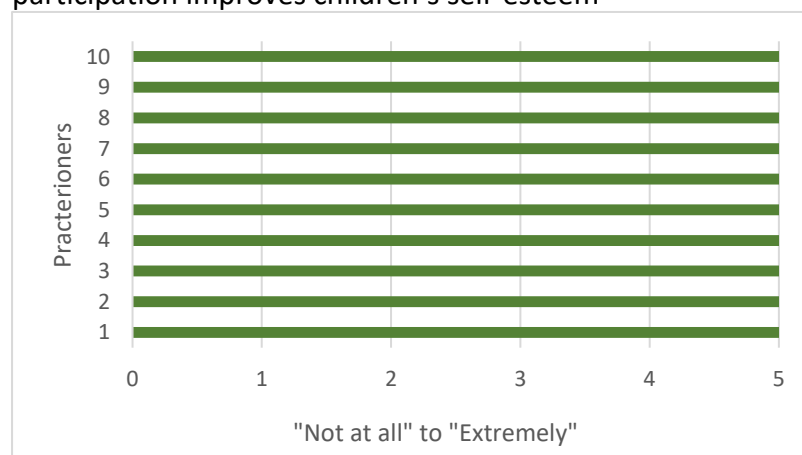


Figure 2. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children's concentration

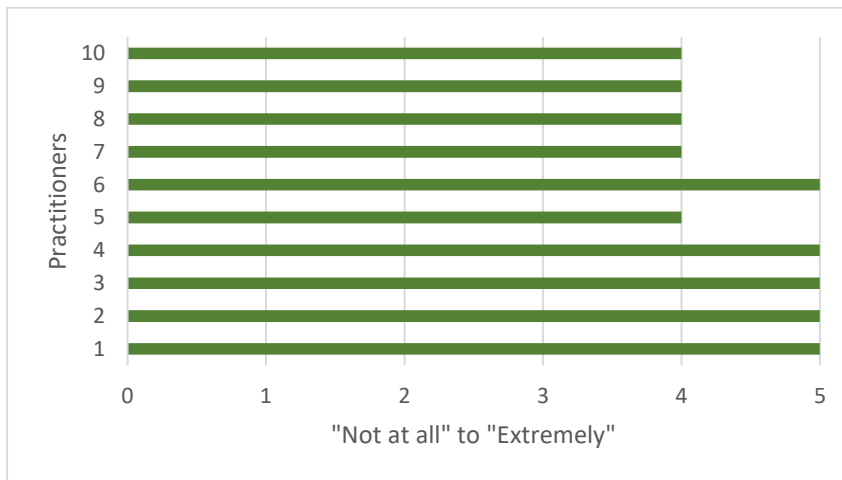


Figure 3. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children's collaboration skills

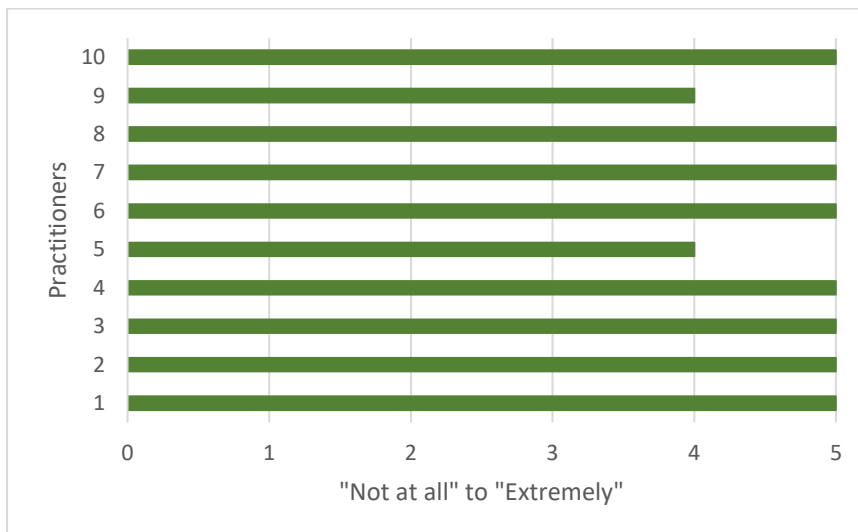


Figure 4. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children's learning through play

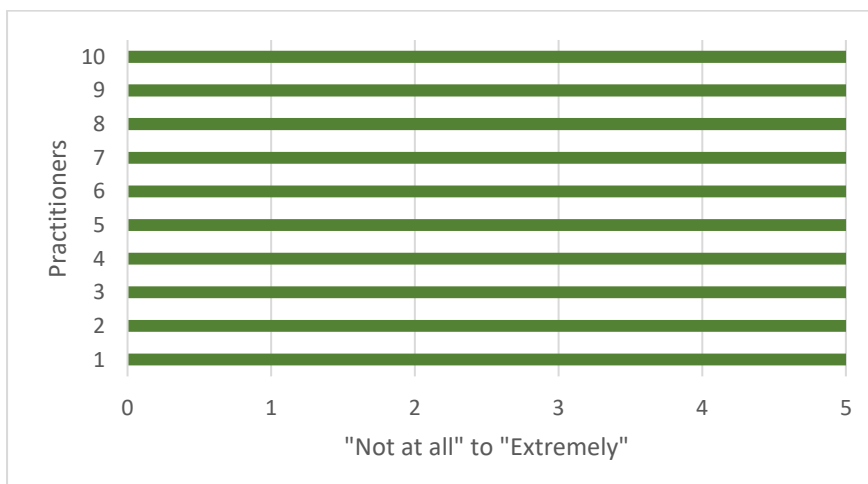


Figure 5. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children's engagement with nature

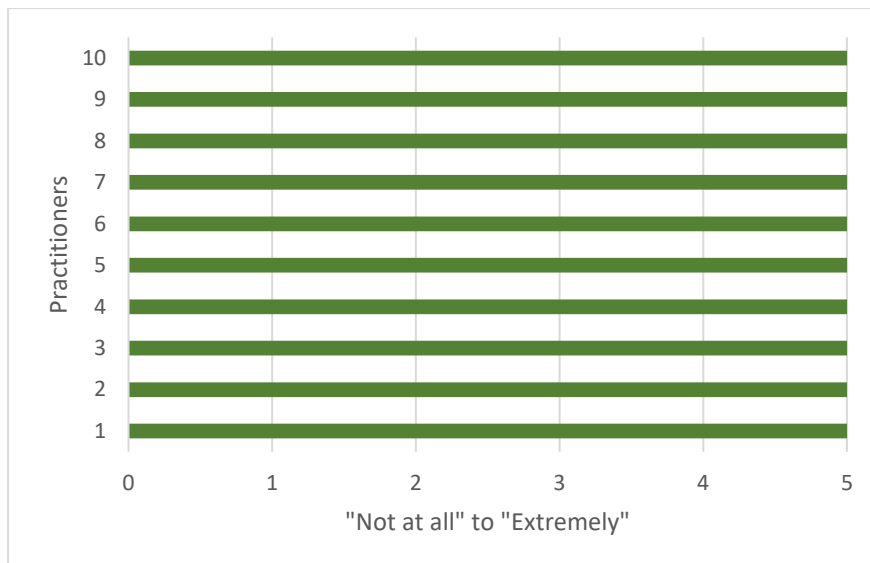
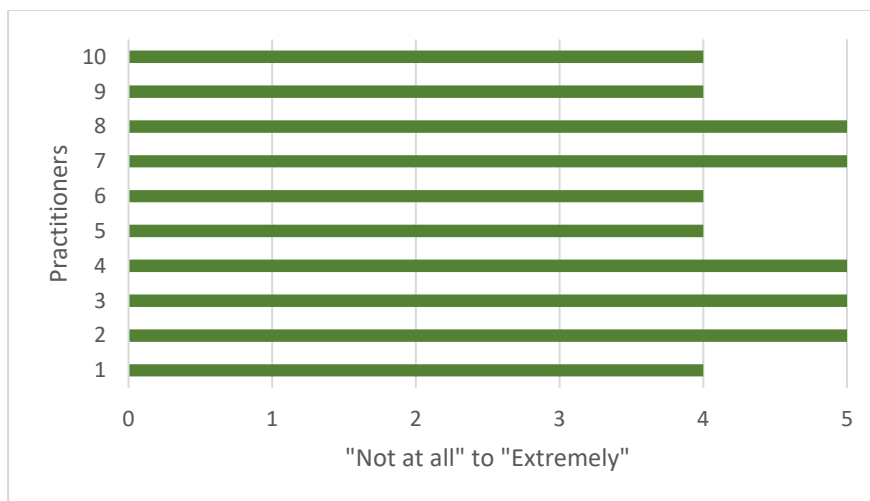


Figure 6. Ratings from Forest School Practitioners on how likely it is that Forest School participation improves children's language skills



Perceived barriers

Figure 7. Ratings from Forest School Practitioners on how likely it is that curriculum demands are a barrier to Forest School participation

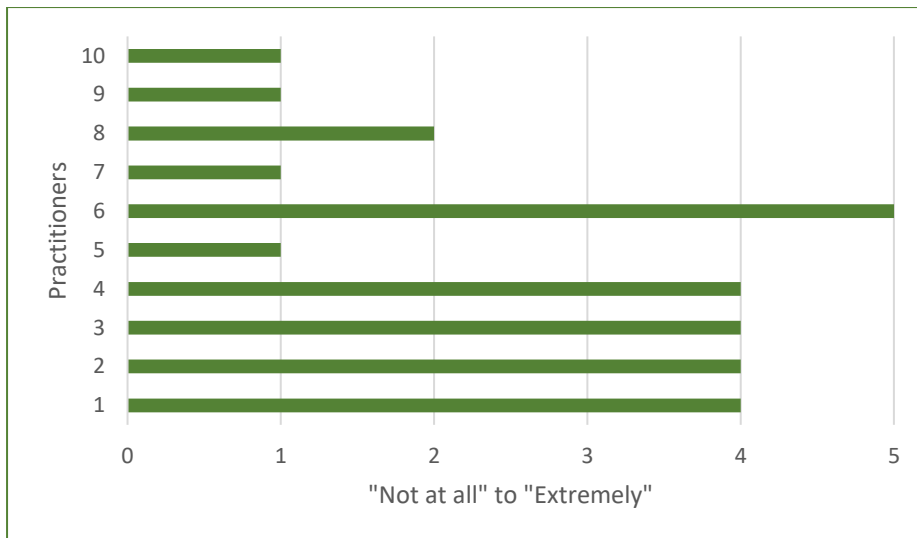


Figure 8. Ratings from Forest School Practitioners on how likely it is that lack of outdoor space is a barrier to Forest School participation

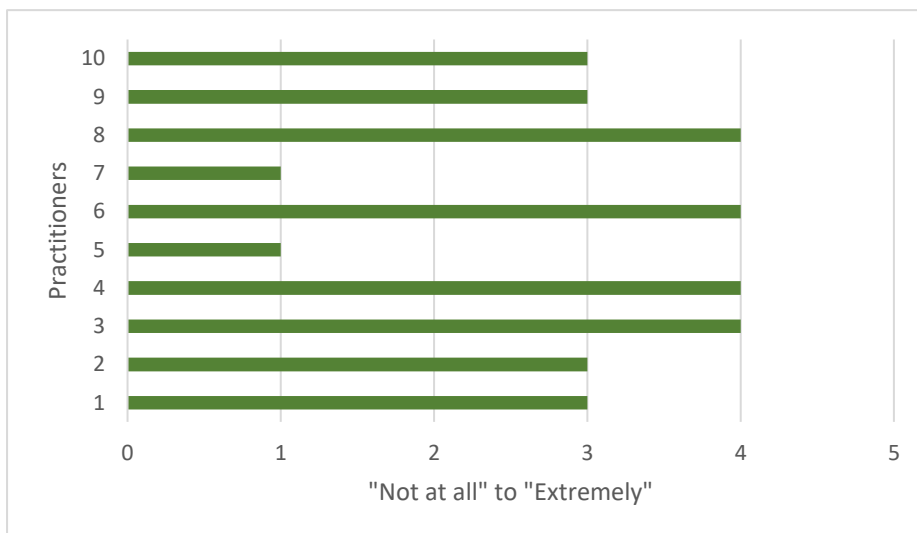


Figure 9. Ratings from Forest School Practitioners on how likely it is that parents' expectations are a barrier to Forest School participation

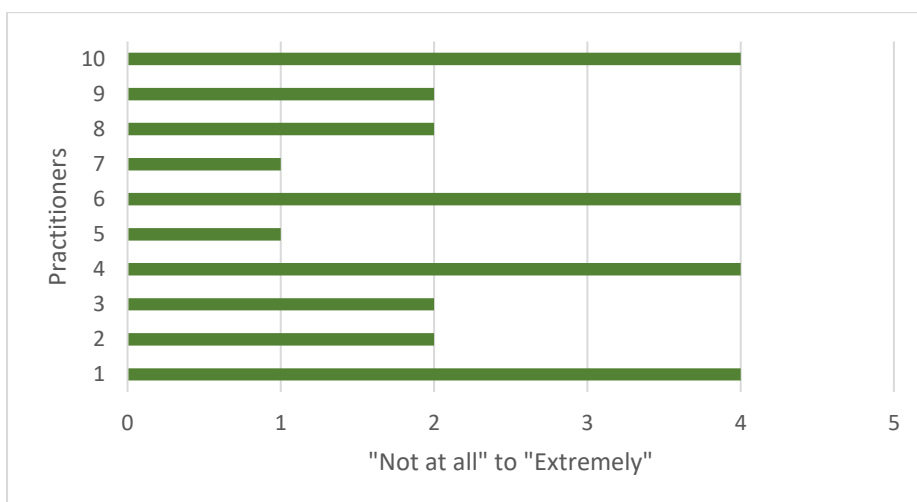
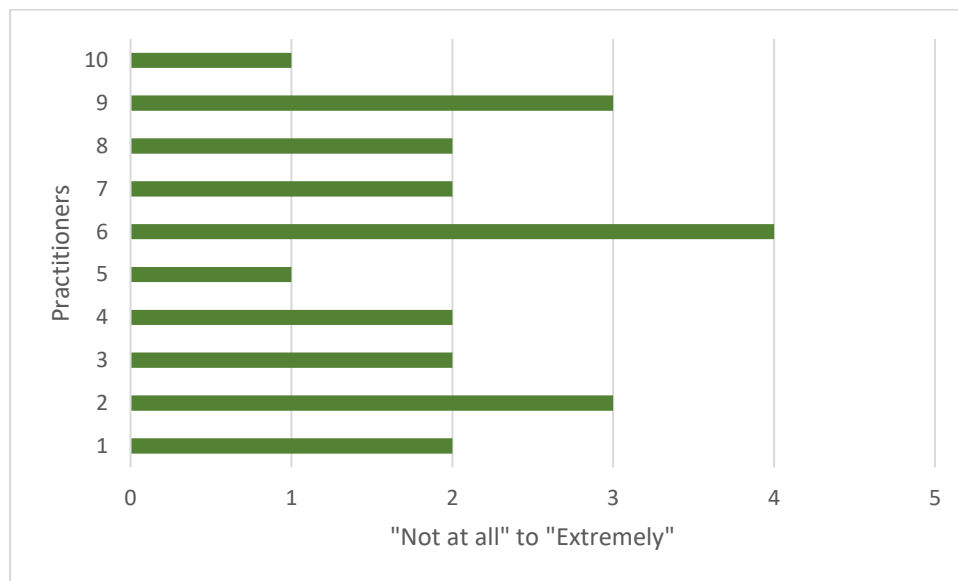


Figure 9. Ratings from Forest School Practitioners on how likely it is that bad weather is a barrier to Forest School participation



References

- Bentsen, P., Jensen, F. S., Mygind, E., & Randrup, T. (2010). The extent and dissemination of udeskole in Danish schools. *Urban Forestry and Urban Greening*, 9(3), 235–243. <https://doi.org/10.1016/j.ufug.2010.02.001>
- Cree, J. (2009). Forest School and the learning outside of the classroom manifesto: What makes it different from all the other outside the classroom educations? *Horizons*, (46), 22–25.
- Dabaja, Z. F. (2022). The Forest School impact on children: reviewing two decades of research. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 1–14. <https://doi.org/10.1080/03004279.2021.1889013>
- Forest School Association. (n.d.). What is Forest School? Retrieved June 9, 2022, from <https://forestschoollassociation.org/what-is-forest-school/>
- Forest School Association. (2011). Full principles and criteria for good practice. Retrieved March 22, 2022, from <https://forestschoollassociation.org/full-principles-and-criteria-for-good-practice/>
- Garden, A., & Downes, G. (2021). A systematic review of forest schools literature in England. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 1–17. <https://doi.org/10.1080/03004279.2021.1971275>
- Harris, F. (2018). Outdoor learning spaces: The case of forest school. *Area*, 50(2), 222–231. <https://doi.org/10.1111/area.12360>
- Harris, F. (2021). Developing a relationship with nature and place: the potential role of forest school. *Environmental Education Research*, 27(8), 1214–1228. <https://doi.org/10.1080/13504622.2021.1896679>

- Hepworth, A., Haddad, H., & Edmonds, C. J. (2024). Attending 12 weekly sessions of Forest School sessions improves mood and cooperation in 7–8-year-old children. *Journal of Adventure Education and Outdoor Learning*, 1–20.
<https://doi.org/10.1080/14729679.2024.2393130>
- Knight, S. A. (2011). Forest School as a Way of Learning in the Outdoors in the UK. *International Journal for Cross-Disciplinary Subjects in Education*, 1(Special 1), 590–595.
<https://doi.org/10.20533/ijcdse.2042.6364.2011.0082>
- McCree, M., Cutting, R., & Sherwin, D. (2018). The Hare and the Tortoise go to Forest School: taking the scenic route to academic attainment via emotional wellbeing outdoors. *Early Child Development and Care*, 188(7), 980–996.
<https://doi.org/10.1080/03004430.2018.1446430>
- O'Brien, L. (2009). Learning outdoors: The forest school approach. *Education 3-13*, 37(1), 45–60. <https://doi.org/10.1080/03004270802291798>
- Pimlott-Wilson, H., & Coates, J. (2019). Rethinking learning? Challenging and accommodating neoliberal educational agenda in the integration of Forest School into mainstream educational settings. *Geographical Journal*, 185(3), 268–278.
<https://doi.org/10.1111/geoj.12302>
- Swarbrick, N., Eastwood, G., & Tutton, K. (2004). Self-esteem and successful interaction as part of the forest school project. *Support for Learning*, 19(3), 142–146.
<https://doi.org/10.1111/j.0268-2141.2004.00337.x>
- Waite, S., Bølling, M., & Bentsen, P. (2016). Comparing apples and pears?: a conceptual framework for understanding forms of outdoor learning through comparison of English Forest Schools and Danish udeskole. *Environmental Education Research*, 22(6), 868–892. <https://doi.org/10.1080/13504622.2015.1075193>
- Waite, S., & Goodenough, A. (2018). What is different about Forest School? Creating a space for an alternative pedagogy in England. *Journal of Outdoor and Environmental Education*, 21(1), 25–44. <https://doi.org/10.1007/s42322-017-0005-2>
- Whincup, V. A., Allin, L. J., & Greer, J. M. H. (2023). Challenges and pedagogical conflicts for teacher-Forest School leaders implementing Forest School within the UK primary curriculum. *Education 3-13*, 51(1), 1–12.
<https://doi.org/10.1080/03004279.2021.1942948>



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