FOREST SCHOOL AND NATURE CONNECTION:
BARRIERS TO THE OUTDOORS FOR WOMEN AND NON-BINARY PEOPLE.

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The overall aim of this research was to advance an understanding of the barriers that women and non-binary people face whilst accessing the outdoors and explore whether Forest School offers an opportunity to remove some of these barriers and increase nature connection.



INTRODUCTION

- In recent years, society has become increasingly aware of the impact that privilege, or lack of privilege, has on many people's lives.
- The literature shows that in outdoor education, there has been a historical emphasis on masculinity and men (Cook 1999, Birrel 2018, Ward 2018).
- Research shows women face barriers to accessing the outdoors, but there is little research into how these barriers can be removed. There has been no research into the barriers for people who identify outside the gender binary.
- Researchers have been developing an understanding of human–nature relations and developing instruments that measure them, with a focus on the nature-relatedness scale (Brügger et al. 2011; Lumber et al. 2017; Martin & Czellar, 2017; Restall & Conrad, 2015).
- The theoretical background of Nature-relatedness draws on Wilson's (1984) Biophilia Hypothesis that humans are drawn to nature because they are part of nature
- Research suggests that Forest School impacts positively on this connection (Barrable & Booth, 2020; Bragg et al. 2013; Cheng & Muroe, 2012).
- There is an opportunity to connect these ideas together and ask whether barriers for women and non-binary people attending Forest School with children can be removed and, in turn, improve their nature connection?
- The question is rooted in eco-feminist theory, which identifies the importance of interconnected social and environmental issues and movements. It explores how Forest School can remove barriers to the outdoors for those who experience a lack of privilege due to their gender.

OBJECTIVE

1. Identify the barriers faced by women and non-binary people accessing the outdoors.
2. Explore whether Forest School sessions for young children and their parents remove some of these barriers.
3. Discover whether attendance at Forest School increases nature connection in women and non-binary people.

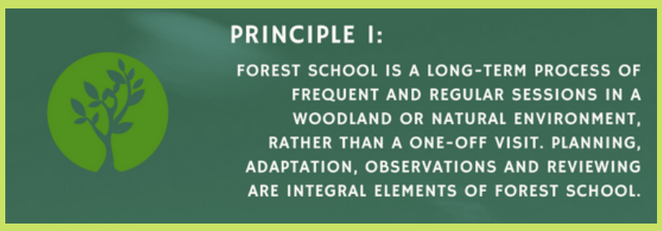
METHODOLOGY

- The research strategy is within the Interpretive paradigm and is a mixed-method approach. The quantitative research was completed using a questionnaire, and the qualitative research was completed through interviews of 7 participants, 5 identified as women and 2 as non-binary.
- The study used a short questionnaire to gather data using the Nature Relatedness Scale. A rating scale was used as it is a flexible quantitative data collection method. (Cohen et al. 2018). This was conducted with those attending a Forest School that followed the 6 principles to ensure reliability. They were asked to consider their answers before and after they attended.
- In-depth interviews were used to gather qualitative data. This method was chosen as it allows for flexible, in-depth analysis (Cohen et al. 2018) The participants were selected using purposive sampling to ensure reliability (Denscombe 2021).
- The quantitative data was analysed to see whether attending Forest School increased the participant's nature connection. Qualitative data was analysed using the Reflexive Thematic Analysis approach.
- The research was conducted under the core ethical research principles of Transparency, Confidentiality, Voluntary, Do no harm and Impartiality.

RESULTS

The research suggested that women and non-binary people face many barriers whilst accessing the outdoors. The barriers revealed were intersectional, but the majority were focused on fear of physical danger due to a lack of gendered privilege. Fear of physical harm from men but also that non-men do not have the experiences of the outdoors that men have.

The qualitative research suggests that the principle 1 of Forest School was the most important factor in removing barriers.



The responses revealed a focus on community and being in the same place every week with the same people as the biggest factor in creating a feeling of safety outdoors. This relates closely with Sense of Place theory.

Both the qualitative and quantitative research demonstrated an increase in nature connection from attending Forest School with their children, with 100% of the respondents scoring higher on the nature-relatedness scale after attending Forest School than before.

ANALYSIS

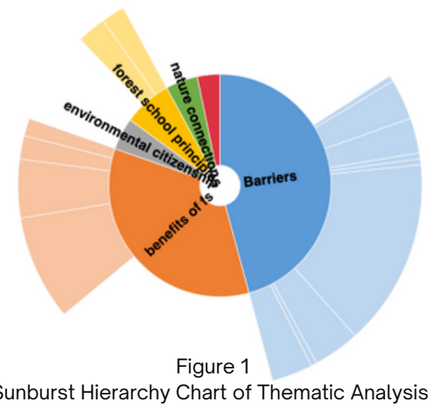


Figure 1
Sunburst Hierarchy Chart of Thematic Analysis

The data from the interviews was analysed using the Reflexive Thematic Analysis approach (Braun & Clarke, 2022) through the lens of eco-feminist theory. Altogether there were 214 coded points which were aggregated under themes. (fig.1)

The theme 'barriers to the outdoors' was analysed and suggests that fear of men was the biggest barrier (82%) to the outdoors for women and non-binary people. (fig,2)

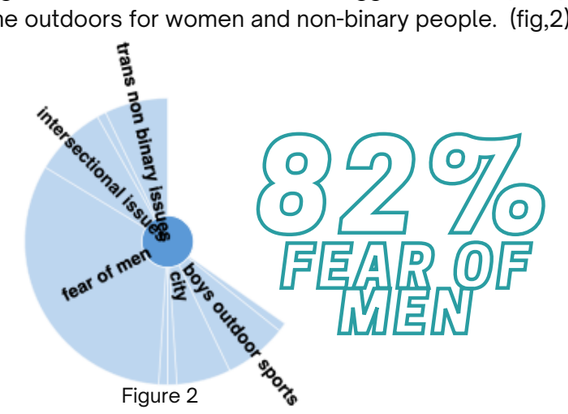


Figure 2



Figure 3
Word cloud of barriers, highlighting fear of physical harm as a barrier for women and non-binary people accessing the outdoors

"For me Forest School is about reclaiming ownership. Breaking down the barriers. It's about connection, community and communication."
Quote from interview.



Figure 4

Word cloud of benefits of Forest School. Community was mentioned directly 18 times and had 36 codes that referenced a feeling of community as removing barriers. (fig 4)

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A paired-samples T-Test was conducted to evaluate the impact of women and non-binary people attending Forest School with their children on Nature Connection. There was a statistically significant difference observed between the pretest (M=53.29, SD=8.864) and the posttest (M=66.86, SD=4.259, t=-3.919, p=0.008). The effect size, according to Cohen (1988) and Sawilowsky (2009) was very large (1.64).

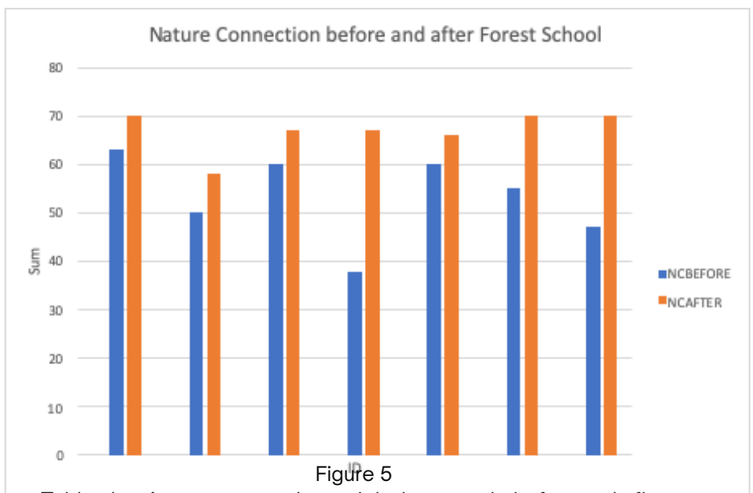


Figure 5
Table showing score on nature relatedness scale before and after attending Forest School.

52.3
AVERAGE SCORE BEFORE FOREST SCHOOL

66.9
AVERAGE SCORE AFTER FOREST SCHOOL

CONCLUSION

Overall, the research suggested that fear of men was a dominant barrier in women and non-binary people accessing the outdoors (fig. 2), that attending Forest School sessions removed some of these barriers through the safety of community (fig. 4) and that attending Forest School with their children increased nature connection (fig. 5) in women and non-binary people.

The research also revealed questions around the further barriers for transgender people, both binary and non-binary, due to lack of gendered privilege that were not experienced by cis-gendered women. The interviews with non-binary participants also revealed ideas around the concept that as Forest School is rooted in self-determination theory, whether the ethos allows the exploration of identity outside of societal gender roles. This is an area which is worth further investigation and research.

Related literature
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