

Can daily Forest School sessions improve children’s well-being and involvement in a day Nursery setting?

Introduction

Well-being is when an individual feels at ease, shows spontaneity, self-confidence and enjoyment (Laevers, Moons, & Declercq, 2013). In addition, involvement indicates how engaged a child is in an activity and how they are functioning within their capabilities (Laevers and Declercq, 2018). Measuring both Well-being and involvement can indicate how powerful a learning environment can be for the children in our early years settings (Laevers and Declercq, 2018). When there is increased involvement there are higher levels of well-being (Biorgen, 2015). Research has found that being outdoors is a suitable places for a child to play, rich with objects to play with, which encourage imaginative play.

The rationale of the study is to look at how the outdoors could have restorative effects and impact on children’s wellbeing and involvement at a nursery setting. Additionally, it was influenced by research conducted by the Department of Education (2020), which found that the wellbeing of children in the UK remains moderately low compared with other countries as well as decreasing over time (The Children’s Society, 2020b, UNICEF, 2020; cited from the Department of Education, 2020). Moreover, RSPB (2010) found that children who disconnect from nature and stay indoors are less healthy and generally have lower well-being.

In addition, this study has been influenced by the recent pandemic, with it’s restrictions and lockdowns. The pandemic has made us more aware of how important nature is for our well-being, especially in the absence of educational settings such as nurseries (Saraev *et al.*, 2021). This is especially significant in children who have limited access to nature outside of education. Thus, for some children, spending time in nature in a school or nursery may be their only opportunity (Wildlife Trust, 2019).

Lastly, this study has been focused around Kaplan and Kaplan (1989) work on Attention Restorative Theory. The Attention Restorative theory deals with attention fatigue. This fatigue occurs when our directed attention is depleted (Kaplan and Kaplan, 1989). According to the theory an environment full of fascinating stimuli will encourage involuntary attention, which rests the individual from direct attention, resulting in reduced fatigue and improved concentration, thus higher level of well-being (Roe and Aspinall, 2011)

The purpose of study is to investigate into whether daily Forest School sessions can improve children’s well-being and involvement in a day Nursery setting. The hypothesis for the study was that involvement and well-being would increase during Forest School sessions. The Null Hypothesis predicted there would be no increase in involvement and well-being during Forest School session.

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Summary and conclusion:

- The research study showed that there was an increased mean score difference for Forest School session compared to class cycle, especially during the afternoon Forest School session. However, the mean scores were not significant enough to prove that time spent outdoors increases a child’s well-being an involvement in a nursery setting.
- ❖ Afternoon Forest School had the highest mean score.
 - ❖ Afternoon class cycle had the lowest mean score.
 - ❖ Observations and field notes showed a higher amount of involvement in activities during an afternoon Forest School session compared to other conditions. This could support Kaplan and Kaplan (1989) Attention Restorative Theory, where using involuntary attention will restore depleted resources and improve cognitive performance. Forest School in the afternoon may have restorative effects after being exposed to direct attention in class.
 - ❖ Observations and field notes showed a decline in behaviour during an afternoon class cycle.
 - ❖ Observations and field notes showed a higher level of involvement in activities which involve physical, communication and language, and expressive art and design, during an afternoon Forest School session.
 - ❖ Observations and field notes showed that during an afternoon Forest School session, children spent between 10-45 minutes on an activity, with some children involved in one activity for the whole session. Similar findings, were found during a morning classroom cycle. Thus, supporting James (1962) who suggested that certain elements in our environment such as “unusual things, moving things, wild animals, bright things, pretty things, etc.” can draw in a type of involuntary attention.
 - ❖ There was evidence of ‘soft fascination’ during observations and field notes at both morning and afternoon Forest School sessions.
 - ❖ When the temperature dropped during one Forest School session, some children’s Leuven scale scores decreased in both well-being and involvement. A similar finding was found in observations and field notes on the free flow garden during a classroom cycle. This finding supports research by Soderstrom *et al.*, (2012), which found an increase in cortisol levels with children exposed to outdoor environments. Which might suggest that varied environments could have a negative impact (Soderstrom *et al.*, 2012).

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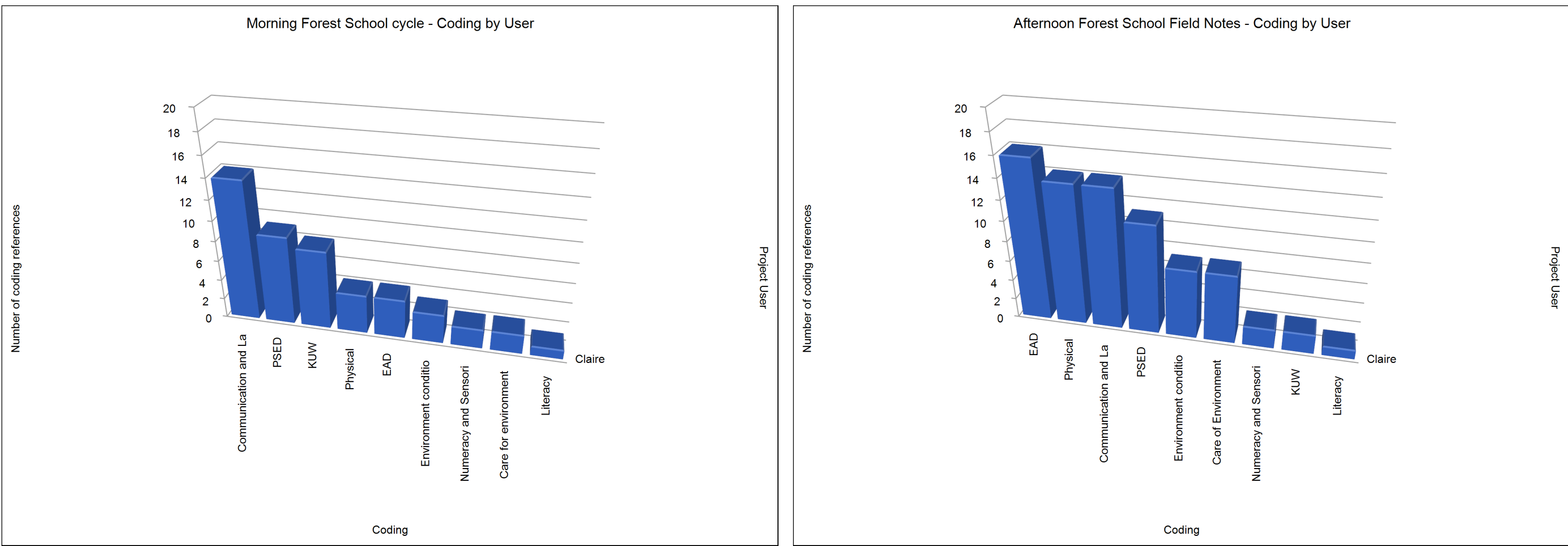
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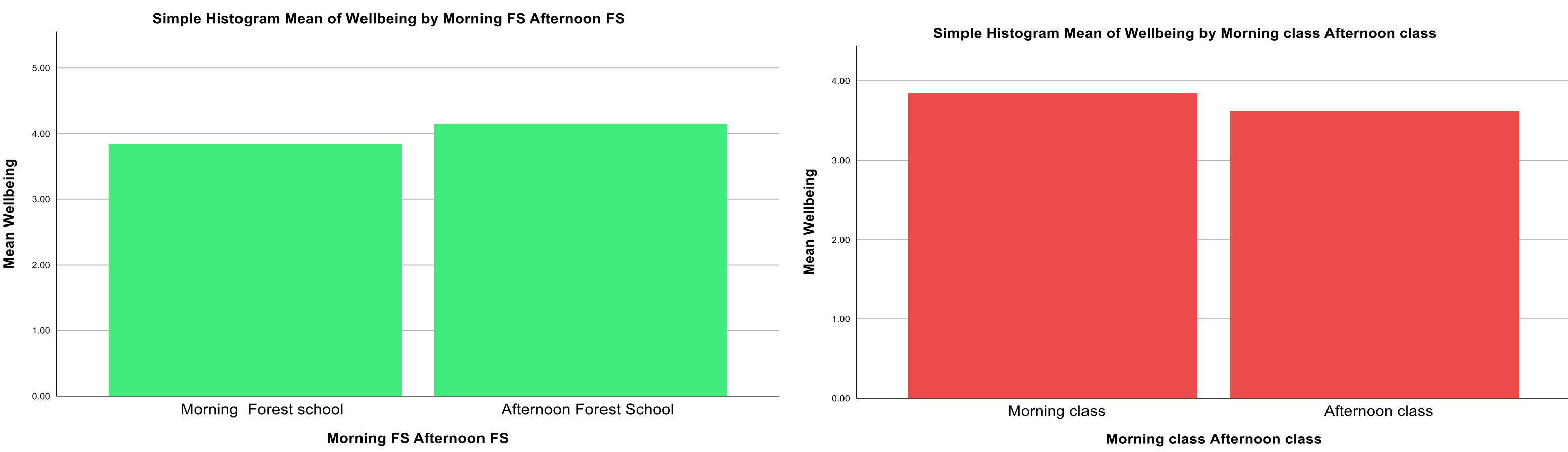
Method

For this research I used a mixed methods approach of both Qualitative and Quantitative methods. My Quantitative method was measuring children’s involvement and well-being with the Leuven Scales for involvement and well-being. I used the scale to measure involvement and well-being for 13 children aged between 3-4 years, during a morning forest school session, afternoon forest school session, morning class cycle and afternoon class cycle. It involved a two-minute observation of each child, marking them on a scale of 1-5 for involvement and well-being. The Leuven scales were accompanied with Qualitative methods, which involved written and audio field notes and observations. The observations and audio recordings were gathered for one morning and one afternoon forest school session per week. In addition, observations and audio recordings were gathered for one morning and one afternoon class cycle per week. The observations were descriptions of what I saw, heard and noticed during each session. Observations focused particularly on the children’s involvement during child-led activities as well as some teacher-led activities. Additionally, the observations examined which activities engage their attention for the longest within the seven areas of learning. Furthermore, the observations examined if there were any links between involvement and well-being and nature connection/care of environment. The observations were made on the same days of the week and recorded as direct notes and inputted into Nvivo following the observation.

Results and Findings:



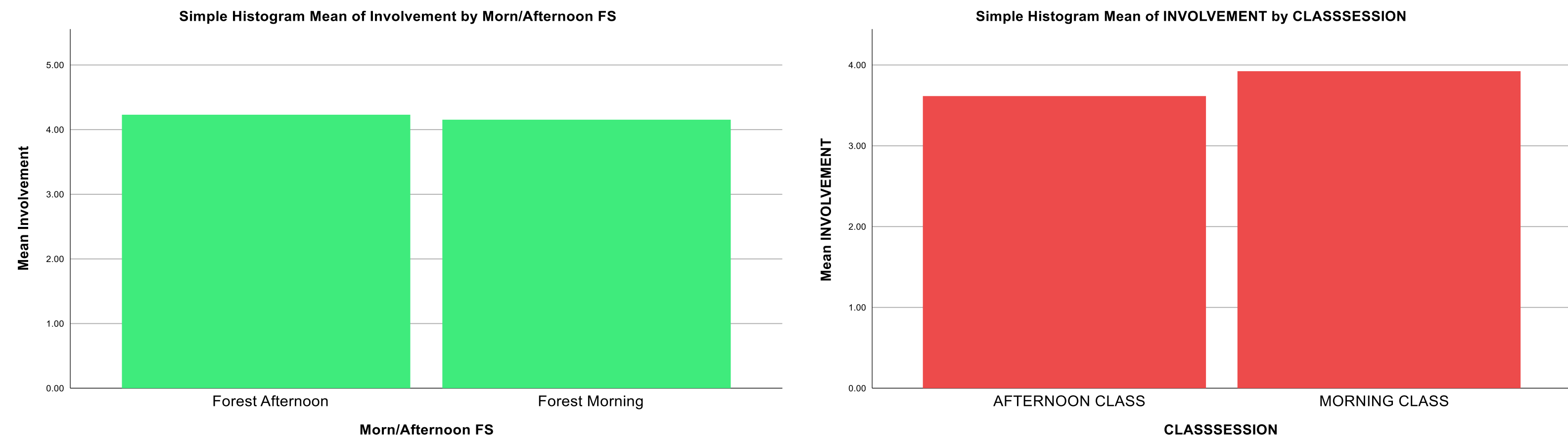
The results from the Qualitative research show that during a morning Forest School session children were observed the highest involvement in activities that promote communication and language, personal, social and emotional development, and knowledge and understanding of the world. In the afternoon Forest School session children were observed the highest in activities which promote expressive art and design, physical development and communication and language. Overall, the afternoon Forest School session recorded the highest coding scores compared to the morning session, which could suggest more activity reported in these areas. Interestingly both sessions recorded a high coding score for communication and language, which could suggest that Forest School promotes language with peers and teachers during morning and afternoon sessions. Additionally, the results show that children are more physical in the afternoon Forest School session. Could this be because the children spend the morning in a 3 hour work cycle inside the classroom?. Furthermore, it was reported that they were more creative in the afternoon session. However, in the morning session they were more likely to link up with peers and play in groups.



Results from the Quantitative research using SPSS demonstrated a slightly higher mean score for well-being during an afternoon Forest School session and a slightly higher mean score for well-being during a morning class cycle. However, the independent samples T-test found no significance between the mean scores for morning and afternoon Forest School sessions. Additionally, it found no significance between the mean scores for morning and afternoon class cycles.

Forest School well-being results: morning Forest School (M=3.8, SD=0.8) and afternoon Forest School (M=4.2, SD=0.9; $t=-0.9$, $p=0.4$)

Class cycle well-being results: morning class cycle (M=3.8, SD=0.8) and afternoon class cycle (M= 3.6, SD=0.5; $t=0.9$, $p=0.4$)



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Forest School involvement results: (M=4.15, SD=0.8) and afternoon Forest School (M=4.23, SD=0.7; $t=0.3$, $p=0.8$)

Classroom cycle involvement results: (M=3.9, SD=0.2) and afternoon classroom cycle (M=3.6, SD=0.2; $t=-1.0$, $p=0.3$)