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LET'S GET REAL: ARE TODAY'S CHILDREN PLAYING WITH NATURE? DO THE EDUCATIONAL ASPIRATIONS OF THE NATURE PLAY MOVEMENT EMERGE WITHIN CHILDREN'S NEIGHBOURHOOD PLAY?

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Abstract

The Irish Neighbourhood Play Research Project was a large scale research project which included almost 1700 participant families and 240 communities throughout Ireland. It used parental surveys and naturalistic observation to secure data on how children in modern Ireland aged 0-15 are spending their free time. An all-island approach was taken incorporating cities, towns and rural areas across a variety of socio-economic groupings.

Interesting findings arose from the data relating to the choices that children are making within their free time. This paper focuses on the choices they are making within their engagement with nature and natural materials. Data on the children's nature choices will be presented and discussed through a child development lens. The positive and negative implications for both learning and development are raised. This leads us to interesting questions about the role of nature within child development and learning. As an international nature play movement gains ground in raising awareness about the importance of nature based learning and its linkages with educational structure and pedagogy, this research into children's nature choices is timely

Keywords: The Irish Neighbourhood Play Project, Nature Play, Nature in Education, Child Development, Neighbourhood Play, Play.

1 INTRODUCTION

This paper presents findings from The Irish Neighbourhood Play Project; a research study initiated by IT Sligo and Early Childhood Ireland in 2012. The focus of this paper is on the data section which highlights children's engagement with nature during the study. This theme is gaining momentum within the field of Childhood Education and Child Development. A Nature Play movement now exists internationally aimed at resurrecting children's vital connection with the natural world.

The concept of Nature Play is not a new concept. It is a type of play that countless generations of children have embraced and thrived within. It's more recent incarnation as a key consideration for educators is a result of societal changes which include urbanisation, increased technological and other indoor play and increased safety considerations. With mounting evidence that these changes have resulted in a decline in traditional forms of play and in particular in nature based play (Francis, Paige, & Lloyd, 2013; Mainella, Agate, & Clark, 2011), the importance of nature play is being centralised within educational debate.

A Nature Play movement has emerged that involves an organised response to its decline. This movement includes researchers, organisations, school, communities and families. Nature Play is now considered something which all educators must give time and thought to; especially in the development of their outdoor classroom. With the sensory learning style that accompanies the first phases of human development, nature play is of especial importance to Early Childhood Educators.

This paper presents findings on Nature Play within contemporary Irish childhood. How are Irish children spending their time? Are they spending time outdoors? Where are they playing? What equipment are they engaging with? Are they engaging with Nature during outdoor play? What impact has the Irish climate on children's Nature Play opportunities? What impact has the location of their community? Does the socio-economic status of their family have an impact on their levels of Nature Play? The answers to these questions are contained within the following paragraphs. The prescribed

length of this paper leaves room for the findings only. The discussion of these findings will be presented within further publications on this topic.

2 METHODOLOGY

The aim of the research was centred on the research question: What is happening in children's neighbourhood play in Ireland today?

Focusing on the best methods with which to answer this question, a mixed method approach was adopted that incorporated detailed parental questionnaires (phase one) and the construction of a tailored observational tool (phase two). Naturalistic observation (Geller, Russ & Altomari, 1986; Loucopoulos & Karakostas, 1995) was chosen as the most effective approach for capturing a snapshot view of neighbourhood play. The project's sequential design allowed for the collection of data from multiple sources to facilitate triangulation which enriched the project, as there are often differences between what people report and actual behaviour (Punch, 2001).

Data was collected utilising a simple coding system (Robson, 2012, pp. 337) which captured data on variables including age, gender, extent of peer interaction, type of play environment, play objects used, instances of interaction with nature and/or electronics and the type of play children were engaged in. The population of interest was all children aged between 0 and 14 who resided on the island of Ireland in June - July 2012. Corresponding with the survey research, the sampling technique employed was purposive sampling, external play areas within the previously determined geographical and socio economic locations were observed. The final sample size achieved was 240. Data was analysed quantitatively; frequencies and cross tabulations were performed.

3 FINDINGS REGARDING THE SPACES CHILDREN USE TO PLAY OUTSIDE

The top three areas children were using to play outside were green areas in estates (30%), estate roads (29%) and park play spaces (9%). Estates in Ireland are collections of houses. These exist within large cities, Medium sized towns, small towns, villages and even within isolated rural areas. They are a strong feature of Irish housing which is evidenced by their appearance as the top two places where Irish Children engage in Neighbourhood Play. Spaces children used to play outside did not differ greatly depending on geographical location, rurality, jurisdiction or socio economic indicator. However, more children were observed using park play spaces in large cities. This may be due to the existence of greater park investment within the creation of park spaces in larger cities.

3.1 Gender Differences by Age Group within Outdoor Play Spaces

In total 400 children were observed playing in outside spaces. Further analysis of the top two outside spaces was conducted. Of the 108 children observed playing in estate green areas, 42% were aged between 8 and 11 (45 children) and more boys (38) than girls (7) were observed. The second largest group observed (41%) were children aged between 4 and 7 (44 children) and again more boys (29) than girls (15) were observed. 9% (10 children) were between the ages of 0 and 3 (4 boys and 6 girls) and 8% (9 children) were between the ages of 12 and 14 (3 boys and 6 girls).

Of the 158 children observed playing in estate roads, the majority (33%) were of children between the ages of 4 and 7 (52 observations) and more boys (35) than girls (17) were observed. The second largest age group observed (28%) were children between the ages of 8 and 11 (45 observations) and again, more boys than girls were observed (28 and 17 respectively). Just under a further 28% of observations (44) were of children between the ages of 12 and 15 (32 boys and 12 girls), while 11% (10 observations) were of children between the ages of 0 and 3 (7 boys and 10 girls).

As the data on children's indoor activity choices shows that girls age 4 and older spend a significant amount of time engaged in creative activities indoors, this perhaps explains the gender discrepancies in relation to outdoor play.

4 FINDINGS REGARDING THE USE OF PLAY EQUIPMENT

In total 173 children were recorded using equipment to play outside. Further analysis was carried out on the top two play objects observed. There were 87 recorded observations of children using equipment in outdoor play, the most commonly observed pieces of equipment were footballs and bikes

Children across all age categories used footballs to play outside. Of the 84 children observed using footballs to play outside, 37% were between the ages of 8-11, 27% between the ages of 4-7 and a further 27% between the ages of 12-15. In all of these cases almost all of those observed were boys (1 girl was recorded playing with a football in each of the ages categories). The remaining 9% of children were aged between 0-3 and a more balanced mix of gender (4 boys and 3 girls) was observed suggesting that ball play is more gender balanced within the early years but becoming more male orientated from the age of 4 onwards.

Again, children across all age categories used bikes to play outside. Of the 52 children observed using bikes to play outside, 38% were between the ages of 8 and 11 (15 boys and 5 girls), 33% were between the ages of 4 and 7 (11 boys and 6 girls), a further 17% were aged between 12 and 15 (6 boys and 3 girls) and the remaining 12% were aged between 0 and 3 (1 boy and 5 girls). Again in the majority of cases (apart from the 0-3 age category) more boys than girls were observed playing with bikes.

5 LEVEL OF INTERACTION CHILDREN ARE HAVING WITH NATURE

There were a low number of observations of direct interaction with nature. In total there were 25 observations (14%) of nature elements being used within play and a further 12 (7%) observations of sensory exploration.

Other instances mentioned singularly were:

- Jumping in, and throwing things into puddles
- Using pieces of wood within construction play
- Symbolic representation using sticks within imaginary play
- Throwing stones
- Using sticks to help move around on roller blades
- Using trees and twigs to make a campfire

There was almost a 50:50 split between observations of those using nature full and part time. 9 of the 17 observations used nature elements part time, while another 8 used nature elements fulltime.

In relation the location of the nature based play, surprisingly, slightly more observations were from city areas. 10 (42%) were in city areas, 8 (33%) were in rural areas and 6 (25%) were in town areas. (Note one recording did not specify area).

6 DIFFERENCES IN THE LEVELS OF ENGAGEMENT WITH NATURE ACROSS COMMUNITIES

There were dramatic socio-economic differences with many more interactions with nature coming from children in disadvantaged areas. 15 observations (60%) were from disadvantaged areas, 7 (28%) from middle income/class areas and 3 (12%) from affluent areas.

Of the observations of interaction with nature slightly more were from the city based communities. 10 (42%) were in the city, 8 (33%) were rurally based and 6 (25%) were in medium sized towns. (Note one recording did not specify area).

At first analysis, gender differences did not appear dramatic. However, there was a larger number of girls engaging with nature overall. Given that larger numbers of boys were observed in outdoor play generally, these differences are greater than they first appear. In total 73 children were recorded interacting with nature across the 25 communities where nature play occurred during observations. Almost two thirds (60%) were aged between 8 and 11 and amongst those, there was an even split in gender. A further 16% observed were aged between 4 and 7 and all were girls. While 12% were aged between 12 and 15 (6 boys and 2 girls) and the remaining 12% were aged between 0 and 3 (3 boys and 5 girls).

7 PLAY OUTDOORS IN WILD AREAS

Just less than 19% of children (318 of the study's 1688 total including observations and parental commentary) play outdoors in wild areas. There is a massive correlation between rural living and play

within wild spaces. As can be seen in table 1, of those who play outside in wild areas, more children (nearly half) are from rural houses. As rural families made up only 21% of the study, this figure is indeed significant.

Table 1: House type analysis of 'play outdoors in wild areas'

	urban apt	urban house	suburban house	rural house
% in total study	1.00%	18%	60%	21%
% who play outdoors in wild areas	0.0%	8.8%	44.3%	46.9%

8 WEATHER AND PLAY

Families report that 74% of Irish children do not play outside in bad weather. Bad weather is defined as significant rain or wind. Of the 438 children (just over 26%) who play outside often in bad weather, there is a significantly higher proportion from rural communities. While the majority of children who play outside in bad weather are from suburban houses, there is a higher incidence of children from rural houses playing outside in bad weather (see table 2).

Table 2: House type analysis of 'play outside often in bad weather'

	urban apt	urban house	suburban house	rural house
% of total study	1.00%	18%	60%	21%
% who play outside often in bad weather	0.5%	17.1%	46.1%	36.3%

SE area analysis does not appear to highlight any strong differences in the incidences of play outside often in bad weather with similar amounts playing outside in all weathers across all socio-economic groupings. There are however, lower numbers playing outside in all weathers within middle income/class communities. This can be seen in table 3 below.

Table 3: Socio economic analysis of 'play outside often in bad weather'

	affluent	middle	disadvantaged
% in total study	30.50%	35.40%	33.90%
% play outside often in bad weather	35.1%	31.4%	33.5%

9 DARK WINTER EVENINGS

Another climate based finding relates to Ireland's dark winter evenings. In summer, darkness comes as late as midnight but in winter it comes as early as 4pm. 85% of families reported that their children do not play outside on these dark winter evenings despite 4pm-6pm being prime neighbourhood play time for children. 15% of respondents (251) said their children do play outside on dark winter evenings. It is worth noting that notably more children from disadvantaged areas play outside often on dark winter evenings (see table 4).

Table 4: Socio economic analysis of 'play outside on dark winter evenings'

	affluent	middle	disadvantaged
% in total study	30.50%	35.40%	33.90%
% play outside on dark winter evenings	30.7%	29.1%	40.2%

More boys than girls (55%/45%) play outside on dark winter evenings and there is a steady increase in the number of boys playing outside on dark winter evenings from the age of 6 onward. Of the 112 girls who play outside on dark winter evenings more are aged 12 (11.6%) and 14 (14.3%) (See figure)

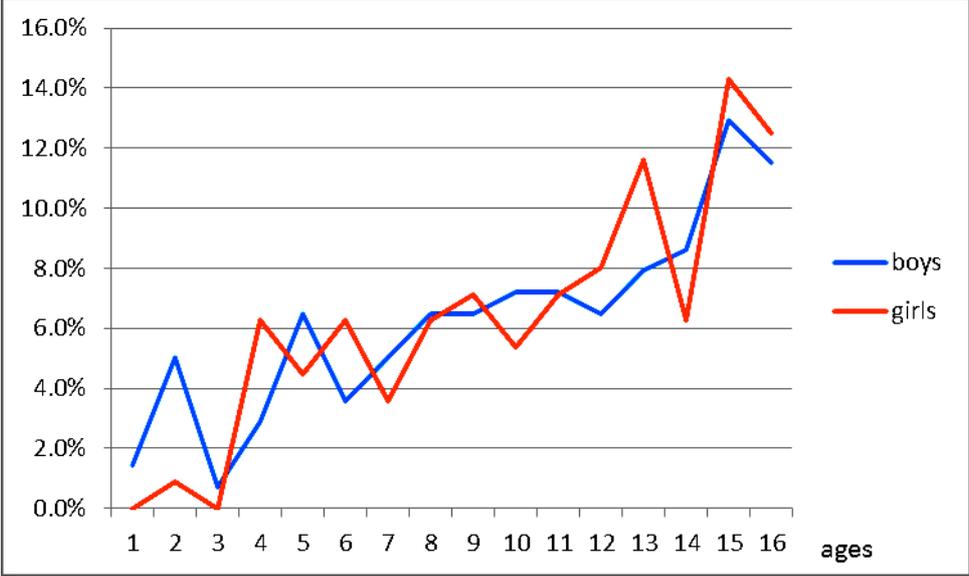


Figure 1: Age and gender analysis of 'play outside on dark winter evenings' (Please note for clarity that the line which finishes higher relates to girls)

10 LEVELS OF OUTDOOR PLAY

Respondents were asked to indicate how often their children played inside the house. As figure 2 depicts, most children (88%) play inside the house on a daily basis. A further 8% play outside every second day. 3% are outdoors only at weekends and 1% (17 children) rarely play outdoors. All of the children in this 1% live within urban apartments. While the sample here for urban apartments is small, this is nevertheless a concerning finding within this study.

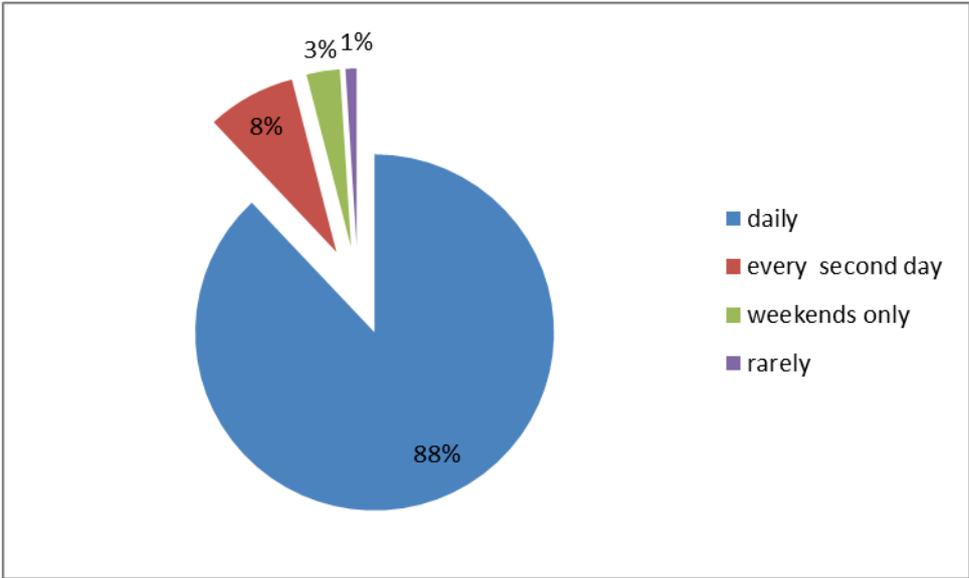


Figure 2: Frequency of play outside the house

Respondents were asked a series of questions about playing outside. 88% of all families cited that winter is a major challenge with reduced outdoor play opportunities due to bad weather and early darkness.

Further analysis of the frequency of play outside and the housing type (type of dwelling) children live in revealed that house type does not appear to impact the frequency of play outside with one very clear exception; more of those who rarely play outside come from urban apartments.

The majority of children (54%) play outside for between 1 and 3 hours on weekdays, while almost a further quarter play outside for 4-5 hours. At the weekends it differs somewhat as three quarters play outside for between 2 and 4 hours.

Socio economic analysis of the findings indicates that more children from disadvantaged SE areas play outside for longer on weekdays. While almost three quarters (74%) of children from affluent SE areas play outside for up to three hours, almost two thirds (65%) of children from disadvantaged SE areas play outside for four or more hours.

Socio economic analysis of average hours of play outside at weekends indicates a more even spread however again, children from disadvantaged SE areas play outside for longer, with almost half (48%) playing outside for 6 hours or more compared to 21% those from affluent SE areas.

Overall, 96% of parents feel children playing outside makes the neighbourhood nicer, helps families get to know each other and improves community spirit.

11 CONCLUSION

It is clear that Outdoor Play holds a central place within modern Irish childhood. However, engagement with Nature is at lower levels than anticipated. This leaves us with critical questions to debate. What role has the environment to play within this? Are our communities designed with children's outdoor play in mind? Do they facilitate engagement with nature? Is nature play something which would be beneficial for our children? And if so, what do we need to facilitate it and thereby support children to reconnect with the natural world and its abundance of materials evolutionally matched to maximize their learning and development.

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