

**OCCASIONAL PAPER No. 4
1999**

Opening up the outdoors

**A case study of young children's outdoor experiences in
one childcare centre**

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This paper is a summary of Alison Margaret Stephenson's M.Ed. thesis, submitted to Victoria University of Wellington in 1998. The full thesis is also available from the Institute for Early Childhood Studies. Alison Margaret Stephenson is a senior lecturer at Wellington College of Education.

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INTRODUCTION

“Let’s go outside” is where I began: I became intrigued by how often I saw evidence of children’s enthusiasm for the outdoors when I visited centres as a supervisor of early childhood teacher trainees on practicum. Having discovered how little research there was into young children’s outdoor play, I wanted to investigate this topic, particularly because I suspected that what we do in New Zealand is very different from the outdoor play described in overseas research reports, where the typical scenario is a brief outdoor recess.

The belief that outdoor play contributes to young children’s development dates back to Rousseau (1712-1778) and Froebel (1782-1852) and the tradition continued in early kindergartens in the United States (Frost and Wortham, 1988), English nursery schools (Straw, 1990), and also within the New Zealand kindergarten movement (May, 1997). Over time, however, the commitment to outdoor play has been challenged by other pressures - increasing urbanisation with a concomitant reduction in access to the outdoors; increasingly academic programme orientation (Frost, 1992); supervision and safety concerns (Bilton, 1993; Frost and Wortham, 1988); and even staff reluctance (Bilton, 1993; Stine, 1997).

Overseas, particularly in the United States, there are urgent calls to protect children’s outdoor play (e.g. Greenman, 1993; Rivkin, 1990, 1995; Wilson, 1996). In New Zealand, however, recent changes in policy documents suggest the opposite shift is occurring. In 1991 the regulations governing access to outdoor play space were changed to enable centres to be established in highrise buildings, where the playground may be an outdoor balcony. The first version of the *DOPS (the Early Childhood Education Charter Guidelines: A Statement of Desirable Objectives and Practices*, Ministry of Education, 1990) stated that there should be “an easy flow of play between the indoor and outdoor spaces at all times”, but this statement, and all references to outdoor play, were removed in the revision of the *DOPS* (Ministry of Education, 1996). In 1998 the regulations were further amended to allow centres to operate in situations where the outdoor play space is not immediately adjacent to the centre building.

This downgrading of requirements is concerning in light of children’s enthusiasm for the outdoors. If one accepts that the child’s perspective should be included in discussion of what constitutes quality in early childhood education (Katz, 1993; Smith, 1996), then

observation suggests that access to the outdoors is, for many children, an important aspect of quality.

LITERATURE BACKGROUND

There has been a considerable amount written about young children's outdoor activities, but little of this has been research-based. For example, differences between indoor and outdoor play were investigated by Henniger (1985), and a number of studies (e.g. Sanders and Harper, 1976; Tizard, Philips, and Plewis, 1976) have included the indoor/outdoor location as one of several variables investigated in children's play. Research emanating from the University of Texas from the 1970s onwards has investigated the influence of playgrounds and outdoor equipment on young children's play (for excellent reviews see Dempsey and Frost, 1993, and Frost, 1992) while other recent research studies have considered the role of the adult in the outdoor environment (Bilton, 1993; Cullen, 1993; Davies, 1997).

The topic of young children's outdoor activities has appeared also as a subsidiary one in studies with a variety of foci. For example, the gender-focused studies of the 1970s and 1980s highlighted outdoor play choices made by boys and girls. Studies of the impact of environment on behaviour (e.g. Smith and Connolly, 1972; Kritchevsky and Prescott, 1977; Moore, 1989) have also produced findings which throw light on children's outdoor play, while qualitative studies from the 1980s and 1990s which focus on social interaction and the development of peer culture (Corsaro, 1985; Fernie, Davies, Kantor and McMurray, 1993) have also contributed to our understanding of young children outdoors.

In addition to this small body of scholarship, a stream of articles written largely by teachers in the United States, has focused on the importance of contact with the natural environment (e.g. Rivkin, 1995; Wilson, 1995); while this literature is not research-based, it needs to be acknowledged because it has produced the most significant development in the literature on outdoor play during the present decade.

DESIGN AND FOCUS OF THE STUDY

I used a version of grounded theory methodology in which the data leads to the development of theoretical insights about the phenomena under study. After considering previous approaches used to study young children outdoors, I chose to use ethnographic methods to investigate a single setting in the hope that a broad, multidimensional approach would open up new perspectives on this topic. I was drawn particularly to Corsaro's (1985) work on peer culture. Corsaro did not enter the field with predetermined categories, and his observations drove his analysis, which allowed the unsuspected to emerge. This approach seemed particularly promising in a research situation where very little research-based knowledge existed. I also hoped that an ethnographic approach would diminish the gap between me, as researcher, and the practitioners in the centre. The process of observing, recording and reflecting is a key aspect of practitioners' role so I expected that there would be overlap in the methods we used, and we would share the same broad focus - increasing our understanding of the children.

A childcare centre was selected that demonstrated exemplary standards of practice, with the expectation that the study would provide a model of high quality curriculum provision in the outdoor setting. The centre is set within a workplace complex, and is licensed for 17 over-twos and 8 under-twos. A childcare setting was chosen because children spend more time in these settings than in sessional settings, and are therefore more vulnerable to the effects of policy changes. I was aware however that my choice of service and centre influenced what I saw. After obtaining approval and permission from all participants I began observations in July 1997.

My initial research intention was to explore the characteristics of the outdoor activities of young children in a childcare centre environment with a view to providing a rich description of these, and develop some initial theoretical insights through which the children's activities could be comprehended.

This approach was intentionally broad and my main aim was to gather observations of children, primarily but not exclusively outdoors, of their interactions with each other, with adults, and with the environment. As I became immersed in the process of observing, I followed different leads. For two days early in the research I took 15-minute time samples of who was outside and what they were doing. Later I observed and

compared the indoor and outdoor environments, and also spent time watching particular areas and particular individuals. Eventually, and it seemed inevitably, one question took precedence:

What are the particular reasons that lead individual children to choose to spend time outside?

I knew there was no single answer, but felt that if I could begin to understand children's decisions, then I would also answer some of the other questions that intrigued me.

I carried out 38 fieldwork visits to the centre; I ensured that the visits covered different times and days of the week, different weather conditions and seasonal differences. Initially I kept fieldnotes but as I judged children felt comfortable I introduced a camera, a tape recorder and later a video camera. I observed intensively before interviewing staff. Data was typed up after each visit, and the concomitant process of on-going reflection and analysis generated ideas, suggested questions, and led to the development of working hypotheses. I began the detailed process of analysis after two months of data collection.

THE CENTRE CONTEXT: THE INDOOR AND OUTDOOR ENVIRONMENTS

There were four teaching staff - Bridget, Celia, Imogen and Sue, plus a teaching supervisor, Jan, and an assistant supervisor, Sara. All were either trained or in training. They were committed to a programme of child-centred learning, and children were able to choose their own activities and have access to both indoor and outdoor environments through much of the day.

Forty-five children were part of the study. Two children were part Asian, the rest were from European backgrounds; most were from middle socioeconomic homes. Pseudonyms have been used throughout (see appendix one for a list of the children).

The centre is a modern purpose-built structure set at the back of a workplace site. "Ordinary" is a word visitors have used to describe the outdoor area of the centre. The playground is a rectangle of flat ground extending from the side and front of the building. The equipment is standard - swings, a fort, bikes, sandpit, water troughs. The fact that the area immediately in front of the centre is roofed and can be used in any

weather, and that the sandpit is situated here, are the only less usual features. However, the way staff use the outdoor environment makes it anything but ordinary (for an inventory of outdoor equipment see appendix two).

RESEARCH FINDINGS

1 Discovering the dialectic of the indoor and outdoor environments

In reflecting on the indoor and outdoor environments, I came to recognise that while each environment encompassed a variety of settings and behaviours, they were perceived by the children and the teachers as distinct entities. There were broad dimensions which differentiated them, but there were also interrelationships between them. The concept of a dialectic relationship between the two settings emerged, in which each existed and was defined in terms of and in tension with the other. The four dimensions which were important in identifying this dialectic relationship are described below.

1.1 The “look at me” and the “look at what I’ve made” dimension

Very early I saw a striking difference in the requests for attention children made in the two environments. Most of the active physical play, the “look at me” play, took place outside and most of the constructive play, the “look at what I’ve made” play, took place inside. Staff recognised that outside was the environment for active physical play; this was the immediate response from Imogen and Sue when I asked about differences between indoor and outdoor play.

Despite the focus of staff on ensuring that art and construction activities were available outside, children tended to use these activities only intermittently. The clay was rarely used, and carpentry only a little more frequently. While sand constructions were frequently built, they were on-going experiences with moats, water and tunnels, rather than finished constructions to be admired. It seemed that when children wanted to spend time in sustained concentration creating a product, they chose to work inside.

The outdoors is recognised in the literature as the environment for active physical play (Smith and Connolly, 1972; Henniger, 1985; Hutt, Tyler, Hutt and Christopherson, 1989; Cullen, 1993), but much of the existing research has been done using brief periods of outdoor play. It is interesting that when children had prolonged access to the

outdoors, the same dynamic of active play being associated with the outdoors operated.

1.2 The change and stability dimension

A more unexpected finding was that the outside emerged as the environment of relative change, while the inside was the environment of relative stability. This was the second dimension I identified in exploring the differences between the environments.

Underpinning the quality of change were the infinite variations inherent in being outdoors - in temperature, light, movement, smell and texture. Their effect is rarely considered, but may contribute to increased levels of stimulation (Olds, 1989; Sebba, 1991) and to emotional and spiritual wellbeing (Olds, 1989).

The way the outdoor environment was set up also varied. Not only were there daily changes in the presentation of movable equipment, but staff also found ways to vary fixed equipment. A tarpaulin was draped over the jungle gym; the rope ladder was tied to the fort's top fence. In exploring this variability with staff, I discovered differences in their approach to the task of setting up the outside. Staff agreed they knew by looking who had set up the environment, and these differences contributed further to the variability children experienced outdoors.

Indoors, by comparison, staff made few changes. Just as variation was considered appropriate outdoors, so stability was considered appropriate indoors. Changes that routinely occurred were minor. The books or instruments perhaps were set out differently, but the overall layout remained familiar. Staff readily acknowledged this distinction. They perceived that it was not only harder to alter the indoor environment, but that it was not desirable. The basic stability was valued because it gave children security when they were new, and then as they settled every morning. Imogen said of the outdoors "we try and change it round outside because it gets too boring otherwise", but the same concept was not applied inside.

The conventional research finding is that teachers perceive they have little control over the organisation of the outside play space because of the nature of the equipment (Gilkes, 1987; Bilton, 1993; Davies, 1997; Stine, 1997). This was absolutely not the experience of the teachers in this centre.

1.3 The freedom and control dimension

A third dimension used to compare the environments was that of freedom and control; the outdoors was the less controlled environment. Several factors contributed to this.

The daily routines of the childcare centre were centred indoors. Children could choose when they went in to the rolling morning or afternoon tea, but at times they needed to wait until a place was free at the table. While lunch was always a relaxed and pleasant affair, it was nevertheless the most controlled event of the day. Younger children were regularly invited (with persuasion at times) to come inside to be toileted. Staff encouraged children to join in the inside tidying up before lunch, but outside they tended to do the tidying themselves, welcoming children's assistance but not requiring it.

Some behaviours were acceptable outside, but not inside. Sean carried a pointed piece of wood through much of an afternoon, but within a few minutes of coming inside he was asked by a staff member, who had also been outside, to put the wood in his locker. Jacinta shouted without censure outside, but was reproved for her loud voice indoors.

Staff acknowledged the distinction in levels of control exercised by the teachers between the environments. Bridget described enjoying "the freedom, like being noisy". Imogen said she liked:

The freedom to move the equipment and to just spend time with the kids [in contrast to inside where] you feel like you're always tidying up, you're doing routine stuff, it's morning tea, or you're tidying up for mat-time, nappy changes.

Jan believed the different types of play inside and outside contributed to the distinction in the levels of control maintained. She saw inside play as being more "structured", and illustrated this with the example of puzzles where "there is a prescribed end result".

Children were freer to transport equipment around in the outdoors, which partly reflects the fact that each piece of indoor equipment had a place where it belonged, while outdoor equipment was all stored in the shed. When children transported equipment from room to room, it made the task of tidying more difficult. Outdoors, with a single storage area, it mattered less where equipment was left.

Another aspect of control was that while children at times were restricted from going outside, it was extraordinarily rare for a child to be restricted from going inside. Only

one child found himself in this situation, and this was as a consequence of a programme planned in consultation with his parents.

There were, of course, rules and limits outside: “up the stairs and down the slide” was a familiar catchcry. On the zoom slide children were told “the rule is one at a time”. Water play was hugely popular and at times had limits placed on it. There were only two ways in which outdoors seemed more controlled than indoors. The first related to clothing; jackets and hats were often required in winter, and sunhats and sunscreen in summer. The other was that children were not allowed to help themselves to equipment out of the shed. Staff minimised the restricting effects of this by setting up a wide variety of equipment, by readily bringing out extra equipment children wanted, and by closing the door to the shed when no adult was there.

This aspect of the qualitative difference between indoor and outdoor activities has only been touched on in previous literature. Bilton (1993) made references to the outside being the freer and noisier environment, and Frost and Dempsey (1990) listed factors that contribute to this: more room to move, running is permitted and so rule-breaking is reduced, more personal space is available and “strains on children’s developing social skills are lessened” (p.55), children can be noisier, and messier.

1.4 Differences in interactions between adults and children

The fourth dimension used in analysing the relationship between the two environments emerged after I became aware of subtle differences in the interactions between adults and children indoors and out. There were several aspects to this.

1.4.1 More directive teaching strategies outside

Watching staff coach children in soccer skills - how to dribble, how to defend the goal - made me aware that, outside, staff felt comfortable to use more directive teaching strategies (Bredekamp and Rosegrant, 1992) than they found appropriate inside. Jan, the supervisor, also perceived a difference in the style of teaching inside and out. My discussion with her suggested staff were comfortable to use directive strategies when physical skills were involved, but that inside they were less comfortable about such strategies:

Outside, I would feel I’m not having any impact on, destroying, do you know what I mean, whatever he’s got; whereas inside, you’re always thinking “now if I do this what’s going to be the spin-off or the effects of it”.

It seemed the distinction she was making reflected the fact that physical learning predominated outdoors. The unease of staff perhaps reflected a confusion felt by practitioners whose training had reflected a predominantly developmental philosophy, and who were struggling to accommodate the more active adult role implied by sociocultural theories (Cullen, 1996). Staff in this centre felt most comfortable with a directive role in the context of gross motor skills, and these were usually in evidence outside.

1.4.2 Differences in adult-child interactions inside and outside

Imogen, a teacher, alerted me to the fact that interactions between adults and children were often physically closer inside. When children sat on an adult's knee this was almost always indoors. This was partly because adults rarely sat outside, but also reflected the fact that many inside activities allowed for closer contact. While books were often taken out on to the deck, reading indoors tended to be more focused, with children and adults less likely to be distracted by events around them. The feeling of enclosure and of separation from others that came from being inside appeared to contribute to feelings of emotional closeness for both adults and children. Such moments were rarer outside.

My observations suggested also that children tended to form larger and more diverse groups outside, and this also affected the interactions which occurred between the teachers and the children. Staff confirmed this analysis: for instance Imogen said:

I think if they're outside they're bigger groups, like the older will join with the younger, whereas if they're inside they don't seem to join so much.

Two other staff commented on differences in their interactions with groups inside and out; Jan found it easier to join groups outside and she believed this was partly because she felt it was appropriate to join in and work alongside them:

I just find it easier to go into the sandpit and start digging with them. For some reason it seems more appropriate to do that than to go inside and pick up a crayon and draw.

This in part reflects her reluctance to provide models, and partly her perception that outdoor activities are open-ended. She also felt that outside it was easier for a child to disassociate themselves from an adult, without having to leave the area.

Celia reported finding it easier to move in and out of children's play outdoors. Indoors: *they'll let you join their groups but then I find that they want you to be the leader and take on the role, almost like constructing their play. Outside you have the freedom to move in and out ... I don't know why. I just think maybe it's the space.*

Reflecting on this Jan agreed and suggested this was perhaps because children were more "engrossed" outside. She used the example of 1-year-old George:

He is totally absorbed with what he's doing at times out there, and ... things can be happening around him and he wouldn't even notice; whereas if he were inside drawing or doing a puzzle, and someone yelled or whatever, he might turn and look and perhaps might veer off to see what they're doing.

She suggested there was more scope for children "to extend themselves, set challenges for themselves" in outdoor experiences.

Both Jan and Sue commented on the ease of identifying what challenged children outdoors. Sue said that she was less aware of a child's progress in an inside activity such as puzzles than she was of their physical achievements outside, and that because of this she tended to celebrate children's achievements more exuberantly outside.

In summary then, in-depth discussions with staff supported my observation that there were differences in the interactions of staff and of children outdoors compared to interactions indoors. This extends the references in existing literature which focus on the supervisory aspects of the adults' role in young children's outdoor activity (Hutt, Tyler, Hutt and Christopherson, 1989; Bilton, 1993; Cullen, 1993; Davies, 1997), and describes a more interactive model.

1.5 Summary reflections: the inside as an encompassing environment and the outside as an open environment

Piecing together these thoughts about the two environments led me to see the inside as an encompassing environment and the outside as an open environment. While this theoretical analysis emerged from the study of a single centre, practitioners may find similar qualities in other early childhood settings. I chose these adjectives carefully. I used 'encompassing' to incorporate the concepts of more controls and restrictions, more activities that tend to be "closed" (Stine, 1997), less variation in the physical environment, with the notion of emotional 'security' one associates with smaller groups, in adults taking familiar roles in routines, in opportunities for physical closeness with an

adult, and even in the feeling of secure enclosure that walls generally bring. All these together combined to offer children an environment that was both controlling and potentially restrictive but which simultaneously could be experienced as predictable and secure.

The outdoors was qualitatively different to the indoors. There were fewer restrictions and controls, and activities tended to be more open-ended. For children, the physical environment of the outdoors was unpredictable. Outside there was what Greenman and Stonehouse (1996) call “a sense of infinite boundaries” (p.223). Not only did the weather change, but the way equipment was presented changed from day to day, and sometimes even during the day. Unexpected events occurred beyond the fence. Groups were more fluid outside, and often bigger, and it was easier for children to move in and out of groups. During most of the day adults outdoors were less involved in routines, and so were more likely to be available. Moreover, outdoors adults felt more comfortable to join in and work alongside children. However, a child was less likely to have sustained physically close interactions with adults outside, partly because adults rarely sat, and partly because the environment did not offer physical seclusion; outdoors both the child and the adult were constantly aware of events around them. Outdoors there were no walls; children were ‘in the open’, exposed to the elements. All these factors combined to offer children an environment that could be described as ‘open’; open in the sense of accepting and less controlled, of incorporating change and unpredictability, but open also in the sense of lacking the security of enclosure and surrounding walls. They combined to form an environment that could be experienced both as dynamic and open-ended, and yet simultaneously as unpredictable.

2 The complexity of outdoor play: the experiences of the older children

During the process of establishing the dialectic relationship described above I was simultaneously exploring what motivated children to go outside. Amongst the many different experiences which children engaged in eight categories appeared particularly significant. At times, activities within different categories come close to merging; while this interweaving reflects the reality of play, it is useful to describe each of these categories separately because each reflects an important aspect of the spectrum of behaviours observed.

The following section focuses on the eight categories of outdoor activity which the older children (2–4-year-olds) engaged in. I have chosen to describe the 1-year-olds’ activities

separately in the next section because I found among that group an unexpected and clear pattern of strong, shared motivation. This pattern was less complex than that of the 2–4-year-olds.

2.1 Physical play

Active physical play was the most conspicuous aspect of the outdoor experiences of the 2–4-year-olds; indeed in this study this type of play occurred almost exclusively outdoors, a phenomenon reported also in the existing literature (Smith and Connolly, 1972; Henniger, 1985; Hutt, Tyler, Hutt and Christopherson, 1989; Cullen, 1993). The first surge of play outside was usually intensely physical - bike riding, swinging, running - but a level of active physical play also continued throughout the day. Three types of physical play were particularly distinct.

2.1.1 Physical challenge

I was often aware that a child's own level of skill and competence was the focus of their physical play. At times, when children's aim appeared to be to test their own limits, they were focused and intense. At other times, and especially with the 3 and 4-year-olds, children's focus was rather to show off their skills, either to adults or to peers, often in exuberant and noisy demonstrations. Hearing "watch me", "look at me" again and again alerted me to how frequent displays of physical skills were.

For the older and more physically competent children, the opportunities to challenge themselves were not as great as they were for younger children. Staff's awareness of the needs of this older group led them to manage the outdoor area in a less restrictive manner and this diminished the likelihood of dangerous risk-taking (Walsh, 1993) and of the playground becoming too boring for the older children.

Staff valued physical learning as part of children's holistic development and their planning included physical objectives, and often specifically identified the outdoors. Jan, for instance, identified a link between physical competence and social confidence, saying:

It also seems if you are good - competent physically - outdoors, you are popular all round ... even at the preschool level.

This statement echoed those made by Zeece and Graul (1993) and Poest, Williams, Witt and Atwood (1990). Jan gave physical learning a particular priority, when she identified

children who had become confident physical risk-takers outdoors as more likely to take risks indoors. While she did not use the word disposition, what she said indicated that she saw the outdoors as significant in the development of a risk-taking disposition (Katz, 1995; Carr, 1995, 1997).

2.1.2 Tim and the coaching sessions

The second type of physically active play I identified related to the adults' role in teaching specific physical skills, and reflected the dichotomy in teaching styles which I described earlier. This type of play was especially important for Tim, a 4-year-old, who showed a passion and aptitude for sport.

Staff actively supported Tim's interest in the way they set up the environment, and also in their interactions. One afternoon Celia and Sue showed Tim and Sean how to 'shoot baskets', using the hoop attached to the fence. This led to dribbling, and then to soccer. Each adult worked with one boy, demonstrating skills in defending and attacking. Other children were drawn into the activity as they showed interest.

These were not "look at me" experiences. Here the emphasis was on developing specific skills with adult scaffolding and modelling. The children were tapping into an area of staff expertise, and staff felt comfortable to share this. The fact that Tim's passion found a match in their expertise contributed immeasurably to the richness of the outdoor environment for him, and for other children who were drawn in.

Comparing these experiences with the literature shows how exceptional the staff in this centre were in this regard. References to staff having no training in physical education (Werner, Timms and Almond, 1996) and not being "skilled in the systematic evaluation of motor skills" (Cullen, 1993, p.54) did not apply to them. The frequently reported finding that adults are more monitorial outside (e.g. Davies, 1997) and less likely to accept the notion of "scaffolding" a child's learning (Cullen, 1993, p.55) was not replicated here. Staff in this centre reported feeling more comfortable to actively scaffold outside.

2.1.3 The thrill of the chase

The third type of outdoor physical play identified lies on the border between physical and dramatic play. What several children particularly enjoyed outdoors was participating in free-flowing active events that included an element of chase, and the excitement that

went with this. Children named 'Hide and Seek' and 'Mr Wolf' as favourite games. At times, only children played, but often staff were asked to join in the chasing games. Corsaro (1985) reported similar approach-avoidance play, although he observed it largely as part of dramatic play.

2.2 *Dramatic play*

The second category identified was dramatic play and this was an important feature of children's outdoor experiences with several aspects of it emerging unexpectedly.

2.2.1 Facilitation by adults

The first unexpected aspect was that many of the dramatic episodes outside were facilitated by an adult. Typically children initiated the play, and the adults, through their facilitating role, sustained the play, extended the ideas, and drew more children into participating. The episodes they facilitated provided a middle ground between the self-sustaining, and largely indoor, domestic play of the 3-year-olds and the more violent themes suggested by the older boys. Common themes of these adult-facilitated episodes were fishing, medical play, boats, and camping.

2.2.2 Regularly occurring episodes of dramatic play : an expression of centre culture

A second unexpected feature were the repeated episodes of dramatic play which I came to see as an expression of the culture of the centre that both adults and children shared, and so distinct from the peer culture which Corsaro (1985) described. The hospital game, which involved the boys falling off their bikes and lying on the grass until adults tended to them, was one example. The casserole game, in which adults chased children and brought them back to "cook" them was another. While these episodes retained a basic format, they did vary with time. Celia told me that sometimes it was football accidents rather than road accidents, and that only once had it evolved into play where a child took a leading role.

2.2.3 Group dramatic play

A third unexpected feature was that children formed bigger groups outside, and that at times, especially towards the end of the day, these large groups participated in brief interludes of dramatic play, usually without adult facilitation. Several staff commented on this; Imogen described how older children would join with younger, and how such groups were particularly obvious when the equipment was put away. Again these events offered younger children the experience of participating in group dramatic play. In the

more restricted indoor spaces it might not have been so easy for children to hover, participating, on the outskirts of such episodes.

There is support in the research literature for children being in bigger groups outdoors, particularly the older children (Henniger, 1985), but conflicting evidence exists on how this relates to the effect of equipment. Several studies report decreased equipment leading to increased conflict (Johnson, 1935; Smith and Connolly, 1980; Noren-Bjorn, 1982). Only Hartle (1996) has reported that removing equipment promoted dramatic play.

2.2.4 Little superhero play

The most unexpected feature of the outdoor dramatic play related to the older boys. One of the strongest findings in the research literature, is that the boys perform much of their dramatic play outdoors (Sanders and Harper, 1976; Tizard, Philips and Plewis, 1976; Campbell and Frost, 1985; Henniger, 1985); especially their superhero play (Henniger, 1985; Frost and Dempsey, 1990). In the current study Sean and his peer group were undoubtedly the superheroes of the playground, but there was relatively little superhero play.

Sean was the main source of exciting play themes. It was he who announced “we’ve started the war”, “I’m a vampire”, “there’s burglars in the centre”. However, two factors complicated the situation: first, he rarely managed to participate in sustained periods of dramatic play without adult intervention because of his overriding concern with issues of power and control; and second, while he chose to spend most of his time outside, his preferred weapons were made from Duplo which was defined as inside equipment. Participation in superhero play outside did not emerge as the strong motivation that the research literature had suggested. With different social dynamics, however, the dramatic play of the older boys might have been more sustained.

2.3 Constructing places

Children constructed places frequently. At times this was linked to dramatic play, but at other times it was a distinct experience. I recognised significant differences in what was transported and constructed, who did it and where it happened. The playground was the domain of the 4-year-old boys for construction, while other children did most of their constructing either inside or on the deck, and these constructions usually had a domestic theme.

The outdoors had several advantages for the older boys. Reflecting the more open quality of that environment, they were more likely to be permitted to exclude children from their constructions. When Michael and Sean built an enclosure with planks and tyres, children who approached were warned away. Inside it was rarely possible to build on the same scale, and staff intervened when others were excluded.

For the older boys carrying heavy equipment was not only a means to an end, but an end in itself. When a child asked me to shift a tyre, Sean, from inside the fort said “I’ll do it, it’s not heavy for me, I’ll do it”. He came out and shifted the tyre while Alex and I watched, and he said to Alex, “You should do it Al, it’s not heavy”. Watching such demonstrations made me realise that the weight of equipment was an attraction for these boys.

Loose materials outdoors, such as tyres, planks and boxes, offered the boys the opportunity to create their own worlds (Cobb, 1977) and this was an important feature of outdoor play for them. However, whereas younger children used the places they constructed for dramatic play, the older boys’ constructions rarely led to extended periods of play unless adults were involved.

The construction activities of these boys provided support for the reported popularity of loose parts/materials outdoors (Hayward, Rothenberg and Beasley, 1974; Frost and Strickland, 1985). The boys’ preference for enclosure in their constructions, and the use all children made of the enclosed spaces on the fort reflects the research findings that children prefer spaces (Shaw, 1987) or equipment that offer a degree of enclosure (Steele and Nauman, 1985).

2.4 Exploring the material world

The outdoors offered children opportunities to use, and explore the material world. While the explorations of these older children pale by comparison to the intensity of the 1-year-olds’ explorations described later, making use of the outdoor materials of water and sand was nevertheless a significant aspect of the older children’s outdoor activity. Staff alerted me to the frequent thread of thinking or schema (Athey, 1990; Meade, 1995) underpinning children’s explorations; they saw the outdoors as particularly appropriate for children who were exploring a trajectory schema (e.g. playing on the slide, using the hose, sweeping) or a transporting schema (e.g. carrying sand, water and

bark chips in buckets, carts, bikes, boxes).

2.4.1 Water experiences

Children almost always had access to water outdoors from the tap over the sandpit, and often also from another waterplay experience. All age groups made use of water in a wide variety of ways: younger children spent time filling and emptying containers, and transporting water while older children made more use of spouting and pipes, and enjoyed projects like washing the bikes.

Water experiences set up by staff incorporated the wide range of equipment available, and varied from day to day. At times children's use of water reflected these variations; for example, a suspended line of colanders, sieves and funnels led to pouring. At other times children created their own experiences; children created the "waterfall game" which consisted of pouring water from the top floor of the fort. There was also waterplay that arose spontaneously as when the puddle which formed at the foot of the ramp became a source of delight, particularly to the younger children, but a frustration for staff, who regularly dispersed it by sweeping.

2.4.2 Sand experiences

The location of the sandpit meant that sand was accessible whenever the doors were open. The combination of sand and water was constantly popular and the accessible tap meant it was readily available.

Children explored sand, constructed with sand, shifted sand, and used sand in dramatic play. Just as children's waterplay often reflected the way staff presented the experience, so the environment also affected children's sand experiences. A fresh impetus came when a set of plastic people were introduced. While younger children were particularly interested in burying the figures, the older boys used them as props in dramatic scenarios.

Another impetus came with Dominic's arrival. During his first days at the centre, the sandpit was the area he preferred. Reflecting on his choice, I suspect he had discovered the enthusiasm staff felt for this area, and that it was the satisfying interactions, rather than the sand itself, he was drawn to. Sandplay became more intense over these days, a succession of large mounds were built, and other children were drawn in. One day the focus turned to the effect of water on the mound. Sean, Tim and Julian were attracted to

this experience and took over pouring water. Initially they watched the water erode the peak and carve a channel; later they made a gap in the side of the channel and watched with excitement as water flowing down the channel deviated through their gap. Use of materials on this satisfyingly large and potentially messy scale was not possible inside.

At all times I was aware of the key role of adults. Some children were not often engrossed in experiences, unless there was a particular stimulus - new equipment, or an adult present to support their explorations or challenge them. Staff regularly drew children into problem solving: Jan asked how they could be sure the opposing tunnels they were excavating would meet; Celia challenged them to find ways to stop the water leaking out of the spouting. Involving children in solving problems that arose in the context of play was a feature of the adults' interactions in all areas, not just sand and water. It seemed to me that the active role taken by adults outside, added immeasurably to the richness of the environment for children.

2.5 Contact with the natural environment

As a result of reviewing recent literature on nature education I was very alert to this dimension during my observations. Knowing that children's interest in the living world had not been a classification used in earlier research (e.g. Henniger, 1985) added interest to my focus. While this was a category of outdoor experience I identified, I was surprised at how relatively rarely I observed it. Digging for worms was the most conspicuous example of this type of outdoor activity. For Susie, aged four, who spent much of her time inside, the motivation to go outside was often to dig for worms; this was a regular occurrence that she frequently initiated.

One Thursday, at Susie's request, Celia brought the garden fork and the sandpit shovels over to the mulch area and began to dig. Susie picked up worms as they were uncovered. Children gathered quickly. Some dug, but most watched and perhaps turned over sods loosened by the fork. Jan joined the group, talked about worms, and explained how warm hands could feel "burning" after the cold ground. Susie left briefly and returned with a margarine container into which she had put her worms. Some children followed her lead, but others continued to hold them in their hands. Later, Susie put her worms into a large cardboard box, added a few handfuls of mulch, and she and Emma used paste and pictures to decorate the box. When children were called inside, the box and worms were abandoned. This episode captures both the efforts of adults to encourage children to observe worms, and treat them with respect, and the children's tendency to

consider them as trophies to gather and use in play.

While the ritual of digging for worms was the most obvious way in which children explored the natural environment, there were others. There were occasional moments of interest in the vegetation and in insects. Younger children spent time looking at the birds, but Alex was the only older child whom I heard talking about them.

The playground did not contain a rich natural environment. Beyond the single magnificent macrocarpa incorporated into the fort, there was a small pocket of rough vegetation behind the ramp, and a few saplings and small bushes. Staff were very conscious of the limitations of the natural environment but uncertainty over the future location of the centre prevented further development.

In describing children's contact with the wider world through the playground fence, we will see that children were very interested in the variety of vehicles and people they were able to see. If the playground's natural environment had been as varied and stimulating as the world beyond the fence perhaps it would have engrossed them in a similar way.

2.6 *Contact with the wider world*

The world beyond the playground, visible through the wire mesh and over the board fence, was a continuing source of fascination for the children.

Through the back fence, they watched and talked about the distant cars and trucks, the occasional tractor cutting grass, dogs being exercised and even a fire engine once. Through the front fence they could see the closer cars, vans, caravans and trailer units in the parking lot, and waved to parents and staff as they drove away. Overhead they watched the sky, and commented on planes and helicopters.

Staff had told me the rubbish truck was "the highlight of the week". When the noise announced its arrival children were lifted up so they could watch over the top of the wooden fence. I had read Corsaro's (1985) description of children's daily contact with the garbage men, and considered it a quirky detail of that particular centre. I was astonished to find it re-created in this centre. The difference was that while adults were only marginally aware of the daily interaction in Corsaro's study, in this centre staff recognised and supported children's interest in the rubbish truck. They lifted children,

talked about what was happening, and waited at the fence with them for the driver's wave. This difference encapsulated for me much about this staff. They understood what interested the children, and were keen to support and extend that interest.

Older children spent little time observing vehicles through the fence, but they initiated interactions. Tim asked the man who brought his dog to the back fence "What's your name?" and Emma told the video crew who was passing the front fence about her school visit. Staff were aware of the contacts children were making and Sara described how the man from the pound talked to the children, and how the tractor driver would hand back toys through the fence.

The wire mesh fencing, the proximity of the carpark and driveway on one side, and grassed Council ground on the other, were what made contact with the world outside such an important part of playground life. Thus events beyond the fence contributed significantly to the richness and variety of outdoor experiences. Reflecting on the paucity of contact with the wider community that centres provide, Meade (1995) advocated more excursions. In this centre, the particular setting provided children with a surprisingly rich source of contacts.

2.7 Children's emotions and their choice of environment

Several events revealed an emotional dimension to children's choice to be inside or out, the seventh category I identified; these provided graphic evidence of the qualitative differences between the indoor/encompassing and the outdoor/open environments.

2.7.1 Choosing to be indoors

Mark had been at the centre for nearly two years when he stopped going outside. Staff believed this coincided with the visit of the rubbish truck when he was in the sandpit. They deduced he had been frightened by the sudden loud noise which recent ear problems, and temporary deafness, may have exaggerated for him. For weeks they observed him, and eventually, with his parents' support, began a programme to re-introduce him reassuringly back to the outdoor environment. Initially staff carried him outside for brief periods. Imogen described how, on his first independent trips outside, he ran from the building to the tunnel on the fort and sheltered there before venturing out into the playground, and that when the rubbish truck came he retreated into a cupboard inside. With time, the programme was successful, and after a break of four weeks away from the centre I was astonished to see Mark standing on the fort, shouting loudly,

before leaping onto the zoom slide.

Mark was a touchstone for me during my observations - the child who was motivated not to go outside. Observing him suggested that in moments of stress or anxiety the inside environment may be more reassuring.

Two observations of 4-year-old boys, who habitually spent nearly all their time outside, provided further corroboration of this emotional dimension. Interestingly, both involved school visits. Julian's father returned him to the centre after his first school visit and reported he was feeling "fragile". Julian retreated into the dramatic room where he spent half an hour in the bed cuddling a doll before he ventured outside. The other observation involved Sean who was anxious about his first school visit, and mistakenly thought it was this day. He spent a little time outside, but then retreated inside, first to the main room, later to the dramatic room and then into the babysafe (a fenced area for the youngest children), where he locked the gate and pulled all the curtains. By the end of the afternoon he was spending much of his time sitting on an adult's lap.

When I talked with staff about these episodes, Celia saw the security of the inside being a function of space, of the feeling of enclosure that comes with being inside. Jan commented:

Outside, even though the fence is there, the wind can get through and the sun, whereas when you're inside, if the doors are closed, nothing can get in.

2.7.2 Choosing to be outdoors

Another episode focused me on the potential of the outdoors. Sean and Tim were in the corner behind the fort, and Sean was whacking the fence with a cardboard cylinder. I watched him as he hit the fence again and again, talking to himself "Smashing, I made the hole even bigger - wheew - broken". Sean readily showed me the holes he had made. He then climbed the fence, and tossed the cylinder out through the mesh. All of these were behaviours which challenged authority, and suggested a need to express aggression. Just as the encompassing qualities of the inside environment made it a more comforting setting in moments of anxiety, so the open and less restrictive qualities of the outdoors were appropriate for expressions of aggression or anger. Here Sean could whack without doing major damage to others.

2.8 Social dynamics

The importance of social factors in children's choice of environment was underlined for

me when I asked Julian what he was going to do. “Be with Sean” was his reply. I was aware also of children who were alone for much of their time outside. Together these formed the final category I identified in exploring what motivated children to be outside.

2.8.1 Choosing to be with friends

There were particular clusters of children who regularly played together, and this often seemed to influence their decisions about where to play. Children also had preferences among the adults. This was especially obvious among the younger children, and among children new to the centre.

2.8.2 Choosing to be alone: Peter dreaming and wandering

Peter was one of several children who regularly spent time outside in a dreamy way, wandering, swinging, escaping the bustle of centre life. On the two days I recorded quantitative data at 15 minute intervals, I found that Peter was on the swing on seven consecutive occasions one afternoon, and that on two occasions he was wandering. My observations captured the mood:

Peter is sitting on the swing talking to himself.

Peter is running around on the bark chips - but slowly - holding a large rattle and singing to himself.

Talbot and Frost (1990) write of the luxury of doing nothing, and comment that few contemporary children have the chance to daydream. Peter used the swings at times to isolate himself (Stine, 1997) and the outdoors as an opportunity for uninterrupted, quiet time.

3 Images of empowerment: the outdoor experiences of 1-year-old children

When I started this project I had not anticipated writing about younger children separately. However, the six children aged one who attended regularly, established themselves as a distinct group because of their shared motivations and their determination to go outside. I came to recognise that for these children the outdoor environment offered unmatched opportunities for empowerment. Nothing in the research literature had prepared me for this, or for their determination to be outside. Only Rose (14 months), who started at the centre late in the research period, and who found the process of separation stressful, was an exception.

Three images capture motivations I came to associate with these children: the first portrays the strength of the desire to go outside; the rest of this section unpacks what

lay behind that desire.

3.1 *Leo: Determined to get outside*

Early one very cold winter morning I watched Leo, wearing his gumboots which he had pulled on himself, go to the sliding door. This was being kept shut to prevent younger children from going outside. I noted:

Joanna goes outside, sliding the door open and shutting it after her. Leo watches. Emma and Pauline ... come in and shut the door after them. Leo is standing by the door, boot on the glass, shouting but not loudly. Sara is outside and when Leo tries to go out, she picks him up "It's a bit cold for you sweetie". She puts him inside and slides the door shut. Leo begins to cry in a halfhearted way. He picks up a woolly hat out of the hat box. An adult puts him in the high chair for morning tea.

He had done all within his power to get outside but was frustrated, first by his inability to slide the door, and then when there was a gap, by the concerned adult. For most of the day both the indoor and outdoor environments were available to all children, and staff understood the frustration for these younger children when, for their own health and wellbeing, they were occasionally restricted to the inside.

Having observed these children, and their determination to go outside, I wrote in my journal "the decision to go outside is premeditated and clear", and began to reflect on what it was that motivated them so constantly to go outside.

3.2 *Maria: Extending her feelings of competence*

My initial reason for observing Maria was because she spent long periods outside. Later I came to see her as representative of this group of 1-year-olds in her interest in the outdoors and the use she made of this environment to increase her feelings of competence.

Maria was unusual in this group because of her high level of competence in managing her clothing. Having observed this suggested to me that being able to do things for herself, experiencing feelings of competence, might be an important motivation for her. Despite the sensitivity of staff, there were moments which suggested how powerless she and others of this age might feel. She was brought inside for nappy changes; she was unable to turn on the tap over the sandpit or to reach the hand-drier in the bathroom; sometimes she was put in a highchair to eat rather than allowed to choose a place at the table; when she held out her cup for another drink her gesture was taken as meaning she

had finished. Many, but not all, of these moments occurred indoors. For these children, indoors was associated with being delivered to the centre, being changed, being put to bed. At times these events were carried out against their will. It was a tribute to staff's empathy for these children and the way they organised the environment, that outdoors there was rarely a need for children to be restricted.

There were many opportunities outdoors for Maria to extend her competence, particularly her physical competence, and, like the older children, the 1-year-olds spent a great deal of time exploring this outdoors. Observing them underscored the reality of this issue for them. There were many movements they found difficult, they often stumbled, fell and sometimes hurt themselves.

Maria frequently used the low challenge courses staff provided, adapting her movements to suit her confidence, and she was also an enthusiastic user of the slides. However, the most striking examples of Maria's increasing physical competence involved strength. While the older boys were keen to display their strength, these younger children's trials were not directed at an audience. One afternoon there was a plastic wheelbarrow in the main room:

Maria wheels the wheelbarrow to the outside door. She opens both sliding doors wider, and then lifts the barrow so it is totally off the ground and steps out through the doors onto the deck carrying it.

A few minutes later she went outside and pulled Peter along in a trolley:

She has her left hand on the handle and she walks with her body sideways and leaning forward, towing the trolley behind her. She gets the front wheels of the trolley into the sandpit and then it won't move. She trips and falls on an unevenness in the sand. She stands up by herself, no comment.

The next time I was in the centre I watched her pulling and pushing the wooden cart for several minutes, applying extra effort when its wheels caught on uneven edges. Other older children in the same situation had said they were "stuck" and asked for help.

Other 1-year-olds also used the outdoor environment to develop their physical competence, sometimes in different ways. Matthew kicked a large ball after watching older boys playing 'soccer'. George was fascinated by slopes; usually silent and solemn he would laugh when he had walked up the ramp. Carl, just a few days after he began walking, climbed to the top floor of the fort, and looked down at the ground with excited exclamations before retreating. Others also performed feats of strength; George pulled

the trolley laden with sandplay equipment across the grass and halfway to the sandpit.

A feature of almost all these observations was that the children showed little awareness of others. Typically the activities were carried out alone with an air of focused intention. This was in sharp contrast with the older children's cries of "look at me".

Of this group, only Maria consistently demonstrated a preference for being with an adult. She shared a close relationship with Imogen and would move to where she was, indoors or out, when she was available. For the others there was not a clear social dimension to their choice of environment. They approached adults or other children at times, but also spent considerable periods alone. However, for all these children, the other half of this picture of growing competence was supplied by staff who, through their constant observations, were aware of these children's interests and supported them. Empathy and reciprocity were characteristic of their interactions with these children.

Sometimes this support was physical - for Maria this occurred particularly in her climbing. She went to the foot of the vertical ladder on the fort and looked towards Imogen who understood that she wanted assistance:

The first step is too high for Maria to reach so Imogen lifts her and from there supports her by standing behind her with two hands on her. She encourages her to reach the silver bars [on either side at the top] - it is a very long stretch. When she has crawled onto the deck she grins and then crawls to the slide ... She repeats the climbing of the ladder and sliding down eight times.

Much of the permanent equipment was of appropriate scale and accessible to these children. The most obvious example of this was the tap over the sandpit, which was often allowed to run gently into a plastic crate so that there was constant access to water even for those who could not yet turn it on and off. Other appropriately scaled equipment included a low swing with a safety catch, small ride-on vehicles, and a log for children to hammer into near the carpentry area. Staff also supported these children in their setting up of the environment. They provided platforms to stand on by the water trough and consistently set up low challenge courses. All these factors contributed to the quality of empowerment this group experienced outdoors.

There is little in the previous research literature to which one can relate these images of 1-year-olds outside. The importance of providing for increasing physical abilities is

recognised in the New Zealand study by Podmore and Craig (1991) and is stressed in writing on design of infant-toddler playgrounds (Greenman, 1988; Wortham, 1990; Frost, 1992; Greenman and Stonehouse, 1996).

3.3 Exploring the material world: George's fascination with water

Some children had a particular fascination for one material. For George it was water - for him a major motivation to be outside was to access water. Indoors, his water experiences were limited to filling a cup at the water cooler and washing his hands, both activities which were closely supervised. Outside he often had unlimited access to water for long periods, and he explored with an intensity that was unparalleled among the older children.

At times his water activity was varied, and influenced by others around him. In one episode in the sandpit I recorded that as well as experimenting with the force of water by turning the tap, he filled buckets, scoops and lids and emptied them into the sand; he carried sand to the crate of water with his scoop and lid, he put boats, a duck and a rake into the crate; he followed an older child's lead and threw, first water, and later boats from the crate. When an adult turned the tap off he made a gentle sing-song noise and later tried to turn it on. He only left the sandpit when an older child threw sand at him. A brief time later, when a group of 4-year-old boys moved into the sandpit, George was back beside the tap when it was turned on to fill a crate.

At other times his actions were focused, repetitive, and unaffected by those around him. One afternoon he made a succession of trips, carrying a bottle of water filled at the water trough up to the top floor of the fort, where he poured the water out down the vertical ladder hole, leaning over to watch it fall to the ground, before retracing his steps to refill his bottle. Other children moved around him but he appeared oblivious, absorbed in his own activity.

Exploration and play are interrelated and often not differentiated but, according to Pellegrini and Boyd (1993), play is characterised by more variable behaviours, by a greater diversity of activities with the object, in play children are more easily distracted, and are more relaxed. In contrast, the child who is exploring tends to be more focused and serious. The quality of fascinated absorption that characterised this group was much rarer among older children.

There is little to corroborate my observations in the limited literature on the outdoor activities of this age group apart from the mention of sand as a favourite play material (Steele and Nauman, 1985; Winter, 1985; Wortham, 1989; Podmore, 1991, 1992). In general literature on infants and toddlers, the potential of the outdoors for exploration is recognised (Greenman and Stonehouse, 1996), and the love of this age group for transporting is acknowledged (Greenman and Stonehouse, 1996), particularly the transporting of sand (Wortham, 1989). Transporting was important for George and his peers, but they used water and mulch as well as sand.

3.4 *The outdoors as an empowering environment*

My observations of the 1-year-olds demonstrated a reciprocity between the particular qualities of the outdoor environment and the passionate motivation of this group to extend their physical skills, to explore their world, and to develop their sense of autonomy and competence.

There is, in the general literature on toddler programming (Stonehouse, 1988; Greenman and Stonehouse, 1996; Ministry of Education, 1996) agreement on fundamental requirements for this. These include:

- the need for security
- opportunities for physical activity
- opportunities to explore
- opportunities to do things for themselves.

There is an element of hierarchy in these requirements. Because Rose did not yet feel emotionally secure, the need to achieve this security absorbed her, but the other children demonstrated a deep sense of acceptance within the centre. Identifying these requirements helped me to understand the passion of the younger children for the outdoors and to recognise that that outdoor environment offered them, in abundance, the opportunities they sought.

The importance of empowerment in young children's care and education was highlighted by its inclusion as a foundation principle in *Te Whaariki* (Ministry of Education, 1993, 1996; May and Carr, 1997) which in turn reflected earlier writings both in New Zealand (Smith and Swain, 1988) and overseas (Katz and Ward, 1978; Jones and Reynolds, 1992). There were three ways in which the outdoor environment seemed particularly empowering for the children in the current study. First, it offered

them more opportunities to develop their physical competence which, for this age group, was a significant aspect of their overall feelings of self-competence. Secondly, access to the outdoors allowed them long uninterrupted periods of exploration, particularly with water and sand. The open-ended quality of the materials, the lack of restrictions on how children used them, and the support of adults, all combined to make the outdoors an intensely satisfying site for exploration. Finally, the outdoor environment gave them more opportunities to express their competence, and was less associated with restrictions, or with the limitations necessitated by the routine events of indoor centre life.

These factors all contributed to making the outdoors particularly empowering for this group. Their avid determination to be outside demonstrated that this was for them an important dimension of quality. In the wider context of New Zealand centres this raises concerns because many children of their age lack such prolonged access to the outdoors, and such access is frequently considered less important for younger children. Until now no research findings have questioned that assumption.

INSIGHTS AND IMPLICATIONS

This study led to five broad areas of insight which are summarised below.

- **A dialectical relationship exists between the indoor and outdoor environments. The outdoors can be characterised as the open environment, and the indoors as the encompassing environment.**

While the indoor and outdoor environments are both multi-dimensional, it is possible to characterise each as a totality of experiences with a particular defining quality, and to identify fundamental qualitative distinctions between them. Staff did not use the words “encompassing” and “open”, but were aware of qualitative differences, and appreciated and maintained the balance, the dialectic relationship, between the two environments. There were subtle but significant differences in the way teachers worked with children that largely mirrored the dichotomy of inside-outside.

The difference in children’s activities inside and outside has been investigated previously (Henniger, 1985) and reference has been made to the appropriateness of the

outdoors for particular activities (Frost and Dempsey, 1990; Lally, 1991; Bilton, 1993), but there has been no previous exploration of the underpinning qualitative difference between the two environments.

- **Outdoor play is a complex and multi-faceted phenomenon.**

The discussion of what motivated children to go outside encapsulates some of the complexity inherent in the concept of outdoor play.

This study adds to previous research about the activities that occur outdoors. There appeared to be a multitude of reasons why children chose to go outside. There was strong support for earlier findings about physical play (Smith and Connolly, 1972; Henniger, 1985; Hutt, Tyler, Hutt and Christopherson, 1989; Cullen, 1993), but more complex findings for dramatic play, construction, and contact with the wider world. Exploration of the material and natural worlds was also identified as something children engaged in outdoors. The outdoors was identified by staff as particularly appropriate for children exploring trajectory and transporting schema. While social interaction appeared to be an important motivation for children to go outside, the development of peer culture in the playground, as described by Corsaro (1985), did not emerge strongly in this setting.

- **The outdoor environment was particularly significant for some individuals and for some groups, particularly the 4-year-old boys and the 1-year-olds.**

While the outdoors was used by all children who were mobile, in each age group there were individuals who consistently selected it more frequently than others. Amongst the children there were some whom staff identified as “outdoors” people; two staff also identified themselves as such.

For the two age groups for whom the outdoors appeared to be particularly important, the tendency of 4-year-olds, particularly boys, to spend more time outside has previously been described (Harper and Sanders, 1975; Tizard Philps and Plewis, 1976; Lott, 1978). The passion of the 1-year-olds to be outside has not been documented previously.

- **Adults were responsive to children, and enthusiastic in supporting and extending young children’s outdoor experiences. This is in stark**

contrast to the largely supervisory role ascribed to teachers in the literature.

In contrast to the characteristically monitorial role described in the research literature (Hutt, Tyler, Hutt and Christopherson, 1989; Bilton, 1993; Cullen, 1993; Davies, 1997), teachers in this setting enjoyed the outdoor environment, and consistently took an active and responsive role in all aspects of children's outdoor experiences.

- **Inasmuch as the centre studied here is similar to many other New Zealand centres, then it appears that New Zealand outdoor play is different from the outdoor play described in most of the overseas research literature. As a result of the more varied experiences provided, the sustained periods of access, and the adults' active role, a wide range of learning occurred within the outdoor setting.**

The final insight, which draws together much of the above, is the confirmation that the provision of outdoor play for young children in this centre is very different from the provision described, or implied, in most overseas research. Most previous studies have been carried out in settings where outdoor play was a brief playtime, with predominantly physical play equipment provided. The New Zealand norm is very different with centres typically providing a wide variety of learning experiences, allowing children long periods of free flow access between indoor and outdoor environments, and staff taking an equally active role in both environments. This study showed that children made use of the variety of experiences provided, and a wide range of learning opportunities occurred. Staff in this setting took maximum advantage of the particular characteristics of the outdoor environment for greater freedom and change, and for large-scale play.

This study provides an image of high quality curriculum provision for outdoor play in a New Zealand childcare setting. Within the New Zealand context the image presented offers a model of quality. Internationally, where sustained provision of outdoor play is far rarer, this study could provide a model of the potential learning that is possible outdoors.

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APPENDIX ONE

THE CHILDREN IN THE STUDY

The following children were included in the study (pseudonyms are used to protect their identity). Their age at the beginning of the study is given.

Michael*	4 years 11 months	Gerald	3 years 7 months
Emma*	4 years 10 months	Jason	3 years 7 months
Sean*	4 years 9 months	Cameron	3 years 6 months
Julian*	4 years 9 months	Liz	3 years 6 months
Alex	4 years 7 months	Phil	3 years 4 months
Susie	4 years 7 months	Anna	3 years 4 months
Tim	4 years 5 months	Joanna	3 years 3 months
Mitchell	4 years 5 months	Pauline*	3 years 3 months
Richard	4 years 4 months	Clarissa	3 years 2 months
		Jacinta	3 years 2 months

Simon	2 years 10 months	Deborah	1 year 11 months
Keiran	2 years 10 months	Jackie	1 year 10 months
Tanya	2 years 8 months	Maria	1 year 10 months
James	2 years 8 months	George	1 year 9 months
Mark	2 years 8 months	Matthew	1 year 3 months
Paul	2 years 5 months	Carl	1 year 3 months
Dean	2 years 5 months	Leo	1 year 2 months
Peter	2 years 3 months	Rose	1 year 2 months
Hazel	2 years 3 months	Brad	1 year 1 month
William	2 years 1 month	Thomas	7 months

During the five months of the research the five asterisked children left, and the following six children were enrolled :

Alice	4 years 2 months
Dominic	3 years 10 months
Ian	2 years 6 months
Jeffrey	2 years 1 months
Sam	11 months
Harry	5 months

APPENDIX TWO

INVENTORY OF CENTRE'S OUTDOOR PLAY EQUIPMENT

The following equipment is stored in the shed:

Waterplay equipment

3 boxes of water play equipment
2 water troughs - one large round, and one smaller oblong
3 buckets and 3 rectangular plastic troughs
3 lengths of spouting
1 length of pipe
Several lengths of hose
Interlocking water canal set plus boats

Vehicles

5 bikes
2 large diggers
3 plastic wheelbarrows
1 wooden ride-on tractor
1 wooden trolley
1 wooden truck - not ride-on
5 plastic ride-on bikes
2 trailers that hook onto bikes
1 big wooden ride-on truck and trailer

Sandplay equipment

19 big plastic spades, rakes, etc
Small spades
Plastic and metal people
1 big container of sandpit equipment, 13 small buckets, 3 plates, 4 flat dishes

Loose materials

2 wooden ladders, 1 7-rung and 1 4-rung
3 planks, 1 short, 2 long
7 plywood circles (to fit on top of tyres)
3 wooden stand-up geometric shapes that children can climb through
Rope ladder with wooden rungs

Miscellaneous

3 Quadro wheels and 2 Quadro lengths of pipe
1 bedspread
1 hoop
1 paint easel
5 helmets
1 football
1 big ball
Several smaller balls
2 pater tennis bats
1 flutterboard

2 stands for sun umbrellas
4 plastic adult chairs
Zoom slide
Gardening tools

The following equipment is kept outside or on the deck:

1 carpentry storage unit
1 carpentry table
2 paint easels
1 rack for drying paintings
1 large tractor tyre,
6 smaller tyres,
3 tyres bolted permanently in a line,
2 wooden reels
8 orange witches hats