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Seasonal and locational variations in children's play: Implications for wellbeing



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ABSTRACT

Physical activity, through independent outdoor play, has come to the fore as a way to improve children's health through it fostering healthy mental and social as well as physiological development. However, in many high-income countries children's autonomous play opportunities have diminished due to urban intensification and declining parental license. Regardless of this trend, children's play varies across countries, cities, cultures and seasons. This paper offers new insights into the complexities of play as a vital aspect of children's wellbeing. Within the context of New Zealand – whose citizens generally regard themselves as outdoor people – this paper explores why 'play' might resonate differently across localities and seasons. We contrast the play affordances provided by Auckland's central city (dominated by apartment living) with Beach Haven, a suburban area. We employed a multi-method approach and included 20 children and their parents who were recruited through school and summer holiday programs embracing different gender and ethnicities to reflect the general cultural mix of the respective neighbourhoods. We advance two arguments. First, we suggest that the rarity of children playing outdoors unsupervised normalises supervised indoor play and reduces children's opportunities to see outdoor play as an alternative to interior or supervised pastimes. Second, we follow Bourdieu's theory of practice to argue that the regard parents and children have towards outdoor play reflects locally constituted beliefs about what is seasonally 'appropriate' children's activity. We found that extracurricular activities and supervised excursions are undertaken in the central city all year around and only vary between social groups by the type of destination. In the suburb, independent outdoor play in summer represents children's main business after school in ways that enhance their environmental literacy and potential future health gain. For others these symbolic values were replaced by safety concerns. In contrast, it seems that even in a relatively mild climate winter is the time to relax and stay indoors unless children have an outdoor habitus. We find that the determinants of seasonal outdoor play transcend modifiable barriers such as traffic and unsuitable play spaces as well as the inevitable issue of inclement weather.

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Introduction

Physical activity accumulation through independent outdoor play has come to prominence for researchers concerned about the increasing threat of an 'obesity epidemic' among children, especially in high-income countries (Brockman, Jago, & Fox, 2010; Sallis, Prochaska, & Taylor, 2000; Veitch, Salmon, & Ball, 2008). The health benefits of childhood physical activity include improved bone density, blood lipid and lipoprotein profiles, glucose metabolism, reduced adiposity and blood pressure (Sothern, Loftin, Suskind, Udall, & Blecker, 1999; Strong et al., 2005) and lower levels of body fat mass in later life (Janz et al., 2009). Psycho-social health expressed in terms of higher self-esteem and less likelihood of depression is also enhanced by an active lifestyle (Lobstein, Baur, & Jackson-Leach, 2010). Echoing Australia, North America and many European countries, New Zealand (NZ) children's levels of physical activity have declined in recent decades (Currie et al., 2002; Knuth & Hallal, 2009; SPARC, 2003), although differences have been shown by age, sex, ethnicities and socio-economic status as well as in different urban environments (e.g. Holt et al., 2009; Jones, Davis, & Eyers, 2000; Kelty, Giles-Corti, & Zubrick, 2008). In the NZ context, one out of five children is deemed to be overweight (Ministry of Health, 2008).







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Behavioural interventions aimed at increasing children's activity have had limited success (Sluijs, McMinn, & Griffin, 2007), while studies have revealed that time spent outdoors engaged in active play correlates positively with higher objectively measured activity levels (Cleland et al., 2008; Mackett & Paskins, 2008). The paradox, however, is researchers and policy makers have begun to highlight the positive effect that independent play has on children's healthy mental, social and physical development (Harten, Olds, & Dollman, 2008; Moore, 1986; Rissotto & Guiliani, 2006), as this form of play has waned (Karsten, 2005; Wen, Kite, Merom, & Rissel, 2009).

Parental concerns over children's mental and physical wellbeing (e.g. 'stranger-danger', traffic safety concerns) have been widely observed as a contributing factor to the decline in outdoor play (Carver, Timperio, & Crawford, 2008; Mitchell, Kearns, & Collins, 2007). Safety-conscious parenting practices such as chauffeuring children between activities and supervising their outdoor play (Mackett, Brown, Gong, Kitazawa, & Paskins, 2007; Wen et al., 2009) as well as the appeal of indoor activities (e.g. TV, video games) have been among the explanations offered for change in children's outdoor play behaviour and a consequent reduction in independent mobility (Atkin, Gorely, Biddle, Marshall, & Cameron, 2008; Biddle, Gorely, Marshall, & Cameron, 2009; Hume, Salmon, & Ball, 2005).

As a general trend, not only the public open spaces in neighbourhoods, but also private play environments are becoming fewer or at least more restrictive in character (Freeman & Tranter, 2011; Gleeson & Sipe, 2006). Reasons for this trend have been attributed to changes in the built environment. Little, however, is known about how the recent intensification of cities affects children's play and place experiences further, given new urbanism and sustainable living ideologies (Napier, Brown, Werner, & Gallimore, 2011; Talen, 1999).

What we do know is that children learn to understand their local environment and develop their own identities through playing outdoors independently or with their peers. Children negotiate their capabilities and risk perception through their local environment which can, if they are not constantly under supervision, improve their self-confidence and may reduce stress and anxiety (Chawla, 2001; Malone, 2007). Such an environmental understanding further encourages creativity as children can adjust their surroundings to their play needs (Day & Wagner, 2010; Thomson & Philo, 2004). Reduced independent mobility then potentially impacts negatively on children's current and future health and well-being. Given this context, we explore children's play practices in two areas of Auckland: a zone of high-rise apartment complexes; and a low density coastal suburb. In particular we ask why, in a country in which citizens generally regard themselves as 'outdoor people', does play resonate differently across localities and seasons?

While built environmental features are increasingly investigated as determinants of children's outdoor play practices, findings on natural environmental factors such as weather and seasonal aspects are limited, especially in moderate climates (Tucker & 2007). Studies examining children's Gilliland. seasonal commuting habits have revealed variations in active travel both in countries with moderate and extreme temperature variations (Børrestad, Andersen, & Bere, 2011; Fyhri & Hjorthol, 2009; Sirard, Ainsworth, McIver, & Pate, 2005). Similarly, studies investigating children's outdoor play reported an increase during the summer months (Castonguay & Jutras, 2010; Loucaides, Chedzoy, & Bennett, 2004; Mikkelsen & Christensen, 2009). However, these studies have been conducted in semi-urban and rural environments and less attention has been paid to the degree of residential intensification. Moreover, this work has not teased apart participants' varying experiences of outdoor play in and between seasons.

We draw on Bourdieu's theory of practice (Bourdieu, 1977, 2000) in combination with insights from perceptual ecological psychology to investigate the seasonal play practices in compact central city and lower-density suburban living environments. In the literature, constraints on children's outdoor play are primarily attributed to the composition of, and access to, the (built) environment and associated constraints on the 'license' granted by parents (Potwarka, Kaczynski, & Flack, 2008; Timperio et al., 2008). A more nuanced consideration of the socio-cultural context is warranted. Our approach to understanding local variation in seasonal play practices (i.e. the links between locality, seasonality, socio-cultural practices and individual capabilities) allows us to provide insights into the complex nature of children's well-being and enriches discussion of children's participation in healthy year-round activity levels. The remainder of the paper is structured as follows. First, we introduce the study's theoretical framework, lay out the research design and discuss the place-specific context of the study. The second half of the paper examines children's and parents' assessments of seasonal outdoor play and their playing practices.

Theoretical embeddings: combining ecological perceptual psychology with Bourdieu's theory of practice

We draw on the perspectives of ecological perceptual psychology as well as the thinking of Bourdieu to investigate how tendencies to engage in seasonal outdoor play are shaped. We introduce each theoretical approach briefly, followed by a discussion on how we combine aspects in the quest for an improved understanding on children's seasonal outdoor play.

The concept of 'affordance' is a central construct in applications of ecological perceptual psychology to the relationship between children and their environments (Gibson, 1979). With this concept Gibson aimed to overcome the artificial dichotomy between an actor and the environment (Heft, 2010; Kytta, 2002). Affordances comprise the infinite range of functions that environmental objects may offer and are action-related (Kytta, 2004; Michaels, 2003). These functions encompass the opportunities and challenges a child perceives while playing in a certain setting (Gibson, 1979; Heft, 1988; Kytta, 2004). Objects, for example, may afford possibilities of throwing, hiding behind, hanging or falling from, whereas surfaces may afford running, climbing, balancing or tripping. How, and to what extent, an action is carried out depends, however, on what the individual child perceives in the environment and how they evaluate its possibilities for action. At the same time the environment needs to offer something which the actor can detect as a possible enabler or constrainer of action. Heft extends Gibson's approach by introducing the distinction between potential and actualised affordances (Heft, 1989). Out of the pool of potential affordances each individual realises (actualises) a small number of affordances. As the term suggests, actualised affordances are related to adopting an activity or its absence (e.g. prompted by a perception of danger).

Turning to another body of theory, Bourdieu (Bourdieu, 1984, 1990, 2000) argues that practices, desires and tastes are inscribed differently in social classes. We draw on his essay on sport and social class (Bourdieu, 1978) in which he argues that affinity for certain sporting activities depends not only on cultural and economic capital, but also on spare-time and embodied beliefs and attitudes. A tool for understanding such dispositions is Bourdieu's term *habitus*. To him, one's habitus comprises the cumulative set of socially learned, but otherwise taken-for-granted, dispositions and ways of conducting oneself which are acquired through the activities and experiences of everyday life. Depending on the character of one's habitus, people evaluate *"immediate or deferred profits*

accruing from different sporting practices [...such as] ethical and aesthetical accomplishments which are or seem to be contained in each sport" differently (Bourdieu, 1978, 835f: original emphasis). Sporting practices need to fit into an existing habitus to meet the intended social aspiration. We argue in a similar way that seasonally-specific participation in outdoor play is shaped by economic and cultural capital. In particular, activity is influenced by the interrelationship between the meanings embedded in outdoor play activities in different locations and seasons as well as the anticipated benefits of participation or non-participation in such play activity.

The actualisation of affordances depends not only on the individual's capabilities and endowments, but also on the sociocultural practices shaping the perception of potential affordances and their actualisation (Costall, 1995; Kytta, 2004; Reed, 1996). We believe it is valuable to add Bourdieu's concept of habitus and capital into this aspect of affordances. Norms, rules and structures can be considered as forming the logic of practice in relation to the (non)actualisation of affordances. Similar to Bourdieu's argument that actors need to be aware of the 'rules of the game' in a certain field, we argue that affordances can only be perceived and actualised when an actor is able to master the rules associated with certain affordances. An actor is able to perceive, utilise, transform and reject affordances according to their knowledge of these rules in the field of affordances, their capital endowments and the practical sense of how to 'behave'. Thus we can conceptualise actualised affordances in relation to the locality children are growing up in, their economic circumstances (e.g. the possibility of organised trips) and parents' educational background as well as their beliefs in the value of outdoor activities in different seasons. Having established a theoretical foundation for the study, we can now examine its geographical context.

Auckland as study context

The Auckland metropolitan area (2012 population approximately 1.5 million people) is one of the fastest growing regions in NZ with a population increase of 32% between 1991 and 2006 (the most recent census). Growth projections estimate that 2 million people will live in the urban area by 2035 (Auckland Regional Council, 2010). The traditional 'kiwi dream' of a free-standing house on a 'quarter-acre' lot is fast disappearing in the face of intensification and the construction of medium and high-density apartment blocks (Dixon & Dupuis, 2003; Murphy, 2008). These trends have implications for children's play affordances and active travel opportunities.

Being an auto-dominant city, walking infrastructure has often been neglected and pedestrian crossings on busy roads are under-supplied making it difficult for children to safely reach destinations by foot (Bean, Kearns, & Collins, 2008; Mitchell et al., 2007). Although improvements are underway, from the perspective of many parents, traffic remains a key obstacle inhibiting children from independently participating in public life (Collins, Bean, & Kearns, 2009). There is a high frequency of parental chauffeuring behaviour and children are increasingly confined to bounded spaces that are often subjected to some level of surveillance: the school, the playground, the home and private and third sector providers offering extra-curricular activities and afternoon 'care' (Freeman & Tranter, 2011; Kearns & Collins, 2006). Such a primarily sedentary and interiorised life-style potentially deprives children from independently exploring their neighbourhoods and developing environmental literacy and competency.

Auckland's climate is an influence on parenting practices. The city is located in the transition zone between subtropical and temperate regions leading to a warm and moderately humid climate. The mean annual temperature is 15.1° Celsius paired with 1240 mm rainfall and 2060 sunshine hours. Particularly during winter, Auckland residents experience intermittently heavy and persistent rainfall (Auckland Regional Council, 2010). Consequently, sports fields and playgrounds are frequently wet and muddy in winter and are often closed. Despite relatively mild temperatures winter weather often leads to people feeling colder than the absolute temperature. This situation is exacerbated by the prevalence of poorly insulated housing (Howden-Chapman et al., 2009). In contrast, summer is usually drier, but can still feature great variability in rainfall. UV radiation, exacerbated by a shrinking ozone layer, is a mounting concern during time spent outdoors with NZ, along with Australia, having the highest global incidence of skin cancer (Armstrong & Kricker, 2001; Callister, Galtry, & Didham, 2011).

Locating Auckland Central and Beach Haven

We selected two areas in the Auckland metropolitan region as study sites: Auckland Central and Beach Haven. Both localities are categorised as highly walkable areas based on the index developed by Leslie et al. (2007) that combines measures of land use mix, dwelling density and street intersection density. Further, they offer walking access to diverse retail, recreational, social and educational destinations according to the Neighbourhood Destination Accessibility Index (NDAI) (Witten, Pearce, & Day, 2011).

Beach Haven is located approximately 5 km north-west of central Auckland and is bounded by wooded hills and an inner harbour coastline. With only two roads in and out of Beach Haven's mostly quiet residential streets, we speculated that children in this suburb may experience less parental surveillance than elsewhere in Auckland. It has numerous parks and has long been considered a good place to raise children (Witten, Kearns, McCreanor, & Penney, 2009). About 25% of residents are under 15 years old and almost 70% of all households consist of families with young children. Although this suburb is relatively deprived with a median household income of NZ\$ 27,000 (census 2006), it has strong social networks, often based around schools, sports clubs and ethnic affiliations (McCreanor et al., 2006).

Central Auckland is characterised by a commercial port, motorways reaching directly into the city and business as well as residential high-rise complexes. However, apartments have not been built with children in mind and tend to cater in the first instance to the needs of students, young professionals and 'empty-nesters' (Carroll, Witten, & Kearns, 2011). More than 75% of all households have no children and the median household income consists of NZ\$ 35,750 (census 2006). Nonetheless, families have begun to move into more affordable central city dwellings prompted by increasing housing prices in the region (Friesen, 2009). About 3% of central city residents are under 15 years old. 'Playscapes' are limited in the central city due to commercial activity. However, two major parks (Myers and Albert Parks) and some smaller open green spaces afford recreational opportunities.

A research design acknowledging children's expertise

We employed a multi-method approach and included a convenience sample of 20 children recruited through school (suburban, 11 children) and summer holiday programs (inner city, 9 children) embracing different gender and ethnicities to approximate the general population mix in the two neighbourhoods. Children and their parents participated in the study from January to December 2010 (for more details see, Ergler (2011)). The project was approved by the Human Participants Ethics Committee of the University of Auckland (2008/501).

The first author undertook a semi-structured interview with each child in both summer and winter, 2010. Interviews were conducted in children's homes at a time that was mutually convenient for their families. Commonly parents were at home. but did not participate in the interviews. Neighbourhood maps. drawn by the children, served as a point of departure for interviews that covered the children's use and experiences of neighbourhood places as well as factors that constrained or enabled neighbourhood play. To complement the children's data, semistructured interviews were conducted with parents to gain a deeper understanding on how families regard play in terms of their beliefs, experiences and habits. Parents were asked to discuss the benefits of, and constraints on outdoor play in their neighbourhoods as well as their own childhood play experiences. A paper-based survey collected household demographic data and activity patterns.

The interviews were audio-taped and fully transcribed. The first author undertook multiple readings of all transcripts, developed a coding frame and analysed the data thematically (Braun & Clarke, 2006). The second and third authors read a number of transcripts, contributed to developing the coding schema and discussed emerging themes with the first author. The first author then viewed the thematic analysis with Bourdieusian and Gibsonian lens for a deeper analysis and improved understanding of the data. NVivo software was used to facilitate data management.

In the following sections excerpts from parents' and children's interviews are used to illustrate key themes identified in the data. Pseudonyms, selected by the children, are used to protect the anonymity of participants. Parents are identified through their child. Seasonality and locality (Central City – CC, or Beach Haven – BH) of the origin of quotes are also indicated.

Playing as an influence on children's well-being

In this section we draw on children's and parents' narratives to explore locally constituted beliefs about what are 'appropriate' affordances for children's play in different seasons and the implications for well-being. We present and interpret findings below in two broad (but ultimately interrelated) sections focussing on locality and seasonality respectively.

(Non)actualisation of affordances and locality

For Beach Haven parents, expectations of children's outdoor play appeared to be dissonant with life in the central city, a lifestyle structured to meet the needs of adult culture. A suburban environment is considered the appropriate place for parenting. None of the suburban parents questioned whether Beach Haven was an appropriate place for children to roam independently, although licences varied; rather parents follow a tacit agreement and knowledge about simply parenting the 'right way'. In contrast, central city parents reflected frequently on their choice to move to an apartment and the particular style of play this decision imposed upon their children. Constraints to easy play were not only generated by the child-unfriendly setup of apartment complexes, carcentred city planning and an 'adultist' urban life-style, but also by the prevailing attitudes towards children in this part of the city. Parents such as Juana's mother reported detecting "looks" from members of the public that she read as signs that her child was disturbing the general performance of city life.

"[T]he city is not for kids. It's not the ideal place for kids to be. [...]. If they want to use their scooters what we do is we usually go to the Warehouse [shopping centre] or something and they ride their scooters in Queen Street which... in the rush hour [laughs] ...annoys a lot of people with kids on scooters, but you know I think the city is not the place to be if you have kids." (Juana's mother, summer, CC)

Juana's mother interpreted the "looks" received from other adults as meaning children are expected to play in places created specifically for their age and development stage. Child-friendly places allow children to roam around independently within sight of their parents, make friends, enjoy themselves and detect the affordances of these places. But the majority of parents in the central city either laughed or looked very puzzled when we asked them about their children's independent outdoor play as this activity was only uncommonly experienced, although desired by some. For these residents the traditional 'New Zealand' outdoor habitus has been replaced by a 'safety' habitus, which aims to protect children's physical and mental well-being. According to three parents:

"Too many cars, it's noisy and not too many kids, because like back home in [Eastern European Country], I grew up in an apartment but there were so many kids and all of us would just go out in front of the building and there would be some grass and we would play in front of the building and it was safe our parents would know where we were. I won't allow my daughter outside." (Hannah's mother, summer, CC)

"They are too young for the safety [...] Maybe when they are teenagers I let them go outside, now they are too young [...] I, the other reason is from my deep inside, I sometimes, I am scared maybe, they get kidnapped [and] erotic advertising. How can I explain my kids." (Elena's father, summer, CC)

"I don't like when they go outside by themselves because if the kids go somewhere by themselves, you don't know what's going on, what they do or if something happens to them. [...] I want that someone is with them, for example their older brothers or sisters." (Nicole's mother, BH, winter)

Distrust in central city children's capabilities to negotiate the "dangers" of the city independently inhibited children detecting the potential affordances within walking distance of their home (compared to the suburban cohort who has a greater licence for independence). They seem to lack environmental literacy. Children provided answers like "*There is not such a place close to my house where I can play*" (Elena, CC). These children appear to learn the 'rules of the game' that dictate that affordances for play are limited to certain places. We found central city children's outdoor experiences to be centred around expeditions to play "mini golf", to go to "the park", "shopping" or "Kelly Tarlton's" (a walk-through aquarium). Destinations appeared to vary little between seasons, but depended on parental income and time. In the words of Hannah's mother

"So she wants to be with other kids [...] of course as an only child she is enjoying our love, but I think she would have more fun with other kids playing in the park or going out. [...] Whenever [I have time to take her] to the park she tries everything. She takes another turn and another turn, it's repetitive" (Hannah's mother, summer, CC)

This parent reveals two recurring problems. First, it is taken-forgranted by central city parents that children need to play in parks under parental supervision. Second, affordances of the park or playground in the central city are limited. Children get bored easily as McBeth's story (CC) reveals. Christina: How does it feel that your parents have to be with you all the time when you want to go outside? McBeth: Boring. Christina: Why? McBeth: Cause we get to do the same stuff. Christina: What kind of same stuff? McBeth: Mm, bicycling, soccering and the playground. It gets

boring when you keep on doing it again and again. I wish I could go loose, loose when *I* want something.

The invisibility of city children playing on the wide sidewalks, in front of the landscaped entrances to buildings or in the parking lots help normalise year-round indoor play. Sedentary indoor activities were less frequently discussed in the central city as inappropriate activities for children (both in summer and winter). These activities did not carry a similarly negative connotation as was the case in the suburb, although most of the central city parents wished for more active pastimes for their children to pursue. These parents followed the implicit norm and embodied consciousness that the right way is to supervise children such that they are protected from danger and do not annoy other city dwellers. This 'logic of practice', to use Bourdieu's term, resulted in the non-actualisation of potential affordances in the central city.

In contrast, the Beach Haven children and parents saw formal play spaces as one of many potential affordances the suburb offered. A suburban boy, who had absorbed New Zealanders' love for the outdoors, describes summer as a "big long play time for kids", which only ends when it gets dark or your parents call you home. The script for children's outdoor play in the suburb is more or less written. Children appear to learn what is expected from them and parents endorse these practices with their allowance to roam. Children are afforded plentiful choices to spend their afternoons in the suburb as the following quotes exemplify:

"go mostly on the see-saw and the dizzy spinner [...] hide in the bushes [in the park and] swing on the ropes [...] down at the beach" (Rosie, summer, BH)

"I love riding my bike [...] I love big action, all over my body. That gives me a big passion. [...Exploring] is something to do and if I get the idea where home is in your memory you can't get lost and it is not something you run out of interest as there is always something you can explore unless you have a time limit like be home by and time runs past really fast" (Dexter, summer, BH)

Even in winter the same children talk with excitement about playing outdoors, although they all agree that summer is "more fun" and they "play less outdoors" in winter.

"It's fun, because you get wet [jumping into] puddles and mud. [...] You sometimes get slippery and you can and if there's, if you got a steep hill, you can slide down sometimes." (Josh, winter, BH)

"[O]ur street isn't that busy, so you can play on it and like on the scooter on the road or bike ride and there we are like [after] the school you can run around and play games [on the sports grounds]" (Isabelle, winter, BH)

Some children integrate the wet and rainy weather into their games while others develop strategies to avoid "getting mud on your clothes". However, while summer carried a connotation of spending time outdoors as much as possible, in winter only the ones with an outdoor habitus felt the urge to play outside. The rest retreated from the inclement weather and shorter daylight hours. While in summer the majority of suburban children actualise many of the different potential play affordances the suburb offers, in winter a seasonal logic of practice formed the non-actualisation of potential play affordances for some.

Maximising children's well-being: seasonal 'rules of the game'

Parents and children saw health benefits in children's outdoor encounters. Play is an activity that offers physical exercise charged with fun, as well as time spent with friends and family. Play in an active, but unorganised fashion was frequently cited by city as well as suburban participants as enhancing children's bodily fitness. Rebekka (BH), for example, plays "rugby, soccer, netball ...and sometimes dancing at morning tea" as it is "fun and you can always get into it, getting fit". In a similar way Valerie (BH), who gets together with friends after school to "shoot some hoops" describes that she "likes sports and it just keeps me fit and I like to be fit". It seems that governmental campaigns promoting 'Healthy Eating, Healthy Action' (Ministry of Health, 2003) have entered children's consciousness: being active helps shape a lean, healthy body (Burrows, 2010). While children discussed the fitness aspect of outdoor play – often in relation to sporting activities or formal play in both seasons - parents in both study areas distinguished between summer and winter particularly with reference to the physical benefits of 'free' play. In winter, fitness aspects are primarily discussed in relation to 'winter sports' in school or clubs (e.g. rugby) no matter whether children participate or not. Only three city participants joined sporting activities, while seven were enrolled in a sports club in the suburb. Practice often happens after dark, while games take up Saturday mornings in the family schedule. In summer parents centre their attention on exercisebased play when discussing the fitness aspects of outdoor play. Almost all parental participants described outdoor play (here in the words of Elena's father, a city parent), as "good exercise for them [...] they can train in muscle" and a main attraction for why they send or take children outside to play. Although children appear not to realise that outdoor play as well as sport keeps them fit and healthy, it is a prominent theme in parental interviews during summer. For example, according to one mother, Juana (CC) "does a lot of exercise going up [and] down the slides", while Michael (BH) "comes home absolutely shattered" after he had again spent an afternoon in the park across the road on the exercise machines, exploring the area or playing soccer or cricket with friends.

Despite the anticipated health benefits of outdoor activities high UV radiation and its associated health risk (due to NZ's location vis *a vis* the thin ozone layer) was reflected in the comment "you got to be sun smart" (Elena's father, CC). According to Rebekah's mother (BH), "I make sure they do have their hats and sun block on" when they are outside. Another strategy is seen in Dexter's family (BH) who "prefer the beach in winter, it's not as crowded and you don't get sunburn". For actualising play affordances and to profit from outdoor activities, families in both study sites adjusted their practices.

Time for free play is more constrained in winter. Breaks in the school day are often the only time children can be outdoors but on a rainy day opportunity to engage in outdoor activities is often denied. Parents report children become "restless" especially in small central city apartments and cramped housing situations in the suburb, and several parents confided that they are likely to punish their children more quickly in winter when everyone "gets on each other's nerves" in a small space.

"I just tell them to go outside and play or don't have to sit inside and sometimes you get off the games, play station or whatever it is. I have a break one hour when they're outside." (Valerie's mother, winter, BH) Reflecting on the limited opportunities for outdoor play in winter children offered comments on the benefits of exercise. Michael (BH) says he does not "feel as tired as if [he] was sitting" around indoors. "[G]oing outside and playing touch [a form of rugby] with [my little brother] like takes my mind away from everything else". Often playing indoors does not bring this anticipated effect. Dexter, for example mentioned that

"you have more energy inside the house. It is really, really hard for me to sleep. Yeah, really, really hard to sleep. Cause the energy, my energy recharges like a lightning bulb." (Dexter, summer, BH)

The majority of participants learned that they can improve their mental well-being by engaging in outdoor activities. However, this knowledge is often overwritten in winter by the "appropriate behaviour" of staying indoors and not risking illness. The unpredictability of the weather is especially a concern in the eyes of parents.

"New Zealand is sunny one minute and the next minute it's the end of the world and it's raining so heavy. You know when it stops raining, you don't risk going out to the park, because everything will be wet anyway and you can, it can start raining as soon as you get out of the buildings." (Juana's mother, winter, CC)"

Inclement weather and daylight hours have, in general, been shown to reduce outdoor activity levels in children, adolescents and adults unless people are habitually active or enjoy participating in active leisure activities (Bélanger, Gray-Donald, O'Loughlin, Paradis, & Hanley, 2009; Salmon, Owen, Crawford, Bauman, & Sallis, 2003). Many parents, however, linked weather not only to declining fitness possibilities, but also to the risk of falling ill in wet environments. Some parents "fussed" less about the rain and encouraged their children to make the best of the weather and integrate it into their games. For instance, according to Rosie's mother:

"I encourage them to go outside in winter like put gumboots and rain coats on... I don't, I know that you don't catch a cold from playing in the rain, so (laughs) go out... and they love it. They love to go out in the rain and they play up here and they go on the trampoline. I mean definitely not as much as in summer, but I still encourage them to go outside and play in the rain whatever, in the puddles." (Rosie's mother winter, BH)

While Rosie's mother is a parent who sees outdoor play even in winter as a healthy pastime, for some children (both in CC and BH) it is out of question as they have no one to take care of them if they fall ill. All but one mother worked at least part-time and many relatives live far away or have to work themselves. Working parents can often not follow the societal expectations of "good parenting" when their children become ill.

"I think a lot of people look down on you when you are outside in the rain, especially with your kids. Oh my gosh, I think they should be inside. I think it is just a change of perceptions or whatever you know. [...] Umm, just cold or "what are you going outside for, it's raining", "no, no you wanna stay home" or "you are sick", just the basic." (Cyane's mother, winter, BH)

Several parents took this approach based on the *belief* that by keeping their children indoors in winter they were protecting them from ill-health while also avoiding a negative public gaze on their parenting.

Although children were aware of the mental and physical benefits of engaging in outdoor activities, "rain is a permanent *excuse*" to engage in *"unhealthy*" activities. Under the pretext of seeing winter as a time to *"relax"*, *"to recharge batteries for the summer to come"* and that there is a time *"to rest and [...] a time to play"* children bend the rules to engage in activities they are not supposed to do like *"watching cartoons [and] the comedy channel"*.

"Oh, well it's like it's a good excuse to stay inside and sleep in and stuff like that, yeah. [...] to say to my dad oh can I go to the movies cause it is winter and it is cold outside and the movies are inside. Yeah. Umm, and I prefer summer to winter, because you can go out and do stuff, but winter is still fun" (Carla, winter, CC)

In this way, children resist 'healthy' activities bestowed on them (Bell, 2011). While in summer it is expected that they spend a considerable amount of time outdoors be it supervised or independently, staying indoors is a way to oppose this active, busy lifestyle during winter. Each season therefore brings benefits in parental and children's eyes; summer carries the connotation of being always out and about, being on the move and active, while in winter, even in a moderate climate, families enjoy easing up from the busy times in summer.

Conclusion

Our study has limitations in terms of design. Clearly our sample was small and in future work, a larger spread of children and families in terms of ethnicity and socio-economic backgrounds to better represent the diversity of a metropolitan city such as Auckland would be preferable. Nonetheless, a key strength of the paper is its offering of new insights into the complexities of play across both seasonality and locality and its consideration of implications for children's wellbeing. Another key strength of our study was the degree and style of engagement with participants, epitomised by time spent with families over the course of a year. Children and parents were highly committed to this project and the children's level of enthusiasm and interest provided us with in-depth understandings of seasonal outdoor play.

A further strength is the study's theorisation. Combining Gibson's ideas of affordances from ecological perceptual psychology with Bourdieu's theory of practice shed light on the relationship between the actualisation of affordances and actors' dispositions. This novel perspective helped illuminate the way that children's outdoor play is not only determined by environmental opportunities, but also by the practical knowledge of how to behave within localities and seasons. Hence, children's play should not simply be viewed as behaviour that enhances bodily fitness, but rather as activity that helps shape children's and parents' yearround well-being.

We noted that the regard parents and children have towards outdoor play reflects locally constituted beliefs about what is 'appropriate' children's activity in summer and winter. We further showed that seasonally-specific norms, rules and structures can be seen as forming the logic of practice in relation to the (non)actualisation of affordances. This interpretation helps confirm that the relationship between activity and health is a necessary but not sufficient explanation for children's well-being within the urban environment. We have further shown that the experiencing of seasonal differences has to be viewed not only as an external factor families cope with; rather their experiencing of seasonal affordances is grounded in their everyday practices and beliefs. Our analysis has drawn attention to the impacts of restricted seasonal environmental learning opportunities on children's well-being. These findings are consistent with Malone's (2007) observations that constrained experiences influence the quality of childhood beyond simply reducing bodily fitness; rather, there are implications for children's environmental literacy and competency.

Parents' responses to the prospect of unsupervised play in the central city reveal the extent to which indoor and supervised outdoor play, including organised sports, have become normalised. While independent outdoor play was deemed possible in both seasons under certain circumstances in the suburban location, in the central city it was seen as inappropriate. In this commercial environment, the public gaze and parents' perceptions of dangers devalued outdoor play as an alternative to interior or supervised pastimes. In the central city, extra-curricular activities and supervised excursions appear to be the norm all year around and these only varied in terms of the type of destination according to parental time availability, income and perception of the weather. While the central city offers many potential play affordances beyond designated child-friendly play spaces, these appear to be rarely detected and even less commonly actualised. Such spaces (e.g. sidewalks, parking lots) are considered inappropriate for central city children's play; rather central city children learned to find affordances for play in places designed for them by adults. Parents reported needing to 'plan a trip' when taking children to the park or playground. In turn, this degree of planning and use of structured spaces and activities hampers the spontaneity of children's outdoor play, with implications for cumulative physical activity and well-being.

In the suburban locality, children appear to graduate from the safe haven of their own garden to the streets and beyond. Children participate in independent outdoor play in summer in ways that maximise their environmental literacy and future health gain. For a minority of families these symbolic values were replaced by safety concerns. Nonetheless, summer in Beach Haven carries the connotation of a long play time, of being out and about, of spending afternoons and weekends playing in parks and beaches with friends, families and relatives. In contrast, play is regarded differently in winter. It seems that even in Auckland's mild climate a prevailing attitude has developed in which winter is perceived to be the time to relax and stay indoors unless children have a particularly strong outdoor habitus. In terms of our theorisation, the non-actualisation of affordances in the suburb is therefore centred around children's and parents' knowledge of the 'rules of the game' during winter. They master these unspoken rules in Auckland's rainier season, a time many parents perceive to be a time of vulnerability to illnesses, by confining children indoors. Norms and rules therefore structure not only children's time inside the home and reduce their activity levels but, as participants revealed, they also potentially have an impact on their mental wellbeing.

To conclude, we believe that previous research has overemphasised the influence of the availability and guality of built and green environments on children's physical activity. This investigation has revealed that these environments also need to be 'read' socially. We have shown that even in an environment in which children enjoy independent outdoor play and detect affordances, it may not fit their habitus all year around. Rather, it is important to understand the values ('accomplishments' in Bourdieu's words) that families see in outdoor play in different seasons and locations that make it attractive for all children to independently participate in healthy levels of activities. Participation in play can potentially and positively impact on their environmental literacy and overall well-being. The political challenge is to seek to extend thinking about independent outdoor play beyond the simple association with healthy activity. There is a need to develop urban environments in which any child can play independently throughout the year.

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