Designing outdoor public spaces as if young people’s healthy lifestyles mattered

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Background

- Education in architecture and urban design
- Keen interest in the study of the human aspects of built environment design
- Worked extensively in design and built environment simulation field
- Led several research funded projects
Outdoor play and PA

- Some evidence do suggest that children on the whole are growing more sedentary.
- Significant detrimental effects on their health, and social, emotional, physical and cognitive development.
- Children are being denied the outdoor play opportunities afforded to previous generations.
Shrinking of play environment

Outdoor play is now primarily centred on the home rather than the street

“Streets used to be places for people. Today they are through routes and places for cars. The children have vanished” UDAL 2000
Obstacles to outdoor active play

• Several factors have paved the way for the decline of outdoor play
  – Safety: Fear of injuries, attack or abduction “stranger danger”
  – Traffic “killer car”
  – Society’s attitudes to play
  – Poor play provision
Consequences

- Parents control children’s play in order to minimise their exposure to danger
- They no longer allow them to play outdoors unsupervised
- These have had detrimental effects on children’s lives
Growing concern over safety

- Growth in litigation
- Diversion of resources for provision into hard and soft safety measures
- The cost of playgrounds has more than doubled in price
Concerns exacerbated by the media

- 'Poor Children 'Prisoners' of Fearful Parents’ (The Independent, 22 August, 1995 p. 6)

- “Childhood over the past 20 years seems to have become as fraught with danger as it always has been for the young of other species. There are predators about, ready to molest and kill” ('The Death of Childhood' The Times, 1 August, 1995 p. 13.)
School environment and PA

- Physical activity guidelines recommend children should engage in 60 min of moderate-to-vigorous physical activity (MVPA) a day
- Children do not engage in enough in PA*
- Only few children manage to meet the minimum threshold (30 min) during school time**
- British children spent only 15% of their school break periods engaged in moderate to vigorous physical activity (MVPA)***

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<th>Crime and the environment</th>
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<td>• Poor design contribute to crime and danger</td>
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<td>• Alley ways, hidden spaces, spaces that do not encourage informal supervision</td>
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<td>• Dark or not well lit areas</td>
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The number of injuries related to playground accidents has almost remained the same.
Decline of play environments

- Playgrounds and schoolyards consist of standardised commercial equipment where absolute risk, cost–benefit, and qualitative factors are predominant
- Learning Through Landscapes claims that only 30% of the potential of England's school grounds is being used, with grounds either little used, badly managed or untended
- Playgrounds are losing their appeal for children
- They are so dull that children reject them in favour of more exciting and potentially dangerous places (CABE Space-a 2004)
Dull Play Facilities

• Universal application of ‘safer surfacing’ in playgrounds is assessed in terms of absolute risk
• The cost of playgrounds has doubled
• Playgrounds are losing their appeal for children
• Many playgrounds are now so dull that children reject them in favour of more exciting and potentially dangerous places (CABE Space-a 2004)
Public attitudes to play

• Public and Local Government attitudes can also hinder play
• Some youth activities, such as skateboarding are increasingly under threat (£20 on-the-spot fine has been introduced if you are found skating anywhere in the Square Mile of the City of London) (CABE Space-b 2004).
The Jigsaw Nursery on Locks Heath Park Road, Hampshire

- Complain that children playing in the garden were too noisy
- Nursery school threatened with a noise abatement order
- Council suggested that children should play outside in the garden for one hour per day at most
Playing fields stir up row

- Plans to create new football pitches have met with anger from local parents in Bristol.
- Three pitches for the new Fairfield School on the site were planned, occupying only 15% of the total space.
- "We recognise that kids need their playing fields, but we need green spaces"
Design approach and children

• “Young children are traditionally misunderstood and overlooked as expert communicants of their own cultures and are generally dismissed as a reliable resource for understanding neighbourhood and community issues”

Catherine Burke “Play in Focus:” Children Researching Their Spaces and Places for Play Children, Youth and Environments 15(1), 2005
Planning approach and PA

- Low-density development has influenced planning approach for decades
- Created “islands of isolation”, which may have contributed to sedentary lifestyles
- The consequences were detrimental:
  - Encouraged cars use
  - Created long distances between schools, shops and other services
  - Much of the environment become hostile to pedestrians, cyclists and children’s play
  - Contributed to increased crime
Parents’ attitudes to safety and play

“it is pointless simply providing more ‘child friendly’ or ‘safe’ play areas, while parents are so preoccupied with children’s safety that nowhere is regarded as secure except the home and no activity without a chaperon is acceptable”*

Safety and change

• Safety research established that **attitudes** to perceived risks and dangers are very difficult to change
• Is it then possible to address some of the safety issues through built environment interventions?
• *Explore the role of built environment in promoting outdoor play and PA in 21st Century*
Role of the built environment

Three components of places
  • Physical
  • Societal
  • Economic
Some factors are determinants, while others are only facilitators

The Components of "Places" - Issues for Planning Design Processes

**Physical**
- Natural Topography
- Man made topography
- Natural physical forces & conditions
- Man made forces & conditions
- Mobile artefacts

**Societal**
- Presence of people
- Individual usages & behaviours
- Social usages & behaviours
- Institutional activity patterns
- Human pressure
- Interaction to and upon the place
- Socioculturally created norms and conditions
- Other biological communities

**Economic**
- Resources & accessibility to resources
- Organisational & technological capacity to exploit and utilise resources
- Market & management systems & opportunity

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"PLACE" invokes a complex local system in space and time which is perceived as (space + identity + purpose) through our sensory and functional experience of it. Any component is open to change, and such changes will affect the balance of the system and other components in it.
Built environment and PA: A new area of research

- The influence of the “built” environment on children outdoor PA is a new area of study
- Data linking the built environment to obesity are only now beginning to emerge
Contribution of the BE to outdoor play

- Powerful evidence suggest that to counteract the deficiencies in the youths’ fitness = spend longer periods of time outside, engaged in higher levels of PA*

- A study found children were physically active for an extra 49 minutes a week in safer neighbourhoods than in unsafe neighbourhoods.

- Neighbourhood design influence activity levels amongst adolescents


Implications of supervised play

- Several studies found that the more time young people spent outdoors, the higher the activity level*

- Access to recreational areas improved PA

- Major study** of 5 year old children who were cared for at home involved 2 groups:
  - ‘A’ Families: those who could allow their five-year old child to play unaccompanied in the living surroundings
  - ‘B’ Families: those who because of their living location and the street traffic could not do so

  - ‘B’ children outdoor play in their living surroundings was often supervised by adults

*Klesges, R.C., Eck, L.H., Hanson, C.L., et al. (1990). Effects of obesity, social interactions, and physical environment on physical activity in preschoolers Health Psychology, 9, 435-449.


‘B’ Children time spent outside was significantly shorter than ‘A’ children.
Social Contacts

• Children in families A have twice as many playmates in the immediate neighbourhood

• Families A are acquainted with significantly more adults in their immediate neighbourhood
Outdoor play and child development

- Outdoor play offers children many unique developmental opportunities
- Help to reduce the long-term health consequences of a sedentary lifestyle
- Potentially facilitate the learning of key social, emotional and life skills.
- The more diverse the natural and physical surroundings, the greater the range of learning and developmental opportunities
New planning approach

- Emphasis on high-density developments
- Encourage mixed use activities
- Inclusion of cycle routes and walking opportunities (linked paths)
- Study found that residential density, street connectivity, and mixed uses positively enhanced overall activity scores
- Review the current approach to the provision of play opportunities, including streets
Safer routes to encourage walking

• Safety improvements to routes to schools combined with encouragements resulted in a higher number of children walking to school – increase by 64% in 2 years*

• Moderate car and pedestrian traffic were could contribute to safety
Improving traffic safety to encourage play

• Street improvements can improve child pedestrian safety and encourage street use
• Speed, not the volume of traffic, was found important in affecting street safety
• Children were about half as likely to be injured by a car in their neighborhood if they lived within a street with a speed hump*

Improvements to school environments

• Targeted interventions, such as painting school playgrounds led to a significant increase (approximately 18 min/day) in the amount of time that 5 to 7 year-old children spent engaged in MVPA during school lunch periods*

• Better facilities and provision of equipment improved the level of activity of middle school students**


Informal supervision and safety

- The benefits of intergenerational informal supervision and mutual support in environment design has not been studied
- Informal supervision involves mutual lookout for children safety
- Design should facilitative informal supervision of play environments
Safety by Design

• A watched space is a safe space
• "So-called 'undesirables' are not the problem. It is the measures taken to combat them that is the problem... The best way to handle the problem of undesirables is to make the place attractive to everyone else." --William H. Whyte
Making places more attractive for youngsters

• Young people have needs for social interactions and retreat behaviours*
• Public spaces are often used for social interactions, while neighbourhoods are selected for retreat (from undesirable peers and adults)
• This is often the source of tension between adults and adolescents ‘hanging out’
• It is important to cater for young people’s needs for key developmental needs of social interaction and retreat, by creating supportive and mutually acceptable physical environments

Avoid ghettoise play

- Early 20th century, playgrounds were a way of isolating children from the dangerous city, but also the city from dangerous children*
- There is a need to shift from developing ghettoise play to a network of multiuse playful landscapes that cater for different age groups and abilities and changes over time
- Incremental design approach that is adapted over time after observing use is needed
- Multi use activities in playful landscapes improve the possibilities for mutual lookout and could encourage intergeneration interaction

Improved research approaches

• Improve our understanding of the link between children’s PA and the outdoor play environments
• Need for new research methodologies:
  – Children’s participation in research
  – Use of expert panels
  – Observation techniques
  – Auditing
• Need for multidisciplinary and multiprofessional approach
Reemphasise the importance of the street

- Encourage play opportunities near home
- More accessible and secure
- Informally supervised
- Social interaction opportunities
- Extend home play opportunities
Shift debate from risk to challenge

Everything he does is a risk. Walking on a pavement is highly risky as he often drops with no warning and falls hard. He splits his head open 3 or 4 times a year by just walking along. It is so important to us to find safe places to play because of this. But even in safe places he is always having to take risks because he has so much energy and loves to run around. I take the decision that he just has to live with risk. Obviously, I try and minimize it as much as possible but I want him to be able to enjoy things and have a good time.

Conclusions

• The design of the built environment can have an important impact on physical activities
• The physical design of the space can have a strong impact on the type and diversity of play and playwork possible in the space
• Diversity is important as it encourages multiple uses, choice and diversity of activities at one time and over time, spatial variety, many physical elements, varied surfaces, shapes, textures, heights, colours, light and shade, smells, sounds and materials
• Networks of safe play environments seem to encourage children to be physically active