# Chapter 7 Participatory Health Promotion Research with Children



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## 7.1 Introduction to Children and Health Promotion Practices

Towards the end of the twentieth century, research emerging from developed countries showed declining children's physical activity and increasing obesity. Although it was well known that physical activity in the adult population was on a steady decline, similar trends in children were alarming – even confronting – to health authorities, education departments, governments and parents (MacDougall et al., 2004). Mainstream health promotion practitioners and researchers, often less experienced in working with children and young people, turned their attention to getting children to become more active. As public health researchers, we shared concerns about the dilemma of increasing children's activity and mobility in the face of concerns about risk and safety. Frequently, health promotion adopts adult-driven research paradigms while dealing with children, which also reflects the dominance of behavioural and lifestyle approaches in health promotion (MacDougall, 2007).

At first, in separate research programmes, we favoured the structural understandings of health promotion, informed by primary health care (MacDougall, 2009) and the 1986 Ottawa Charter for Health Promotion (World Health Organization, 1986), which agreed on the primacy of participation, empowering practice and research.

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CM well remembers research meetings, reminiscing about "when I was a child" sprinkled with whimsical tales of a magical, free-range childhood full of adventures, high jinks and roaming the countryside and suburbia alike. The innocence of the nostalgia narrative was soon tempered by imperatives to educate parents to protect their children from the new risks of strangers, motor vehicles, television and junk food (MacDougall, 2009). After CM and LG started working on a common research programme, our reflections on the children and health promotion research led us to prepare a conference poster entitled "Six steps to ensure the failure of health promotion in the early years". Borrowing from sustainability science, we adapted an inverse approach, which "...starts by describing the ecological and health outcomes that we do not want and works backwards to identify courses of action that have the best chance of avoiding these undesirable outcomes. We can also work backwards to identify the courses of action that are more likely to result in the outcomes we don't want" (Lowe, 2011, p. 179).

The inverse logic inspired us to propose six steps to failure of health promotion with children (MacDougall et al., 2012a):

- 1. Focus on the responsibilities of individuals to change the powerfully and socially determined conditions of daily life.
- 2. Configure health promotion as adult-led short-term social marketing to parents and children, changing campaigns frequently as government departments reorganize and develop new branding.
- 3. Assume children are developmentally unable to participate in the research and practice about their health.
- 4. Justify health promotion to children in terms of their health as future adults and costs to governments if they are not active.
- 5. Keep the evaluation simple and tick the box.
- 6. Fix the gaze within the country, ignoring global perspectives.

Articulating these six steps clarified what we did not want to do and sharpened our resolve to explore alternative epistemologies referencing the United Nations Declaration on the Rights of the Child. Epistemological and methodological clarity emerged primarily from the European *sociology of childhood*, arguing that children are neither passive nor incompetent, as a result of their stage of development, rather they can and should participate productively as research participants, even to the extent of co-designing and interpreting research studies (MacDougall & Darbyshire, 2018).

In this chapter, after setting our position in health promotion research paradigms, we reflect on close to two decades of researching and theorizing about children's participation in health promotion research. We elaborate upon the underpinning values derived from critical theory, empowerment, children's rights and the primary health care participation agenda. Finally, we discuss the challenges and future prospects of health promotion with children, upending the inverse logic to increase the chances of successful participatory health promotion with children.

## 7.2 Research Paradigms and Theories

Modern psychology combines biological, cognitive and behavioural studies to propose developmental stages for children to navigate en route to adulthood. This developmental child theory underpins research to match policies, programmes and interventions to the most appropriate developmental stage and can be invoked to limit children's participation in research if they are seen as developmentally capable. A parallel framing, since the Industrial Revolution, identifies and reduces the risks to children, too often from adult institutions. The child at risk framing positions children as vulnerable and has made major contributions in child labour and slavery, physical abuse, sexual abuse and injury prevention. Adults fulfilling their roles as protectors can prevent children from participating in research by claiming that they are safeguarding them (MacDougall, 2009).

By contrast, a **citizen-child theory**, defined next, takes a child-centred approach and argues for the rights of children to exercise agency in their own lives (MacDougall, 2009). This theory combines a more reactive story, rejecting adultist and developmentally derived assumptions, with an aspirational story, which blends a children's rights approach with the participation and empowerment agenda (MacDougall & Darbyshire, 2018). The more reactive story rejects research and health promotion, framing children as human becomings rather than human beings, and the aspirational story builds on the new sociology of childhood and the UN Convention on the Rights of the Child (MacDougall & Darbyshire, 2018; United Nations, 1989).

The citizen-child-inspired researcher problematizes and reduces the power relationships between adults and children, understanding that there are different types of citizenships (Gibbs et al., 2013). Personally responsible citizens obey the law, pay their taxes and are kind to others. Participatory citizens join organizations, vote in elections and volunteer to help others. Socially critical citizens will investigate inequity and strive for justice. The citizen-child approach embraces discourses on rights, critiques framing children as passive and compliant citizens, encourages structures for children to become participatory citizens and – through active participation in research – invites children to consider their role in the world as advocates for social justice (MacDougall & Darbyshire, 2018; Gibbs et al., 2013; Westheimer & Kahne, 2004).

# 7.3 Informing Health Promotion Through Participatory Research with Children

In this section, we analyze four linked sets of studies involving the participation of children in research designed for health promotion policy and practice. The first two projects, involving CM, took place in metropolitan and rural South Australia and experimented with child-centred methodologies to understand children's perspectives on adult concerns about physical activity and health promotion. Broadly, we

were interested in exploring children's perspectives about how the places, spaces and communities in which they live influence their experiences of, and engagement in, play and physical activity.

The third study occurred in Melbourne, the capital of the Australian state of Victoria where CM and LG sought to add to the evidence by including children's perspectives on how they actively participate in negotiating and developing their everyday mobility.

Again with CM and LG, the fourth international observational study of schools and their surroundings applied ethnographic methods to uncover the policies and practices in different countries that created built environments around schools, which in turn shaped the attitudes and behaviours of children and the fears of their parents. Then, we comment on the changes in health promotion research as a result of the 2020 COVID-19 pandemic.

# 7.4 Uncovering Children's Responses to Adult Concepts of Physical Activity Promotion for Children

One approach to the promotion of children's physical activity is for adults to take charge and direct the research on children using language and concepts with which they are comfortable. The title of the paper, *We have to live in the future*, brings a contrasting voice from a child in a focus group from a class of 9–10 year olds in Adelaide, the capital of South Australia, who wanted the children's voices to be heard. This study of 204 children aged 4–12 years, asked the following questions:

- 1. What are children's theories of physical activity, play and sport?
- 2. What do children want to tell adults?

The child was making a plea to the South Australian Department of Human Services to listen to the voices of the future generations in their commissioned research to inform a physical activity strategy for primary school-age children. The department bravely broke with the tradition of adapting strategies for adults to children and conducting adult-focused research. Instead, they commissioned us to undertake a qualitative study combining focus groups, drawing and mapping techniques and photographic methods with 204 children aged 4–12 years in metropolitan and rural South Australia. The methods of data collection, namely, focus group interviews, drawing/mapping and photovoice, which were used to provide a rich, multifaceted perspective of children's experiences, are described in detail elsewhere (MacDougall & Darbyshire, 2018).

Focus groups provide powerful ways to observe how children construct and reconstruct ideas. We have found that focus groups can move beyond the verbal to include children showing researchers what they mean, such as demonstrating a local variety of a popular game. With older children, gender can get in the way; so, depending on the question, single-sex groups could be considered. As power is inscribed in place and space researchers must do their homework and insist on using

spaces in which children have had positive experiences, avoiding those in which children have experienced negative events or the demonstration of power over behaviour by adults is important. It is vital to set a culture of children being the experts of their lives so that children tell adults about their experiences. In turn, adult researchers demonstrate respect and deep listening.

Drawing and mapping provides valuable data about where children are located, how they move around and which people are important in their lives. It is not an art competition! We often provided a pencil, paper and an eraser to focus on the content – not on the art technique. In the days of film, we gave children disposable cameras and asked them to photograph aspects of physical activity that were important to them; but this is easily translated to a digital world. Crucially, for drawing, mapping and photovoice, the images are not the data. If they were, we would produce adultist interpretations of children's lives. Instead, the captions, commentaries and photographs stimulate joint discussions with children, enabling them to articulate and advocate accounts of their lives.

Children participated enthusiastically and appreciated the opportunity to communicate their views. "Physical activity" and "exercise" had little meaning for children, who described them as terms that adults use. "Play" and "sport" had powerful, contrasting meanings for children, with "play" being child-centred and "sport" being controlled by adults. Children did not respond to adult-led links between physical activity and health status.

Children's participation gives rise to critical distinctions between sport and play. Our results show that play is much more child-focused than sport, involving spontaneous decisions and rules made for and by children. Moreover, results suggest that mixing images of play and sport could be counterproductive.

Health promotion strategies will benefit from understanding how children ascribe meanings to words that adult professionals commonly use in physical activity promotion. These words matter. It is counterproductive to plan a health promotion campaign revolving around concepts and words that do not engage children. It is also fraught with danger to mix concepts such as play and sport. For example,

- · Children immediately engaged with the word sport, meaning purpose, competition, organisation, and often (but not always) fun. They told us about the crucial role of adults to organise, fund participation, arrange travel and provide equipment. Sport was adult-led, pre-planned, rule-bound involving hierarchical decisions with power-over;
- $\cdot Children \ said \ barriers \ to \ sport \ included \ cost, \ distance, \ travel, \ lack \ of facilities, \ and \ expense \ of \ clubs, \ injuries, \ bullying, \ put-downs, \ humiliation, \ gender \ issues;$
- · The word play also engaged children in focus groups where they frequently demonstrated types of play that involved fun, freedom, spontaneity, energy and physicality. While adults did not organise play, their encouragement was important. Children managed the rules to ensure high levels of inclusion and improvised with available equipment;
- · Play was helped by adults fostering a culture of democratic decision-making;
- · Barriers included time, space, lack of equipment, arguments and engagement reduced with age.

Unlike "sport" and "play" the words physical activity, exercise and fitness did not engage children who had trouble differentiating them from either sport or play. They said physical activity was an adult word; exercise suggested work, purpose, lack of fun (MacDougall et al., 2004).

Such child-centred research is relatively simple and should underpin expensive campaigns and policies.

The marketing company commissioned by the relevant government departments to develop a campaign used data from Table 7.1 to create television and cinema adverts focusing on children's accounts of the meaning of play. The overall campaign also included information about places for children to play. In these ways, health promotion was directly informed by children's theorizing. This illustrates the benefits of modifying tried-and-true qualitative methods to answer the simple question of understanding how children interpreted common adult health promotion language.

How is children's play influenced by geographical and parental boundary settings?. In an Australian Research Council grant, CM and colleagues followed up the finding that children did all they could to ensure that play was child-centred,

 Table 7.1 Distinctive research contributions to successful health promotion with children

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Steps for successful health promotion with children	Example from studies in this chapter
Understand, map and act on the responsibilities of adults as duty bearers to change the powerfully and socially determined conditions of children's daily lives.	Children participate enthusiastically in research and state they want their voices heard. COVID-19 has illuminated the direct and indirect influences of inequity on children – Again highlighting the decisions by adults and their institutions.
Refine and design participatory and rights-based methods to encourage children's participation in the research and practice of their health, tailored to context and developmental stage.	Children's critical distinctions between the salient concepts of play and sport and less relevant adult words such as physical activity and exercise have powerful implications in research and policy. Play and sport change character as children develop, including interactions with gender.
Include the insights of children about health promotion, requiring long-term changes to natural and built environments and paradigms underlying health promotion research and practice.	The natural and built environments shape play, sport, mobility and daily physical activity. Children can contribute to diagnosing problems and suggesting solutions. Adults and adult institutions take the final decisions.
Recognize the simultaneous imperatives of improving the here and now of children's physical activity goals and contributing to their future participation as critical citizens.	Health problems from COVID-19-related decreases in activity highlight immediate and long-term consequences.  The pre-existing rights-based paradigms reinforced by COVID-19 inspired concerns about the loss of rights and independence in their futures that could curtail development as citizens.
Become comfortable with nuanced evaluation and analytical frameworks.	Findings are strongly influenced by context and cannot be reduced to binary distinctions.  For example, independent mobility frequently changes character and goes beyond the active—passive and independent—dependent travel.
Conduct cross-country research and reflections on practice to appreciate the importance of context and learnings from outsider perspectives.	Uncover hidden assumptions of insider researchers and learn from global policies. Great differences between city and country. Urban form varies within and between cities.

spontaneous and continually adjusted to avoid boredom, with increased access to give all children the chance to have fun (MacDougall et al., 2004). What are our boundaries, and where can we play? – This question sought children's perspectives about places, spaces and communities in which they live, which impact their experiences of, and engagement in, play and physical activity. In this study, we elicited children's perspectives on where they live and their boundaries and rules about moving through their communities (MacDougall et al., 2009).

We worked with children in an inner metropolitan school in Adelaide, the capital of South Australia, and in a rural school on Kangaroo Island off the South Australian coast known for farming and tourism. We spoke to 33 children, 8–10 year olds to find out:

- 1. What is the area like for you?
- 2. What are the rules and boundaries and who sets them?

In this project, we started with methods similar to the previous ones while paying more attention to tailoring them to the research questions, thus ensuring children retained formal ownership of their data and examining the benefits and risks of using multiple methods.

We also had to tailor methods to work efficiently in Australian rural locations that require extensive travel time. Time, cost and logistics required us to design two visits for data collection, each lasting a few days. Our focus group questions were more expansive than the previous study because they had to explore geographical and cultural boundaries. We included the drawing and mapping method within the focus group to both use time efficiently and combine verbal and visual data. Then we provided children with cameras to photograph where they played, who they played with and what they played. We returned within a month to hold workshops, where we returned the photos to the children and asked them to select four photographs and arrange them on an A4-sized worksheet page using the following prompts:

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This is my favourite photo because ...
My favourite place to do activities is ... because ...
This photo makes me feel ... because ...
What I like doing best is ... because ...
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During this visit, we brought resources so we could take copies of all the photographs and drawings that we needed, while returning the originals to the individual students, as well as making books of all the drawings and photographs for each year level to be used within the school curriculum. Our aim here was to demonstrate to the children that they effectively owned their data, which we were using respectfully as if on licence.

Use of multiple methods can be expensive and take up valuable time in a child's life. As a result, we compared our findings from each method and first concluded that they provided triangulation by confirming key themes from multiple data sources. Critically, each method yielded distinctive data, leaving us to conclude that multiple methods provided richer findings than single methods (Darbyshire et al., 2005).

Rural children negotiated freedom of movement by considering broad principles about safety. Those who lived on farms said that they could go anywhere as long as they could negotiate with their parents about safety in relation to risks and dangers, most of which were related to the natural environment. Rural children demonstrated the power of geographical and social contexts in their list of (relatively few) places they could not go. Children overwhelmingly supported and appreciated parental involvement in setting rules and boundaries.

We interpreted the findings using an ecological framework for physical activity comprising three factors that link human agency to structure and environment: locating in space, moving through space and relating to people in space (MacDougall, 2007). Findings raise questions about the way in which the environment is designed for social planning and the importance of children's engagement and interaction with the natural environment.

## 7.5 Independent Mobility and the Transition to High School

Stepping Out was funded by VicHealth, established through Victoria's visionary tobacco-control legislation in 1987 as the first health promotion body in the world to be funded by a tax on tobacco and with international recognition for health promotion and policy impact (Richardson, 2017). Stepping out involved CM and LG and was designed to contribute to a children's perspective on the problem of significant declines in children's independent mobility. Independent mobility is important for physical health by helping children incorporate active transport into their daily travel routines and from a rights-based perspective for providing children with the opportunities to access public spaces for play, recreation and citizenship (Gibbs et al., 2012; Nansen et al., 2015).

The study used child-centred methods to understand how children transitioning from primary to high school in inner city Melbourne, the capital of Victoria in Australia, negotiated and developed their everyday mobility in the contexts of parental rules, family routines, cultural influences, peer social connections, communication technologies and neighbourhood environments.

The first stage comprised site observations followed by child focus group discussions and then accompanying children on their travel journeys. We piloted the process with eight children in their final year of primary school who acted as research partners to help refine and shape the research design. The first stage is useful to include in grant applications for participatory research with children to help avoid reviewers critiquing the lack of detail about methods that – by their very nature – can only be finalized during data collection. Similarly, institutional ethics committees require details about interview questions and other data collection methods. By providing a sound rationale for a rigorous first stage, reviewers and ethics committees can be assured that the research plan is theoretically sound and can be reviewed as the details of each stage emerge (MacDougall & Darbyshire, 2018). Methods can be extended to multiple stages to enable children to give progressive consent as they

get to know the researchers and the project. Multiple stages also open up the possibility for the children to choose or propose data collection methods they find suitable (Gibbs et al., 2013).

We conducted focus group discussions with 48 children in groups of 5–8 in schools with groups of mixed gender and diverse cultural backgrounds. The discussions were centred on two visual photo-ordering exercises (Willenberg et al., 2010) that used images depicting places and objects involved in their neighbourhood travel. Visual aids effectively stimulate children's responses, and we asked children to discuss and work together to order the importance of each image for their travel journeys.

We then used mobile methods that involved travelling with 10 children (6 boys and 4 girls) from the focus groups on an everyday travel journey. Children took the researchers on routine travel journeys, predominantly to and from the school but also to places such as shops and parks, to show how they normally travelled, with questions generated by the environments and interactions that were observed during the journey. Mobile methods position children as experts of their lives by asking them to take the researchers on a tour of a salient area. Researchers and children plan a route, work out how to collect data (e.g. the route itself, interviews, photographs, observations) and balance independence with safety. Theoretically, mobile methods are a form of visual sociology and draw upon the *new mobilities paradigm* stating that places are linked by networks of connections that stretch beyond a single locale, requiring travel for social life and connections.

Our findings suggested that a more critical engagement with the conceptual underpinnings of children's mobility can lead to new understandings. We found that children's everyday mobility is defined by interdependencies rather than a simple dichotomy between dependent and independent or active and passive. Child mobility compositions were assembled through changing relations of companionship – travel companions, companion devices and ambient companions. Children are not passive subjects of rules and environments rather they assembled relational compositions of mobility. They expressed some ambivalence about the benefits and pitfalls of 'independent mobility' and balanced independence with enjoyment of parental accompaniment, sometimes experiencing excitement and freedom alongside nervousness or fear (Nansen et al., 2015).

#### 7.6 Culture and Place Matter

The findings from our first three studies showed the role of the natural and built environments in fostering children's activities. As a result, we designed a method for observing and analyzing the settings in four countries that influence the independent mobility of children to stimulate discussions about culture and context in children's health promotion. Both qualitative research and anthropology/ethnography distinguish between the embedded and contextual knowledge of the insider (emic) and the more detached perspective of the outsider (etic) – and of course – the

interplay between the two. This rich interplay can provide outsiders with the opportunity to interrogate insiders and ask them to explain observations when outsiders observe something unusual or perplexing. In the process, insiders articulate assumptions that are taken for granted.

We conducted field observations in towns in Australia, France, Germany and Scotland using one researcher from the home country and one from another country. We observed the settings around schools, taking care not to observe or photograph people. Schools were judged to be in typical areas, and multiple observations were conducted at different times and days. Field notes and photographs were discussed immediately after observations, stimulating insider—outsider discussions of assumptions that were taken for granted, local knowledge and representative policies to consider. There was a meeting of all observers from Australia, France and Scotland to discuss the critical differences and policy and follow-up presentations with the German case, which was conducted by a student from Germany on placement in Adelaide, Australia (MacDougall et al., 2012a, b).

Illustrative findings include the surroundings of a South Australian outer suburban school characterized by a road architecture that enables parents to drop off and collect children from school during two short but congested times of the school day. Colloquially known as the "kiss and drop," this architecture reflects the distances students had to travel to schools, which are consolidating into larger schools, in a government school system which rarely enforces zones for local schools. The outsider in the research pair, from Germany, had no experience of the "kiss and drop" that was so familiar to the Australian insider. Policy observations include the need to retrofit car-based suburbs whose cul-de-sac-based design impedes walking safely. The "kiss and drop" also reflects the move to larger and larger schools driven by an efficiency agenda to compete with the significant numbers of prestigious independent and religious schools, often combining high parent fees with generous government funding.

The German observation revealed an architecture of a different type: a design to support a variety of school-based learning activities. Having observed the Australian school, the German outsider was at pains to point out a replacement of the "kiss and drop" by extensive bicycle parking for students and staff alike. The policies exemplified here prioritize active and ecologically sustainable transport over motor vehicle domination.

The French school was small, with neither a "kiss and drop" nor a bicycle park. Public transport and car parking were nearby. However, the French insider noted that the school was set in a park, linked to nearby private and social housing by a network of walking paths. The French insider pointed to a robust, well-funded government education system including local zones and the relative absence of private or religious schools. Her historical explanation was that, post revolution, France adopted the values of Liberty, Equality and Fraternity and Laïcité, producing a secular school system based on separation of the church and the state with a profound effect on education.

The Scottish school also had neither a "kiss and drop" nor a bicycle park. When the two Australian outsiders remarked curiously on the large bus stop inside the school, the Scottish insider replied that bus transport was dominant because the local government provided free transport to all within the school zone. If a bus was not feasible, children were transported by taxis. This contributed to reductions in car travel, traffic congestion and the use of fossil fuel and established independent mobility as the default.

The second Australian school, in inner city Melbourne, had more in common with the German and French schools than its Adelaide counterpart. Inner city Melbourne resisted the trends in other capital cities to make room for cars, producing multiple opportunities for composite journeys involving walking, trams and various combinations of parental supervision. Policy learnings included a specific primary-to-high-school transition including attention to children's independent mobility.

These examples illustrate the contribution of environmental observations of places – not people – as inexpensive and ethically defensible adjuncts to qualitative research. The dialectic between insider and outsider perspectives opens discussions about how culture and policy shape children's mobilities in relation to school (MacDougall et al., 2012a, b), which are typically not reported or discussed in the academic literature reporting on school-based studies. Clearly, there are environmental and contextual differences within, as well as between, countries.

### 7.7 Commentary on COVID-19

Early concerns about the novel coronavirus SARS-CoV-2 in Wuhan, China, in December 2019 (WHO, 2020) turned to alarm as, by March 2020, the virus had spread to all global regions. COVID-19 (the disease caused by SARS-CoV-2) was threatening to overwhelm the world's economies and strongest health systems (Editorial, 2020; Remuzzi & Remuzzi, 2020). Without an effective treatment or vaccine, public health measures including physical distancing measures became the cornerstones of global response. The scale and impact of lockdowns and physical distancing was not anticipated in epidemic planning, especially the effects on children of the widespread closures of schools, day-care centres and playgrounds and directives to stay at home. By late 2020, evidence was beginning to emerge about reductions in physical activity, increases in screen time and changed sleep patterns.

Much of the research was conceived and conducted by adults on children. For example, in relation to a broad range of physical activities, research showed how children suffer with limited social connections, which are crucial for identity and well-being, reduced physical activity, loneliness and boredom (Fegert et al., 2020; Jiao et al., 2020; Loades et al., 2020), and which may have long-term effects; children not in school do not have break-time activities or physical education classes, are not walking to school or to a bus stop and generally cannot participate in school sporting teams or clubs (Esmonde & Pollack Porter, 2020).

On the other hand, there were media stories about children taking some degree of control. The Dutch Prime Minister answered video questions by kids in the kids news (https://www.youtube.com/watch?v=wLRc6Otqs-E). Children in South Australia contributed to a guide for parents about home activities (https://dulwich-centre.com.au/creating-a-guide-for-parents-during-lock-down-by-children/) Young Indians created care packs during the pandemic (https://citizenmatters.in/wp-content/uploads/sites/2/2020/03/HELP-INDIA-PDF.pdf).

Some studies looked at the relationship between the design of neighbourhoods and children's behaviour. A Canadian study found that some children became more active and were walking/biking and playing more and had increased outdoor physical activity (Carroll et al., 2020). These children often lived in houses in lowerdensity neighbourhoods and lived further from a major road. Children in higher-density neighbourhoods with parks within 1 km were more likely to increase their outdoor activities. In Portugal, Pombo et al., found that children under 13 years of age with an outdoor space and who had other children in the household were significantly more active (Pombo et al., 2020). Children from families with all adults working from home showed lower levels of physical activity. A similar pattern of activity reduction was reported among high school students in Bosnia and Herzegovina between January 2020 (before COVID-19) and April 2020 (during the physical distancing).

We have discussed the role of independent mobility in children's physical activity. Riazi proposed that the value of children's independent mobility was crucial during the pandemic, offering children access to the outside world (Riazi, 2020). With many parents working from home, children's outdoor time depended on parents having time to join in physical activity outdoors after work or between meetings. Inequities in independent mobility were highlighted during the pandemic, exemplified by a lack of access to gardens for many families. Independently mobile children had more chances to be physically active by walking or biking to locations close to home.

Children's right to play, their need for play and independent mobility or the need for changes in urban design were highlighted mostly through opinion pieces in independent journalist platforms.

A rights perspective is evident in opinion articles in *The Conversation*, an Australian social media site reporting research to a broader audience. These emphasized the critical need and right for children to play during confinement and restrictions of the COVID-19 pandemic. McLean made a plea for a focus on play-based learning during confinement, noting the pandemic as a time in history where child rights and responsibilities as human beings come into clear focus (McLean, 2020). Alden noted the lack of acknowledgement by cities and authorities of the impacts of restrictions upon children's right to play as part of healthy development (Alden, 2020). This is of particular concern where families do not have access to high-quality play opportunities or access to public open spaces and green spaces. When playground equipment is also closed, children's play naturally increases in other community spaces, including neighbourhood streets. Reflecting on the existing research about children's need for collaborative play, Alden called for a balancing of the risks of limiting social play beyond households and the benefits of closing streets and empty parking spaces where green space is scarce.

In the reimagination of space following the pandemic, there are arguments for reallocating road space for collaborative play, walking and cycling, opening up green spaces and initiating car-free zones and redefining the usefulness of space for children's play in a post-pandemic era. Garau and Annunziata (2020) used a theory of affordances, similar to our independent mobilities study, to analyze the potential of public spaces to enable and support children's independent activities in Sardinia, Italy. Another study described the likely health inequities experienced by underresourced communities and families and proposed supporting physical activity in unused school yards and through 'play street' initiatives (Esmonde & Pollack Porter, 2020).

The research reviewed in this section reinforces the importance of taking a children's rights and participation approach to understand how health promotion can conceptualize how physical activity, sport and play are influenced by natural and built environments. Health promotion can play an important role in reversing the rapid loss of environments and the opportunities for children to be active during the early stages of the pandemic. It can also generate debates about ways in which distancing measures reduce children's rights for activity and mobility.

#### 7.8 Conclusions about Child Health Promotion Research

In this chapter, we have shown how qualitative and ethnographic research methods are ideally placed to guide health promotion research with children underpinned by participation and empowerment. Methodological development enabled us to work with children whose voices have until recently been silenced in health promotion research that concerns their lives. Findings from this study led directly to a South Australian health promotion campaign to increase children's participation in play and organized activities. Adding an ethnographic focus illustrates the responsibility of *adult duty bearers* who control policies to adopt a healthy settings approach linking structure and agency, particularly in relation to equity, the built and natural environments and the political and cultural practices that shape the daily conditions of living that determine children's health.

The citizen-child paradigm has the potential to link health promotion with children to a broader discourse of rights and citizenship, thereby bringing to bear broader social and political theories to advance our understandings of health promotion. We see this starkly in the ways in which the existing inequities shaped the experiences and consequences of physical distancing measures at the start of the COVID-19 pandemic.

Writing from Australia, we well know that health policies about children reflect the individualized approaches to health promotion, defined as privileging individualized actions about healthcare service delivery and access, with little attention to the social determinants of health (Phillips et al., 2016). The analysis of theories and methods in this chapter is designed to assist researchers to challenge the enduring

power of the biomedical paradigm to crowd out rights-based and social models of health promotion.

We started this chapter by proposing six steps to ensure the failure of health promotion with children, theoretically informed by the literature critiquing biomedical and behavioural constraints on health promotion.

We close this chapter by reimagining these six steps and combining empirical data from our review of studies with theory and propose how adopting the inverse of these steps opens possibilities for a structural and participatory approach to health promotion with children.

Table 7.1 shows how research helps health promotion challenge dominant adultist and biomedical health promotion paradigms and benefits from being rights-based rather than pathogenic. Distinctively, health promotion researchers have the tools to involve children as much as possible in research, rejecting assumptions that particular developmental stages invalidate children's capacity to participate.

**Acknowledgements** CM acknowledges the work on the COVID-19 literature by his partners in the South Australian studies, Professors Philip Darbyshire' and Wendy Schiller and Dr. Tahna Pettman. CM and LG acknowledge the contribution of Dr. Bjorn Nansen from the University of Melbourne to the *Stepping Out* study and our international ethnographic collaborators Dr. Isabelle Danic (France), Professor John McKendrick (Scotland) and Jessica Schneider (Germany). Studies were partially funded by grants from the Australian Research Council, Flinders University, University of Melbourne, South Australian Government, VicHealth and University of Magdeburg-Stendal in Germany.

#### References

Alden, C. (2020). Coronavirus spotlights equity and access issues with children's right to play, in *The Conversation*. The Conversation.

Carroll, N., et al. (2020). The impact of COVID-19 on health behavior, stress, financial and food security among middle to high income Canadian families with young children. *Nutrients*, 12(8), 2352.

Darbyshire, P., MacDougall, C., & Schiller, W. (2005). Multiple methods in qualitative research with children: More insight or just more? *Qualitative Research*, 5(4), 417–436.

Editorial. (2020). COVID-19 in the USA: A question of time. The Lancet, 395(10232), 1229.

Esmonde, K., & Pollack Porter, K. (2020). Distance learning makes it harder for kids to exercise, especially in low-income communities, in The Conversation. 2020, The Conversation.

Fegert, J. M., et al. (2020). Challenges and burden of the coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolesc Psychiatry Ment Health*, 14(20) https://link.springer.com/article/10.1186/s13034-020-00329-3

Garau, C., & Annunziata, A. (2020). Supporting Children's independent activities in smart and playable public places. *Preprint*, *12*(20), 8352.

Gibbs, L., et al. (2012). Stepping out: Children negotiating independent travel. In Final report to VicHealth, Jack Brockhoff child health and wellbeing program, McCaughey VicHealth Centre for community wellbeing. University of Melbourne. https://www.vichealth.vic.gov.au/media-and-resources/publications/stepping-out

- Gibbs, L., et al. (2013). Research with, by, for, and about children: Lessons from disaster contexts. *Global Studies of Childhood*, 3(2), 129–141.
- Jiao, W. Y., et al. (2020). Behavioral and emotional disorders in children during the COVID-19 Epidemic. *Pediatr*, 221, 264–266.
- Loades, M. E., et al. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(11), 1218–1239.
- Lowe, I. (2011). Environment, sustainability and health. In H. Keleher & C. MacDougall (Eds.), *Understanding health* (3rd ed., pp. 171–182). Melbourne.
- MacDougall, C. (2007). Reframing physical activity. In H. Keleher, C. MacDougall, & B. Murphy (Eds.), *Understanding health promotion* (pp. 326–342). Melbourne.
- MacDougall, C. (2009). Understanding twenty-first century childhood. In H. Keleher & C. MacDougall (Eds.), *Understanding health: A determinants approach* (pp. 287–307). Oxford University Press.
- MacDougall, C., & Darbyshire, P. (2018). Collecting qualitative data with children. In U. Flick (Ed.), *The SAGE handbook of qualitative data collection* (pp. 617–631). California.
- MacDougall, C., Schiller, W., & Darbyshire, P. (2004). We have to live in the future. *Early Child Development and Care*, 174(4), 369–388.
- MacDougall, C., Schiller, W., & Darbyshire, P. (2009). What are our boundaries and where can we play? Perspectives from eight to ten year old Australian metropolitan and rural children. *Early Child Development and Care*, 179(2), 189–204.
- MacDougall, C., Gibbs, L. and Phillips, C. (2012a). Six steps to ensure the failure of health promotion in the early years, in Poster Presentation. 1st Biennial Australian implementation conference, ARACY and Parenting Resource Centre: Melbourne.
- MacDougall, C., et al., (2012b). Stepping out: Comparing Children's mobility settings in Australia, France, Germany and Scotland to see how culture matters, in conference presentation: Population health congress: Adelaide.
- McLean, C. (2020). Let the children play: 4 reasons why play is vital during the coronavirus, in *The Conversation*. The Conversation.
- Nansen, B., et al. (2015). Children's interdependent mobility: Compositions, collaborations and compromises. *Children's Geographies*, 13(4), 467–481.
- Phillips, C., et al. (2016). To what extent do Australian child and youth health policies address the social determinants of health and health equity?: A document analysis study. *Public Health*, *16*(512).
- Pombo, A., et al. (2020). Correlates of Children's physical activity during the Covid-19 confinement in Portugal. *Public Health*, 189, 14–19.
- Remuzzi, A., & Remuzzi, G. (2020). COVID-19 and Italy: What next? *The Lancet*, 395(10231), 1225–1228.
- Riazi, N. (2020). Free-range kids: Why a child's freedom to travel and play without adult supervision matters, in The Conversation. The Conversation.
- Richardson, N. (2017). 30 years of VicHealth 1987–2017. Melbourne, Victoria. https://www.vichealth.vic.gov.au/media-and-resources/publications/30-years-of-vichealth
- United Nations. (1989). United Nations Convention on the Rights of the Child. G.A. res. 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2 1990. /C/93/Add.5 of 16 July 2003.
- Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal*, 41(2), 237–269.
- Willenberg, L., et al. (2010). Exploring the relationship between playground environmental characteristics, children's perceptions and playground activity levels. *Journal of Science and Medicine in Sport*, 13, 210–216.
- World Health Organization. (1986). *Ottawa charter for health promotion*. Department of Health and Welfare, World Health Organization.