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# Policies to enable children's voice for healthy neighbourhoods and communities: a systematic mapping review and case study

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## ABSTRACT

The purpose of this research was to gain an understanding of child consultation in policies for healthy environments in the international evidence base, and examine national and local-level policy and processes regarding child consultation. A systematic mapping review was conducted and grey literature was sought from Aotearoa New Zealand urban and neighbourhood planning, local board, and transport authority websites. A local exemplar project (in Tāmaki Makaurau Auckland City) of child engagement in policy planning was presented. Twenty-four articles met the inclusion criteria for the literature search. The literature was synthesised into three broad themes: co-design and planning processes, green space, and physical activity and body size. Despite the existence of high-level national policies, there was little regional consistency. The 'Healthy Puketāpapa' project presented provided a replicable model for high-quality, local consultation processes. Child consultation is a method through which decision-makers can respect children as citizens, and the process has been found to be beneficial to all stakeholders involved. This research provides an international perspective of literature, and a methodology that can be replicated in other countries and regions for comparability.

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## KEYWORDS

Co-design; public participation; consultation; healthy environments; child-friendly neighbourhoods

## Background

Community participation in designing and developing healthy neighbourhood environments is important for ensuring designs are relevant and appropriate for the community of interest (Kyttä and Kahila 2011). Positive outcomes of effective community participation can include policies and actions that facilitate health and health equity into planning and fiscal decision making; support or formation of community identity; and ongoing community engagement in, and guardianship of, neighbourhood environments (Mahjabeen et al. 2009; Ismail and Said 2015; Kelkar and Spinelli 2016; Leyden et al. 2017). Localised approaches are needed that fit with community requirements and

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preferences. It is worth recognising that while models and frameworks exist (Cascetta et al. 2015; Kelkar and Spinelli 2016), conceptual clarity is still needed in terms of what community participation actually looks like, and this may differ by context. As with general community participation, clarity on exactly what child ‘participation’, ‘consultation’ and related concepts look like and encompass remains lacking (Reid et al. 2008; Sanders and Stappers 2008; Cele and van der Burgt 2015). The degree to which engagement with children occurs can differ, with the most substantial participation evidenced by child initiated and shared decisions with adults (Hart 2008). Quality and types of participation across degrees of engagement can also vary (Hart 2008; Simovska 2008; Hagen et al. 2012). No one approach is necessarily better than the other, but rather optimal processes are context-dependent. In the context of this research, the terms participation, engagement, consultation, and co-design are used interchangeably to represent the overarching concept of engaging with children regarding environmental design.

For the most part, research in this space has focused on adult perspectives, despite an acknowledgement of the importance of understanding priorities and needs from ‘people of all ages’ (American Planning Association 2017). The United Nations Convention Rights of the Child (UNCROC; United Nations (1989)) and the Child Friendly City Framework for Action (UNICEF 2004) prioritise activating child voice for informing neighbourhood design. In Aotearoa New Zealand (NZ), the recent Tamariki Tū, Tamariki Ora: Child and Youth Wellbeing Strategy aspires for children to be involved and empowered through representation of youth voice; and happy and healthy, living in healthy, sustainable environments (Department of the Prime Minister and Cabinet 2019). Importantly, child-reported perspectives, priorities, and needs were used to inform this national strategy – setting a strong precedent and standard for subsequent policy directives. As a signatory of the UNCROC, NZ has agreed to uphold certain rights and conditions for children, including giving children a voice and representation in government, and listening to children’s views. This is explicit in Article 12 which guarantees the ‘right to express those views freely in all matters affecting the child, the views of the child being given due weight’. These key policy documents all place importance on enabling child voice – respecting their opinions and ensuring their opinions are reflected in policy.

Whether these aspirations are realised is likely influenced by the presence or absence of policies that stipulate the need for (and means by which to undertake) child consultation, engagement, and participation in planning. In NZ, the Child Impact Assessment Tool was developed by NZ’s Ministry of Social Development to support the nation’s commitment to the UNCROC in policy-making processes (Ministry of Social Development 2018). Importantly, the tool recognises the Treaty of Waitangi/Te Tiriti o Waitangi (foundational document for NZ) as a source of rights for children living in NZ, and stipulates that policy proposals must comply with this. The tool also recommends incorporating views of a diverse range of children and young people when assessing whether policy proposals will improve the wellbeing of children and young people. The recent ‘Child Friendly Planning in the UK’ report by Wood et al. (2019) contextualised child consultation in a UK context. This report provides an excellent platform for other regions to draw from, in order to gain a comprehensive understanding of child consultation in planning environments that promote and support child health. A growing evidence base documents child consultation in planning and the benefits of such approaches (Danenberget al. 2018; Freeman and Cook 2019; Witten and Field 2019). For example, children see the world

through a different lens than adults – enabling them to identify issues and develop innovative solutions that might not otherwise be noticed by adults (Danenberg et al. 2018; Freeman and Cook 2019). Including recommendations from young people can lead to improved efficacy of interventions, policies, and programmes (Derr et al. 2018). Social inclusion (important for child and youth wellbeing) is facilitated through child engagement in planning. Finally, participation in environmental planning and consultation can lead to children acting as environmental stewards during childhood and beyond (Derr et al. 2018).

The purpose of this research is to contribute to this knowledge base through: (1) conducting a systematic mapping review of international literature to identify the prevalence of policies and practices including child consultation, engagement, or participation in urban and neighbourhood planning, and (2) identifying national and local urban planning policies in NZ that describe the inclusion/exclusion of child participation policies.

## Methods

### *Aim 1: literature review*

A systematic mapping review (Grant and Booth 2009; Miake-Lye et al. 2016) in Scopus and PubMed was undertaken. The study protocol is registered on the Open Science Framework (<https://osf.io/y3erw/>) and follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews Checklist (Supplementary material). Studies were eligible at the searching stage if they were: (1) peer reviewed articles published in academic journals, (2) published in the English language, and (3) conducted with human populations. Search terms were identified from MeSH terms, existing literature reviews, and the expertise of the research team (Table 1).

Duplicates were removed then titles and abstracts of remaining articles were screened for inclusion. Studies were included if they detailed an urban or neighbourhood planning policy, recommendation, or process that incorporated child consultation, engagement, or participation in some form. All study types (cross-sectional, natural experiments, prospective, retrospective, experimental, longitudinal studies; quantitative, qualitative and mixed/multi methods) were included providing they met other inclusion criteria. Where it was not clear whether articles met the inclusion and exclusion criteria, full text articles were sourced.

Study characteristics and key findings were extracted using a study-specific data extraction form. Variables included study author, year of publication, country, policy/strategy description, information on child consultation, engagement, or participation in urban and neighbourhood planning, and key findings. Key findings were collated into main topic areas, summarised, and synthesised.

**Table 1.** Search categories and terms used in this review.

Population	Process	Environment	Policy	Health
Child*	Consultation	Neighbourhood	Policy	Health promot*
	Co-design	Neighborhood	Policies	Healthy
	Codesign	Built environment*	Planning	Public health
	Participation	Urban design	Framework	
	Engagement	Urban plan*	Recommendation*	

## ***Aim 2: national grey literature review***

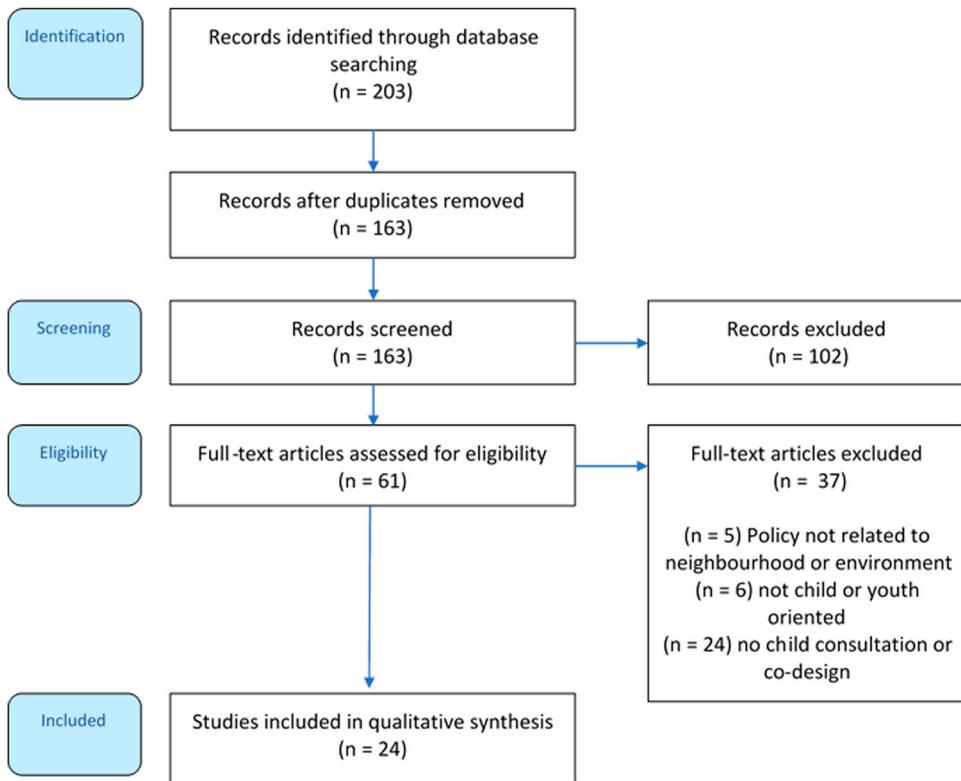
A manual search of websites of urban and community planning authorities, local boards, and transport authorities in NZ was undertaken. The presence or absence of recommendations on child consultation, engagement, or participation in urban and neighbourhood planning, was documented and details were extracted. NZ has 78 local, regional and unitary councils, 74 of which were relevant to this review. Excluded were environmental councils such as Environment Southland, as their policies did not pertain to neighbourhood or community planning. The Significance and Engagement policy (which enables councils to determine whether areas of interest warrant public consultation and outlines consultation processes) of each of the 74 relevant councils was sourced, in addition to the council's most recent long-term plan. In the event that a long-term plan was not made available, the most recent annual plan was sought. Additionally, any separate youth or consultative policy that each local council may have made available was sourced. Descriptive data for the presence or absence of recommendations on child consultation, engagement, or participation in urban and neighbourhood planning policies and strategies was generated.

An exemplar project, 'Healthy Puketāpapa' was identified and detailed as an example of local-level incorporation that is recommended through local council action. Puketāpapa is a local board area of Tāmaki Makaurau Auckland City, NZ's largest city and home to over a third of its population. In 2018, the Puketāpapa local board created 'Healthy Puketāpapa', a series of policies and strategies focused on the health and wellbeing of the community (Puketāpapa Local Board 2019; Wilson 2019). The main goal of Healthy Puketāpapa is to enable feelings of safety, comfort, happiness, and satisfaction in the people of Puketāpapa, as well as promoting holistic health and wellbeing. There are two significant document types under Healthy Puketāpapa – the Strategic Framework (5–10 year plan) (Puketāpapa Local Board 2019), which is a long-term development strategy, and the Action Plan (2 year plan) (Wilson 2019) which is concerned with implementation of the strategy. Both documents are guided by Te Pae Mahutonga (Durie 1999), a holistic Māori (indigenous people of NZ) health model and were developed in collaboration with the community, including with children (defined as aged <16 years). Examples of community-identified neighbourhood needs in consultation were to improve access to water fountains, to improve safety for walking and cycling, and to create public spaces (including green spaces) that support activity for people of all ages. Thus, Healthy Puketāpapa was identified as an optimal exemplar project to demonstrate a model for weaving child consultation throughout strategy and policy document development for healthy environments.

## **Results**

### ***Aim 1: literature review***

The initial search yielded 203 results, of which 24 articles met the inclusion criteria and were included in this review (Figure 1). No articles focused on policies that stipulated the need for child consultation, engagement, or participation in urban and neighbourhood planning. However, the 24 articles included did cover the four topic areas to some extent. Two approaches to child consultation were evident – one approach centred child consultation as the primary phenomenon of interest ( $n = 11$ ) while the other used child



**Figure 1.** Flow chart for studies screened and included in systematic mapping review.

consultation as an element of methodology or as a particular approach to a pre-existing issue ( $n = 13$ ) (Table 2). Focus groups were commonly employed to gather children's perspectives on the built environment and other relevant issues. Alternative techniques such as photovoice ( $n = 3$ ), child community audits ( $n = 4$ ), child-led workshops ( $n = 1$ ) and mapping techniques ( $n = 1$ ) were also used. Research predominantly arose from the USA, with representation also from Europe, Africa, and Australia.

### *Co-design and planning processes*

Children's co-design in retrofitting a particular built space or feature was outlined in two articles (Carroll et al. 2017; Pawlowski et al. 2017). Carroll et al. (2017) investigated the redesign of a city square that occurred during a consultative process with children. The methods presented provide helpful guidelines for other researchers or authorities to conduct effective child consultation. Key aspects included a child friendly audit which involved children visiting and playing in the city square as well as taking pictures. Another element was a fun and engaging workshop which involved analysing photographs and annotating a map of the area. From this, the authors created a plan which was fed back to the children and cross-referenced with the children's ideas. In this case, the authors noted that this consultation and redesign process was both a first for Auckland Council and has seldom been investigated within research spheres. Additionally, the process fulfilled the study criteria for enabling effective and

**Table 2.** Characteristics and key findings of included studies.

Study Author (s) and Year	Country (study location)	Participants – Number Age (years or school level) Sex	Setting	Policy/strategy description	Description of child consultation, engagement, or participation in urban and neighbourhood planning	Key findings
Aarts et al. (2009)	The Netherlands	3449 children aged 9–13 years old. No data reported on sex.	42 primary schools in four medium-sized Dutch cities (Tilburg, Breda, Hertogenbosch, and Roosendaal).	Social and environmental policies to encourage physical activity. Specifically looking at multi-sectoral policy specific to four localities.	Children in 42 primary schools in the four cities were consulted. A survey was given to children and parents separately with questions regarding green space, the built environment, active transport and other topics.	The survey had a 90% response rate from the children. The information gathered was used to inform evidence-based policy plans encouraging active transport in children. The research was able to link children's views to their physical activity levels.
Arredondo et al. (2013)	USA	Five Latino youth leaders 9th–12th grade (ages 13–18). No data reported on sex.	A church community in Chula Vista, San Diego.	Policies relating to parks and green space access for the Chula Vista community.	Latino youth leaders from a local high school were involved in planning data collection and advocacy activities. The youth leaders, along with promotoras (health leaders in the community) decided to conduct surveys and audits of the green space to find barriers to access. Training was provided. Youth also gave their own observations and ideas and met with city council members to share their concerns.	As a result of this intervention, actions carried out included the removal of a fence and overgrown plants, enhanced amenities, improved pedestrian paths and safety.
Badland et al. (2009)	New Zealand	50 children were involved in the Photovoice element of the study. An unspecified number of children aged 3–12 were involved in a household survey. No data reported on sex.	Five diverse neighbourhoods in Waitakere and the North Shore, Auckland.	Policy relating to the built environment and its impact on activity levels and obesity. This is part of the International Physical Activity and Environmental Network (IPEN) collaboration.	Children in five diverse areas of Auckland were invited to participate in Photovoice research. A child-specific focus group analysed the photos resulting and captions that the children wrote. Topics explored in the Photovoice component included activity, neighbourhood factors, and the built environment. An adult and a child from each household in the study sample were also recruited to participate to gather activity data and anthropometry.	This is a study protocol. Thus, no concrete results came from this particular paper. The researchers hope to investigate the built environment and its relationship to health outcomes in adults and children. Research gaps were identified. These included potential underestimation in the literature of the relationship between the built environment and health.
Boelens et al. (2019)	The Netherlands	818 children and 818 young people/adolescents. No data reported on sex.	Three intervention neighbourhoods and three control neighbourhoods in Rotterdam, Netherlands.	Under the 'Promising Neighbourhoods Program', several youth policy domains were focussed upon. Interventions specifically designed for each neighbourhood were created, looking at how neighbourhood quality and other factors could decrease health inequalities amongst youth.	Focus groups of 12–18 year olds in intervention and control neighbourhoods will be undertaken to investigate the quality of neighbourhood conditions and other factors, including community resources, from the perspective of the youth.	This is a study protocol. Therefore, the results of the study are not yet available. However, researchers hypothesise that collaborating with the community, including youth, could lead to higher quality interventions that fit the community's needs and reduce inequities.
Carlson et al. (2012)	Tanzania	24 children aged 9–14 in each neighbourhood cluster. No data reported on sex.	Fifteen neighbourhoods in the Kilimanjaro region of Tanzania with approximately 2000–4000 residents.	This study involves strategies to alleviate the impacts of the HIV/AIDS epidemic upon young people in Tanzania. The focus is around education and neighbourhood collaboration.	Youth were involved in focus groups before and after the intervention to discuss their views on issues. Topics included worries and concerns, development and sexuality.	The response rate was 95% for the pre-test survey and 96.8% for post-test interviews. The program itself was found to increase self-rated self-efficacy in terms of young peoples' abilities to engage in the community and express emotions appropriately. This process allowed youth to gain confidence in engaging in forums and public processes regarding HIV legislation, enhancing existing consultative processes involving youth.
Carroll et al. (2017)	Aotearoa New Zealand	Eleven children aged 7–13, six girls and five boys.			Children participated in three half day workshops which involved consultation	The children had numerous ideas with varying levels of viability. Some ideas were included

			A city square in Auckland central business district, (CBD), New Zealand.	The focus of this study is urban planning and development, particularly the redesign of Freyberg Square in Auckland CBD.	and co-design. This included an audit of the Freyberg Square space, oral responses, a Photovoice component and a group discussion. Children were also shown a proposed plan incorporating their ideas.	in the final redesign and some were not for various reasons including push-back from tradespeople and council/resource constraints. This redesign process created a more child-friendly space and the process itself was appropriate, engaging, and fun. Through provision of detailed research methods and processes, the authors gave a clear plan that could be reproduced in other settings. This process benefitted adults as well, as adults were encouraged to think laterally and learned more about what a 'child-friendly' environment really is.
Corsino et al. (2013)	USA	Six focus groups were conducted, one of which involved adolescents of an unspecified number. No data reported on sex.	Durham County, North Carolina, USA.	Community-oriented obesity interventions in Durham, North Carolina.	The focus groups discussed participants' perceptions of obesity as a health problem and the impact this has on the community.	The focus groups determined that obesity was a top priority issue in terms of resource needs and policy changes including neighbourhood and environmental policy. Based on this, the researchers have pilot tested an intervention at a school in Durham involving nutrition and exercise.
Davis and Jones (1997)	UK	468 children aged 9–11 and 13–14 completed a survey and an unspecified number were selected for a focus group. In the junior schools, 83 girls and 94 boys participated; while 125 girls and 166 boys from secondary schools participated.	Four state schools in Birmingham, UK.	Urban planning and its interactions with child and youth health.	A semi-structured questionnaire was employed. The survey measured transport modes, access to out of school activities and community resources, and independent mobility. Focus groups were selected based on survey data to discuss topic areas including transport and community resources more in-depth.	Children and young people appreciated proximity to key destinations in their local areas (i.e. being close to friends, shops, school etc.). Negative aspects included not feeling safe in their communities and their local areas being dirty/unkept. Suggestions included pedestrianising areas and reducing pollution, creating youth facilities and improving parks. The authors suggested an increased focus on child consultation in urban planning and development to begin to make positive changes to urban/suburban environments and empower youth.
Finkelstein et al. (2017)	USA	42 youth aged 12–14 from low-income families participating in focus groups. No data reported on sex.	Low-income households in Colorado, USA.	Strategies to improve rates of children's physical activity in Colorado, especially in low-income communities.	Researchers conducted a focus group with children to identify barriers to physical activity for children and recommendations of how to address these barriers.	One concern brought forward specifically by youth was safety in the neighbourhood. There was much more discussion of the opinions of parents and stakeholders despite the inclusion of the child focus group. However, cumulatively the focus groups identified 12 common findings which were 'lack of affordable options, traffic safety, limited access to high-quality facilities, transportation, neighbourhood inequities, limited program availability, lack of information, and limited engagement with community'. The authors noted that many barriers to physical activity operated at a community level and would require policy change and specific interventions.
Fredriksson et al. (2018)	Sweden	207 young people aged 12–16 who use youth centres, were surveyed and no			A purposive sample of 207 young people who used these youth centres completed	The policies of the youth centres themselves helped to foster healthy choices amongst

*(Continued)*

Table 2. Continued.

Study Author (s) and Year	Country (study location)	Participants – Number Age (years or school level) Sex	Setting	Policy/strategy description	Description of child consultation, engagement, or participation in urban and neighbourhood planning	Key findings
		data was reported on sex. Additionally, six group interviews were completed with youth aged 13-17, consisting of 13 boys and 13 girls.	Two youth centres in lower income, multicultural suburbs of Sweden.	Advocating for the place of youth centres and why youth centres should be funded in Sweden as part of neighbourhood policy.	questionnaires and six semi-structured group interviews with youth were held. Topics included benefits and potential improvements for the youth centres, as well as motivations for their visits. These views and opinions were used to guide advocacy for policy decisions.	youth. Youth stated that building meaningful relationships was central to their participation in youth centres, including through spending time with friends and having trusting relationships with leaders. They identified being safe and welcome as important. Having both unstructured and structured time in these centres was critical. Based on this research, a variety of recommendations were made to guide policy, including using practice-based research to give youth an opportunity to be heard in policy development processes.
Frerichs et al. (2018)	USA	21 young people aged 13-17, fourteen girls and seven boys.	A rural, low-income North Carolina County.	Creating a curriculum that helps youth understand obesity and advocate for change. Looks at community-level and policy-based factors such as food environment and pricing.	Twenty one young people took part in a four session curriculum looking at leadership, obesity interventions, and communication strategies. Their views on obesity-related issues and self-rated ability to advocate for policy change was assessed before and after the programme.	After completing the programme, researchers observed significant increases in young peoples' perceptions that the environment contributed to obesity, and in their support for policies regarding food environment and cost. Youth reported increased research and participatory actions such as advocacy in their community. However, their socio-political skills and motivation to influence policies and environmental determinants did not change, possibly due to high initial values in these areas. The unique views of youth were able to be showcased. For example, youth discussed how and why they would patronise a fast food restaurant. This helped to further refine causal pathways for youth obesity and unhealthy behaviours and determine how curricula could influence youth.
Goltsman et al. (2009)	USA	Number and age of participants not specified.	Parks in Santa Rosa and Marin County.	Improving access to natural environments for children, particularly in urban areas, in order to increase activity levels and improve health.	In one case (the Marin County, California case study), a step in the redesign of a new park was a 'family discovery day' in which children and their families could engage in the existing park area and provide ideas.	Through community input and an urban planning process, authorities were able to create nature-based parks that facilitated the right to play for children, provided access to nature and urban wildlife, and incorporated sustainability amongst other attributes. Unique findings from the participatory process showed that utilising natural environments for play contributes to childrens' health and wellbeing, and is essential in the design of a healthy city.
Hackett et al. (2015)	USA	Nine students aged 15-17, five females and four males participated in the running of a community farmer's market.	Roosevelt, Long Island.	Policy involving facilitators of and barriers to physical activity, especially concerning the built environment. This study is specifically set in low-income areas with high obesity rates.	This study used Photovoice to engage youth. Participants were able to highlight positive and negative environmental features.	Assets included the local farmer's market, new school buildings, the new library, and parks. Barriers to physical activity and health included few healthy food choices, inaccessible footpaths, and neglected

Hanssen (2019)	Norway	No participants, but a general guideline.	Urban Norway.	Policy and planning that facilitates activity and health for children living in urban areas. Child-friendly urban planning in accordance with the Planning and Building Act.	In Norway, the Planning and Building Act ensures that children and youth are involved in the planning process. This article explores how governments and planning authorities at a local level can achieve this in a meaningful and positive way.	spaces. These findings resulted in the formation of the Roosevelt Environmental Justice Coalition which appealed for federal funding for 'community advocacy and capacity building'. Youth were able to highlight the positives and negatives of the built environment and have their voices heard by policy makers. Findings suggest that larger municipalities were much more likely to have a permanent arrangement for youth consultation. There is great potential for increasing the involvement children have and making processes more innovative. This paper suggests a novel method – the Children Track Methodology whereby children use maps to mark off and discuss important areas in their local environments. This process can be completed online and provide valuable information including about how children value space and why. The information can then be used to inform urban planning.
Hinkle et al. (2018)	USA	73 youth from the Food & Fitness intervention were involved in this study. The majority (63%) were aged between 16 and 18 years, 8.2% were aged between 13 and 15 years, 19.2% were between 19 and 21 years and 9.6% were between 22 and 24 years of age.	Communities across the USA.	Authentic youth engagement in the Food & Fitness Initiative. Particularly looking at built and food environments, and encouraging healthy activity.	Youth were involved in Food & Fitness partnerships which involved forming advisory boards and creating new initiatives and interventions. Community members including youth who were involved created a vision and an action plan. Youth who were involved in the F&F Initiative partnerships were interviewed (semi-structured, open-ended questions). Youth were asked about how they engaged in partnerships, challenges, what they learned, and how they contributed.	Four types of arrangements with youth were used: working with institutional partners, creating youth advisory boards, partnering with community-based youth organisations, and hosting youth engagement summits and conferences. The models which centred youth in decision-making with adults, rather than siloing and separating youth and adult activities, were more successful. Youth enjoyed being engaged in hands-on activities to keep them motivated and taking on leadership roles within the partnerships.
Lapalme et al. (2014)	Canada	Adolescents 12–18 years of age were the focus of the review question		Neighbourhood interventions that promote positive youth development. Literature review of the impact and context of such interventions.	Some of the interventions centred around youth engagement and advocacy, including, for example, Photovoice projects amongst disadvantaged youth. However, the authors commented on the overall lack of youth engagement despite a great need to include youth in such processes.	Most interventions were short-term and engaged disadvantaged or marginalised youth. Some involved youth advocacy and community engagement, for example, youth conceptualised and created a Community Technology Centre in one example. When interventions did include youth, they were found to enhance confidence, civic engagement, and feelings of empowerment. However, the authors noted an overall absence of youth voice in decision-making and implementation processes. The authors claimed that this should be examined in future research, as it is important to engage youth in decision-making to respect their rights as citizens and stakeholders who will be impacted by decisions.

*(Continued)*

**Table 2.** Continued.

Study Author (s) and Year	Country (study location)	Participants – Number Age (years or school level) Sex	Setting	Policy/strategy description	Description of child consultation, engagement, or participation in urban and neighbourhood planning	Key findings
Linton et al. (2014)	USA	136 youth completed the baseline survey. 73% of participants were female.	San Diego County, USA.	Policy supporting healthy environments – specifically involving food, nutrition and physical activity.	An evaluation of Youth Engagement and Action for Health! (YEAH!). This program involves youth advocating for local-level (neighbourhood) policy surrounding food environments and opportunities for physical activity. Surveys were provided to youth involved.	Twenty groups were involved, forming in middle schools, high schools, and community centres. Seventy three percent of participants completed the program. Most groups completed assessments of the school environment but others examined parks, outdoor advertising, and other types of advertising. Issues were identified and all 20 groups met with community legislators and decision-makers for advocacy. Eleven groups noted a change occurred as a result. For example, exterior lighting was added in one area and YMCA classes for young Muslim women were started. All changes were youth-led.
Nelson (2008)	USA	An unspecified number of school children. No data reported on sex.	Burlington, Vermont.	Policy surrounding the built environment and how this contributes to health and physical activity rates in the community.	Children and youth were involved in student-led projects in order to develop tools and frameworks to assess the built environment and its impact on health. In particular, youth in Burlington conducted walkability audits to assess how the built environment impacts activity levels. Collaboration between young people and community organisations was facilitated.	Smart Growth Vermont – elementary (primary) school children created tools to survey the built environment in order to assess for walkability and other attributes. Students created a report card for walkability and presented to local officials and community groups. The lessons that can be taken from this exercise include the value of insight and knowledge from children, how the needs of children differ from those of adults, and how the role of decision-makers should be defined by end users including children.
Pawlowski et al. (2017)	Denmark	59 children aged 11–13 years old. No data reported on sex.	Sydhavn, a neighbourhood in Copenhagen Denmark.	The built environment and its impact on activity, especially concerning open public spaces.	A quasi-experiment was described which included a children’s study. Children were involved in the co-design of urban spaces to increase movement and activity in the community. Children discussed their views on community attributes and physical activity. Then, co-design workshops took place with children, planners, architects etc, and stakeholders. Children were also involved in assessing interventions and their movements were tracked.	This paper is a study protocol so results are yet to come. The researchers hope to gain insight into co-design with children/older people and into interdisciplinary collaboration.
Rodriguez et al. (2019)	USA	26 middle school students aged 12–13 years old participated in the feasibility study. Of the 17 that completed the demographic surveys, 12 were girls and five were boys.	Santa Clara County middle school, California, USA.	The built environment, specifically walking routes around schools, and the impact on active travel.	Middle school students acted as ‘citizen scientists’ using a program called ‘Our Voice’ in which students conducted community audits using a mobile application. Students identified facilitators and barriers to active transport to school. Students took photographs and recorded sites of interest.	Following the community audits, students identified numerous barriers to active travel including a lack of pedestrian crossings and traffic violations. Students were able to attend advocacy meetings with stakeholders and were also invited to present their findings at a conference. However, they were unable to attend this conference due to liability issues.

Sharifi et al. (2015).	USA	Four focus groups of 21 children aged 10–12 years old who had reduced their BMI successfully. No data reported on sex, other than detailing whether quotes were by boys or girls.	A multi-speciality group medical practice in Massachusetts, USA.	Obesity interventions and how children and young people overcome barriers within the built environment to lose weight and improve their health.	A focus group was undertaken with children who went to well child checks at a group practice in Massachusetts and managed to lose weight. Candidates were only eligible if they lived in obesity hotspots.	Factors that had a significant impact included child motivations for change, support from family and friends, and positive neighbourhood attributes (such as parks, supermarkets, and gyms). Negative influences included unhealthy food environments and lack of spaces to exercise/be active. According to the researchers, the children's insights could be used to develop community and practice-based interventions.
Trayers et al. (2006)	UK	A focus group of nine primary school students aged 9–10. No data reported on sex, other than detailing whether quotes were by boys or girls.	A deprived neighbourhood in the South West of England (exact location unspecified).	Policy surrounding transport and health, specifically looking at a home zone development and an extension of the National Cycle Network.	Focus groups were conducted with primary school children and college (high school) aged students. A topic guide was given but participants were encouraged to speak freely.	Students brought up concerns surrounding safety, space, antisocial behaviour, physical activity, and health. Primary school children perceived the local area as unclean and unsafe. College students were concerned about the potential for antisocial behaviour but were encouraged by the potential for physical activity to increase.
Watson-Thompson et al. (2008)	USA	A focus group of 16 neighbourhood youth aged 12–18 were involved in this study. No data reported on sex.	A community partnership in Ivanhoe, Kansas City, Missouri.	Creating a framework for healthy youth development and violence prevention. A focus on broader environmental and neighbourhood issues.	Youth and mentors/advisors developed the Ivanhoe Youth Council which involved strategic planning about community issues and concerns.	Goals of the council included creating and promoting activities for youth. Leaders emerged amongst the youth and were trained. Policies and programmes centred around preventing youth violence were developed. The council facilitated 26 community changes in policy, programmes, and practices. These changes included creating a neighbourhood crime awareness rally and a back to school celebration for the community's youth.
Winter et al. (2016)	USA	Ten adolescents with a mean age of 12.8 were recruited as citizen scientists. Six of the ten adolescents were female.	North Fair Oaks, California.	Policies surrounding the built environment and its impact on active living.	Adolescent citizen scientists were recruited and conducted environmental assessments to look for barriers to and facilitators of active living. Participants attended training and then undertook their assessments. They took photographs (Photovoice) and recorded audio narratives.	This study demonstrated that, with minimal training, minority and marginalised community members including adolescents were able to engage in data collection and analysis, and could create potential solutions and engage with stakeholders for change.

meaningful participation, with metrics including giving children ‘appropriate support’ to participate. Similarly, Pawlowski et al. (2017) asserts that children in their study were involved in co-design, where spaces were designed *with* children’s input, not just *for* children. Key methodological aspects of this study that could be reproduced included supporting children to create collages and models of potential urban installations.

### ***Benefits and barriers***

Co-design processes and the inclusion of children in decision-making were seen as beneficial to children (Carlson et al. 2012; Carroll et al. 2017; Frerichs et al. 2018). In many cases, educational and development-focussed programmes (all with at least a minor focus on consultation or urban and neighbourhood design) incorporated or were centred around child development. For example, in many cases researchers identified youth as having learned valuable skills and competencies (Nelson 2008; Lapalme et al. 2014; Frerichs et al. 2018). Children’s self-efficacy and ability to participate in civic processes was seen to increase in a study of focus groups about HIV in terms of neighbourhood development, health promotion, and civics (Carlson et al. 2012). Winter et al. (2016) recruited children as citizen scientists which helped to develop their skills in technology use, environmental science, and urban design as well as contributing to positive change in their local environments. The researchers suggested this process amplified the voices of marginalised youth, as it provided youth with a platform to engage with decision-makers and important community stakeholders regarding their environments.

There were numerous barriers to consultation processes involving youth. Firstly, it was reported that children, particularly in minority communities, felt hesitant to get involved (Winter et al. 2016). According to these researchers, this may be due to lack of trust of researchers and decision-makers. A similar level of hesitancy was reported in the study by Arredondo et al. (2013). In this research, there was a high dropout rate from the initial surveys to the child-led audits, which made assessing the success of consultations difficult. Researchers commented that children did not feel confident participating in such in-depth research and leading the process. In other cases, even where participation rates were high it was not always feasible to execute children’s visions completely. For example, according to the research by Carroll et al. (2017) pedestrianising the area of interest (i.e. making it exclusively for pedestrians and removing all motorised transport modes), as per children’s recommendations, was not possible due to pressure from tradespeople and shop owners in the local area (who also felt that they were not adequately consulted). In the case of Rodriguez et al. (2019), the extent to which children were able to disseminate their research as citizen scientists through, for example, attending conferences, was limited. The students were not able to attend an environmental conference due to liability issues.

### ***The built environment***

The built environment – referring to the man-made physical structures and spaces in cities and neighbourhoods, including any feature that has been created or manipulated through human action (Srinivasan et al. 2003) – was a prominent focus in the literature. Authors also used phrases such as ‘urban environments’, (Davis and Jones 1997) and ‘urban sprawl’ (Goltsman et al. 2009) to describe the built environment. Thirteen of the 24 included

articles discussed the built environment in relation to child consultation, neighbourhoods, and co-design.

The literature emphasised that children's views on the built environment are important because children interact with the built environment differently to adults, and their local built environment often has a significant impact on their lives. For example, the safety and suitability of pavements and roads can significantly impact children's abilities to walk to and from school due to safety concerns and other barriers (Nelson 2008; Hanssen 2019; Rodriguez et al. 2019).

Current systems and structures were foci of discussion in terms of positive and negative environmental attributes (Davis and Jones 1997; Trayers et al. 2006). Commonly, the unique insights of children were used to identify and value environmental attributes that were seen to be working well or as being good examples from children's perspectives (Davis and Jones 1997; Hackett et al. 2015; Hanssen 2019). Identification of positive attributes helped to identify facilitators for children's physical activity, feelings of safety, and health. For example, Hanssen (2019) created an innovative process called the 'children track methodology'. This allowed children to mark off local areas of interest and to discuss their neighbourhood, including features that they enjoyed and valued, or more negative features, and their use of the built environment. Negative aspects of the built environment were highlighted as potential areas for policymakers to create change and to spur the introduction of new interventions (Hackett et al. 2015; Rodriguez et al. 2019). For instance, one study found that neglected spaces and inaccessible footpaths were barriers to children's physical activity in a low-income United States suburb, and were identified as areas for improvement (Hackett et al. 2015).

### ***Green space***

Green space was the primary phenomenon of interest in two articles (Goltsman et al. 2009; Arredondo et al. 2013). Green space refers to environments such as parks that are outdoors, open public spaces which include 'natural' features such as trees and plants, water, and other similar aspects. Recreating natural environments was the focus of Goltsman et al. (2009) in order to facilitate children's play. The authors considered there to be a preoccupation with artificial playground equipment and children's spaces, rather than shared, integrated environments. Arredondo et al. (2013), on the other hand, was more concerned about access to, and improvement of, existing green space. Methodologically, Arredondo et al. (2013) employed youth as leaders to survey and suggest improvements to these green spaces. Goltsman et al. (2009) held an open day for children to explore the park and to contribute ideas for improvement. This meant that the park design was based on community needs and aspirations. Overall, these articles show that urban design and neighbourhood planning do not only involve creating or improving spaces, but also facilitating access through child-centred improvements and changes.

### ***Physical activity and body size***

Physical activity featured as a central area of concern in eight articles and body size in four. Physical activity was most commonly explored in the context of the built environment and green space, and how these elements can facilitate or hinder activity (Aarts et al. 2009; Badland et al. 2009; Finkelstein et al. 2017). Body size was often considered to be a consequence of urban and neighbourhood planning. In particular, researchers were concerned

with walkability and food choice, and how these factors relate to body size (Aarts et al. 2009; Finkelstein et al. 2017).

Consulting with children on barriers to physical activity amplified children's unique perspectives on this issue. For example, a study by Hackett et al. (2015) found children to be highly aware of the assets in their local community which encouraged physical activity and barriers which hindered activity. Assets included a local farmer's market and parks, whereas drawbacks included inaccessible footpaths and neglected spaces. This information was used as motivation to form the Roosevelt Environmental Justice Coalition which appealed for federal funding to further environmental advocacy, particularly amongst youth. Similarly, Davis and Jones (1997) found that children considered walkability and proximity to facilities to be assets in their local area. Barriers included noise and perceptions of safety as well as rubbish and vandalism.

In terms of body size, many researchers, including Corsino et al. (2013) and Sharifi et al. (2015) were motivated by the childhood obesity epidemic and wanted to gain the unique perspectives of children in order to investigate causal pathways and potential solutions. Sharifi et al. (2015) conducted focus groups with children who lived in obesogenic environments but were able to reduce their body mass index. Children provided information on both personal and neighbourhood attributes that they felt supported their weight loss. Children discussed many neighbourhood attributes that aided or hindered their lifestyle change, such as accessibility of parks and the food environment. The authors have outlined these factors as potential guidelines for designing interventions, particularly for public health practitioners and policy makers.

### **Summary**

Studies identified were diverse in their topics of interest (including green spaces, children's physical activity and body size, and informing built environment design), methods (including photovoice, focus groups, audits, workshops, and participatory mapping), participants, and region of study. Methods employed were outlined in detail in two studies. Overall, child co-design and participatory approaches were seen to be beneficial, however a number of barriers existed, including a reluctance of children to participate, and challenges with actualising children's visions.

### ***Aim 2: aotearoa New Zealand policy environment***

Here, we shift from a broader international focus on extant literature to describing the national policy context in NZ. The NZ government is divided into central and local branches. Central government encompasses the legislature, executive, and judiciary, with responsibilities including housing, education, justice, foreign policy, health, and immigration, amongst other areas. Additionally, NZ has 78 local councils with responsibilities such as water, rubbish, public transport, and roads. While local governments are bound to some central government regulations and requirements, they operate relatively autonomously to represent their residents. Consequently, there is significant variation in the policies and practices of each local council.

One protocol that all local councils must follow is creating long-term and annual plans for their area. These plans provide a consistent metric for assessing child consultation. All 74 local council plans had some mention of consultation and public involvement in the

creation of the plans themselves, as well as general consultation practices. However, child consultation was not mandated across councils, and had a more prominent role in some councils compared to others.

At a national level, both the Department of the Prime Minister and the Cabinet and the Ministry of Social Development have created reports and policies to uphold the UNCROC (Table 3). Tamariki Tū, Tamariki Ora: NZ's First Child and Youth Wellbeing Strategy utilised both child consultation itself and emphasised the importance of including children's opinions in decision-making across the government generally (Department of the Prime Minister and Cabinet 2019). The Ministry of Social Development's Agenda for Children (Ministry of Social Development 2002) laid out what is currently being done to enhance child consultation throughout central and local government. This included representing children's views in family court, as well as creating youth boards and representational roles at a local government level and in schools. Additionally, the report detailed a child consultation process, which elicited children's views on how they would like their voices to be heard in government. The Ministry of Social Development's Child Impact Assessment Tool can be used by government and non-government agencies to assess whether any proposed policy or legislation is likely to support child and youth wellbeing and includes child and youth consultation as a key evaluation component (Ministry of Social Development 2018). Despite this supportive policy environment at the national level, there was inconsistent evidence of these policy directives being implemented at the local level.

The Local Government Act (2002) provides central government guidelines on how local councils must operate. Of note is the article which obliges local councils to consult 'persons who will or may be affected by, or have an interest in, the decision or matter'. Because children are citizens impacted by governmental decisions, this article implies that child or youth consultation is necessary, despite no explicit mentions of this. Under the Local Government Act (2002), each local council must have a Significance and Engagement Policy in place. The council, having been elected to make decisions on behalf of its residents, cannot and should not consult the public on every issue. Thus, Significance and Engagement Policies enable councils to determine whether areas of interest warrant public consultation. This policy also outlines the ways in which councils can and should engage with the public in consultation processes. Engagement tools may differ depending on the demographic the council is aiming to engage with; for example, social media may be a suitable consultation tool for youth, but not for elderly people.

Each of the 74 local councils' Significance and Engagement Policy is outlined in the supplementary material. Based on an analysis of each of these policies, the basic premise is the same within each local council. They outline when and how consultation will happen, list strategic assets, and define various levels of community engagement. However, there is some scope for each local council to define particular areas of importance, one of these being child consultations. While all 74 local councils state in their Significance and Engagement Policy that they consult those who will be affected by the decision, only 32 local councils explicitly mentioned child or youth engagement in their policy. The scope of the issues addressed differed between each of the 32 councils. Some councils directly addressed youth as important stakeholders in decision-making or outlined the purpose of local Youth Councils in consultation processes, while others took a broader focus on youth engagement. While there are numerous procedures that

**Table 3.** Key national-level documents involving child consultation or participation for healthy environments.

Category	Description	Child Consultation
National-level policy concerning Local Boards (Parliamentary Counsel Office 2002)	Local Government Act 2002	No explicit mention of consulting children but asserts: '(a) that persons who will or may be affected by, or have an interest in, the decision or matter should be provided by the local authority with reason-able access to relevant information in a manner and format that is appropriate to the preferences and needs of those persons. (b) that persons who will or may be affected by, or have an interest in, the decision or matter should be encouraged by the local authority to present their views to the local authority'.
National-level report from the Department of the Prime Minister and Cabinet (2019)	Have Your Say: Summary Report National Engagement on Tamariki Tū, Tamariki Ora – New Zealand's First Child and Youth Wellbeing Strategy	The strategy's engagement report contains many references to the importance of consultation. Adults and children who were involved in the consultation process both asserted that including children's voices in decision-making is important. Over 6000 young people shared their views on health and wellbeing. There is mention of respecting the rights set out in the UNCROC. Children advised that they wanted to be listened to through face-to-face consultations. 'Autonomy, advocacy, and listening to children and young people' was a common theme.
National-level government strategy from the Ministry of Social Development (2002)	New Zealand's Agenda for Children	This entire strategy was led through consultation with children and young people. Ten principles to guide the report were developed through this consultation process. The report recognises and supports 'provision', 'protection', and 'participation' as set out in the UNCROC. Takes a 'whole child' approach to forming policy. The strategy lays out what is already being done. This includes local council consultations with children, youth councils, the Law Commission examining Family Court processes and how children can best be represented and involved, and with Board of Trustees Representatives at schools.
National-level Guide from the Ministry of Social Development (2003)	Involving Children, A guide to engaging children in decision-making	This guide provides guidance to organisations, government departments, community groups and individuals on how to engage children up to the age of 18. In addition to highlighting the principles of and barriers to children's participation, and benefits for organisations, children and society, the guide details the ethical considerations that also need to be taken into account when engaging with children. There are a number of practical issues to enabling participation and guidance on working with specific groups of children provided.
National-level guide from the Ministry of Youth Development (2009)	Keepin' It Real, A resource for involving young people in decision-making	This document was created as a companion to the previous guide, <i>Involving Children, A guide to engaging children in decision-making</i> . However this guide focuses on advice for youth participation aged 12-24. As well as discussing the principles of youth participation, the guide presents two models, Hart's Ladder and Shier's Pathways to Participation, with examples to assist organisations in developing projects with youth. The guide provides a practical checklist for organisations to determine their level of adherence to the principles of youth participation.

National-level guide from the Ministry of Youth Development (2008)	A guide for local government – An introduction to youth participation	This document offers guidance, tips and examples to local governments’ of engaging youth in decision-making. Brief examples of methods to engage youth are provided such as youth councils, consultation, surveys and youth forums. Guidance on how to conduct youth-friendly consultations and establish youth councils is given, followed by a number of successful examples of each in NZ.
National-level Child Impact Assessment Tool from the Ministry of Social Development (2018)	Improving the Wellbeing of Children and Young People in New Zealand	This guide and associated Child Impact Assessment Tool provide a framework on which to evaluate whether policy/legislative proposals are likely to improve the wellbeing of children and young people. Child and youth consultation is a key component, with one assessment criteria querying whether the respondents have ensured the views of children and young people are part of the evidence base of the Child Impact Assessment, and whether consultation has occurred with diverse groups of children and young people.
Local Government Urban Planning Guide – works alongside the Unitary Plan (Auckland Council 2014)	Auckland Design Manual: Designing Child Friendly Parks & Open Spaces*	This document suggests that designing child-friendly spaces involves listening to children and respecting their views and wishes. Heavily involving children in design and planning processes is also said to increase ‘creativity and inclusivity’. Consultation also increases pride and ownership amongst children of child-friendly spaces. There are numerous design and consultation guidelines provided, as well as examples of child friendly open spaces.
UNICEF (NGO) Initiative (UNICEF 2004)	UNICEF Child Friendly Cities Initiative (launched in 1996)	Numerous cities including Auckland, Wellington and Whangārei have made steps towards the Child Friendly Cities criteria. This is a two-stage process with 12 benchmarks, which include respecting children’s rights and consulting with children.

\*Although this is a policy specific to the Auckland region, it is the only design manual of its kind across NZ.

local councils must follow, including under the Local Government Act (2002), councils have autonomy on many issues. This autonomy extends to youth councils. The purpose of youth councils is to amplify youth voices in the community and to gather a youth perspective on significant issues. Forty eight local councils had current, established youth councils or similar groups. The remaining 25 local councils either had no youth council or youth group ( $n = 18$ ), were currently in the process of establishing a youth council ( $n = 2$ ) or had a youth council that was currently inactive ( $n = 5$ ).

Forty one local councils had at least one explicit mention of child or youth consultation in their long-term or annual plans. This ranged from identification of youth as stakeholders or explanations of the role of the Youth Council, to detailed plans regarding youth consultation. Additionally, some local councils had a separate policy regarding youth consultation. For example, Central Hawkes Bay Council created a Youth Action Plan which discussed youth development at length, including consultation processes and representation.

### ***Exemplar project – healthy Puketāpapa***

The previous section identified inconsistencies in policies for child consultation and participation in urban planning activities at the local council level. Here we narrow down to one local council area in NZ and present an exemplar project from this council, Healthy Puketāpapa, that demonstrates processes for and outcomes of child participation in policy development for health promoting environments. The consultation process for strategy development was held from April to May 2019, and involved numerous hui (meetings), workshops, online consultations and a review of the Puketāpapa Children's Panel. This panel is made up of 89 children in school (aged approximately 7–11 years old and representing 19 different ethnicities) from 8 local primary (elementary) and intermediate (junior high) schools. Children's voice was developed through interactive 2-hour discussion workshops at each school with the primary aim of developing a localised action for the children and school community to implement on a health topic of their choice. Strong themes emerged from this panel including mental health and environmental issues including climate change. Results from the consultation process in its entirety were consolidated and presented to a co-creation group (comprising individuals from the community and those with specific topic expertise) that led the design and development of the Strategic Framework and Action Plan. An equity review on the draft plan and framework was completed by the Healthy Puketāpapa Project Manager using the Ministry of Health NZ Health Equity Assessment Tool (a planning tool encompassing 10 questions to assess interventions for current or future impact on health inequalities; Signal et al. (2008)) and feedback from stakeholders and the community was sought through hui and online consultation. The resulting Strategic Framework and Action Plan set out five priorities that reflect the community consultation. Children's insights with regard to play, engaging with neighbours and family and protecting the environment are prominent and reflected in one of five priority areas and associated actions within the plan – 'Encourage Movement' (Table 4). These perspectives has also informed the development of one of three 'signposts', Wāhi Takāro Wāhi Ora – Connecting People Through Welcoming Spaces, that provides directions for the focus of project delivery (Figure 2).



mapping review was derived from a wide range of different academic perspectives and covers a number of phenomena. Relatively few concrete policies or documents existed relating to child consultation within the international literature. The built environment featured in the bulk of the literature – an unsurprising finding considering environmental design is regulated by policy and affects children’s activity levels, health, and wellbeing. Several articles assessed child consultation in the development and redesign of aspects of the built environment (Carroll et al. 2017; Pawlowski et al. 2017).

### ***Benefits and barriers***

Authors including Carroll et al. (2017) found that child-friendly, engaging and fun consultation processes were possible and beneficial for children, researchers, and policy-makers alike. Also notable were the numerous barriers to child consultation such as council constraints and pushback from other members of the community who also felt deserving of a special consultative process (Carroll et al. 2017). Macro-level barriers to community consultation have been previously identified, perhaps most notably Fung’s (2015) identification of the absence of systematic leadership, lack of consensus by decision makers (the ‘elite’) on the place of community participation, and limited scope and power of participatory innovations. Time-related barriers have also been highlighted by Del Gaudio et al. (2017) namely local rhythm, community participation speed, timing norms of partners, and timing required for achieving change. These barriers likely existed in relation to the research identified in this review, but were not articulated here. It is possible this was because the main focus of research identified research that included child participation processes (and so to some extent already having overcome these broader issues).

### ***Children’s insights***

Children gave significant insight on the built environment. Some ideas emerged which would not have been considered by academics or other community members. A clear example of this is given by Davis and Jones (1997), where it was found that children were particularly concerned about walkability while adults were seemingly more preoccupied with parking and car-related issues. Green spaces and parks also arose as a key area of interest for child participation in environmental design, aligning with earlier research with children and adolescents (who also appreciated neighbourhood environments that were safe and supported social relationships; e.g. see Passon et al. (2008) and Egli et al. (2019)). In the literature, children were able to assess features of green spaces in co-design processes and initiated potential improvements. Importantly, the literature considered green space to be an environmental asset that could be used to encourage physical activity and improve health across numerous domains (Goltsman et al. 2009; Arredondo et al. 2013). Indeed, systematic reviews have demonstrated the importance of green space for children’s physical and mental health (Twohig-Bennett and Jones 2018; Vanaken and Danckaerts 2018). Moreover, children’s outdoor natural experiences can lead to environmental action in young environmental leaders (Arnold et al. 2009) and environmental stewardship in later life (Chawla 1999; Broom 2017).

### ***Direct benefits to children as participants***

Another issue explored in the literature was using consultative processes to benefit and uplift youth. Rather than trying to solve a particular issue and create change in the community, this subsection of the literature used child consultation to directly benefit study participants. For example, a number of articles were focused on consultative processes which developed youth civic skills, aligning with findings from Derr et al. (2018). Many other articles attempted to benefit children and youth in their communities of interest, for example through facilitating easy access to green space and other healthy environments. However, in this subsection of the literature, articles were set apart by the fact that the interventions were targeted at the study participants themselves (Nelson 2008; Carlson et al. 2012; Winter et al. 2016).

### ***Aotearoa New Zealand policy***

Most policies and plans were guidelines for governments and organisations to follow in their general practices. In addition, while national-level guidance in NZ related to child consultation exists, there was little specific/mandated guidance to local councils on *how* to engage children and youth in urban and neighbourhood planning processes. Many reports or policies that existed were ad-hoc. This was particularly clear within the local government context where some governments have clear and stringent policies for child consultation and others neglect child consultation in their policies. Overall, these findings reflect the fact that, traditionally, children have been marginalised and excluded from decision-making processes – governments, policy makers and planners have only recently begun to realise the critical importance of including children in such processes.

In order to put child consultation at the forefront in decision-making processes in planning, it would be more effective to provide urban planning guidelines across local councils that comes from national-level policy such as the work from the Office of the Children's Commissioner and the Ministry of Social Development's Child Impact Assessment Tool. This requirement is especially significant because of the large number of local councils in NZ. This makes it difficult to have consistency and widespread representation of youth unless higher-level policy is created to regulate the local councils, as is the case with the Local Government Act (2002). However, this is not to say that change cannot be driven at a grassroots, local level. Numerous case studies demonstrate that local councils have effected significant change in the area of child consultation. Additionally, a few simple additions to local council policy could have a significant impact. For example, 16 local councils have a Youth Council that is not mentioned in their Significance and Engagement Policy. The addition of explicit mentions of the role of the Youth Council in consultations could be beneficial. Along with such changes, national-level guidelines on how to engage children with planning would simply ensure that every local area is consulting with children at an adequate level.

### ***International policy***

While this literature review focused specifically on the NZ policy environment, other similar developed OECD nations approach child consultation differently. For example,

Australia has six state governments as opposed to numerous local councils. All six state governments have at least some legislation or special report on the role of children and youth consultation in their government, although there is significant variation between states. For example, New South Wales has a specific branch of government called the Office of the Advocate for Children and Young People. South Australia, on the other hand, has a specific report detailing child voice (Office of the Advocate for Children and Young People 2016) but no special advocate or position to enact this.

Despite having some national-level guidance on involving children and youth with decision-making, institutional systems and policies within local governments can also hinder developing participatory initiatives (Freeman et al. 2003). Several factors including entrenched ways of working, limited time frames and training for planning professionals to work with children, lack of budgets and resources, and hierarchical power structures within local councils (Freeman et al. 2003) could help explain why engaging children in decision-making and planning in NZ has, to date, been ad-hoc. Understanding how participatory planning can be integrated from the perspectives of planners is also necessary (Freeman and Cook 2019). Previous case studies with planners in NZ reported that an overwhelming majority wanted to be more actively engaged with children and youth and highlighted the need for training and good-practice guidelines (Freeman and Aitken-Rose 2005).

Recently, there has been an increase in policy-based research in the area of child consultation. For example, Wood et al. (2019) published 'Child Friendly Planning in the UK', a report on this subject matter. This review concerned itself in part with UNCROC article 12 and found that, within the UK, children are largely absent in policy considerations. The release of this report, amongst others, demonstrates that the issue of child consultation is coming to the forefront and further investigation within other countries, such as this mapping review, will add to the current body of literature and further create incentive for governments to change their practice and policies. Furthermore, recent work by Witten and Carroll (2019) and Freeman and Cook (2019) provides timely and useful guidance for planners to undertake meaningful engagement with children, providing methods, techniques and country-specific examples of good practice.

### ***Exemplar project: healthy Puketāpapa***

The community of Puketāpapa is an example of a community that has a strong focus on health and wellbeing, with many grassroots and community actions related to health, development, and rights having been initiated in the local area. Healthy Puketāpapa is an example of a local board exercising its autonomy to further uplift the community and provide a platform for children's views. However, not all local areas have such a strong, mobilised community or a local board so strongly committed to respecting the rights of children. Through the Healthy Puketāpapa initiative, the government was able to empower the community to continue and strengthen actions already taking place, and to more directly influence policy at a local government level. Puketāpapa is one of the few local boards that has centred and legitimised child consultation to such a significant degree. This is likely due to community influence and aspirations as well as political incentives and push from the local board.

## **Limitations**

There are several limitations to this mapping review. The primary drawback of this review is its scope – only NZ policy was examined in detail. This means that there is less relevance of the policy considerations in this review internationally. However, this could also be a strength because it has resulted in an in-depth exploration of one policy environment, as well as a short comparison to other similar contexts such as the UK. Another limitation of this review is its methodology. Compared to systematic reviews, mapping reviews provide a broad overview rather than a comprehensive identification and evaluation of the academic literature. However, the mapping review approach was chosen specifically for this topic due to the general limited evidence available currently. Consequently, this mapping review was able to generally demonstrate the current state of the literature and to emphasise the need for deeper exploration. Similarly, there was a small sample of literature both from the initial search and after exclusions which may have limited the breadth covered in the review.

## **Conclusion**

This literature review has brought forward many concerns relevant to child consultation and its impact on public health. Firstly, there is a need for more investigation into this topic at both a local and international level, by both academics and government decision-makers. The literature that currently exists demonstrates the potential benefits child consultation can have both for the child themselves, the community in question. This area of research and policy is promising in its ability to enact change and pin down drivers of large-scale social issues, in addition to uplifting children as citizens and enhancing their rights. Encouraging and enabling children's participation in urban planning beyond ad-hoc approaches in an on-going and systematic way could lead to empowering a new generation of youth to engage with planning, redressing previous power imbalances. While the Healthy Puketāpapa project sets out a framework for local governments or even organisations to strengthen child consultation, it would be even more effective and powerful if child consultation was organised on a wider scale, for example through national legislation and nationwide programmes. Children have the right to be consulted, as set out in the UNCROC, and these rights should be guaranteed for all, not just those who happen to live in particular parts of a country.

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