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Integrating Children and Youth Participation into Resilience Planning: Lessons from Three Resilient Cities

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Abstract

Article 12 of the United Nations Convention on the Rights of the Child of 1989 places obligations on States to provide opportunities for children to express their opinions and to have these opinions taken seriously in matters that affect their lives. While many studies from around the world have shown that children and youth can meaningfully participate to inform a wide range of issues, wide-scale implementation of children's participation, and thus the realization of children's rights, is still not widely achieved. In the context of planning for urban resilience, three cities in three diverse nations approached the integration of children and youth into resilience planning, with varying levels of success. While each city was able to support children's voicing of perspectives, facilitators struggled with how to authentically integrate youth voices into a new realm of planning—for urban resilience. This article shares the approaches and objectives from each city, and reflects on what can be learned from these experiences when trying to integrate children and youth opinions and perspectives into community planning, particularly when guided by international frameworks or agendas. While each city has had some success in realising children's rights to participate, lack of municipal frameworks for participation, and lack of knowledge about and support for children's participation among municipal leaders inhibited the realization of children's participation.

Keywords: participation, resilience, urban planning, children's rights, sustainability

Introduction

Article 12 of the United Nations Convention on the Rights of the Child states that children have the right to express their views on all matters that affect them. In its framing, Article 12 "goes beyond freedom of expression," placing obligations on States to create appropriate opportunities for children to voice their opinions *and* to have these opinions taken seriously (Lansdown, 2014, p. 172). However, when new initiatives are created, the resulting processes of citizen engagement do not always adhere to these principles. Thus, it is often left to individuals to advocate for the inclusion of children and youth. Such was the case when three cities sought to include young people in resilience planning through the 100 Resilient Cities network (100RC), pioneered by the Rockefeller Foundation. Each city approached integration of young people differently. One city established a program that facilitated young people's perspectives in urban planning within the city, with bridging allies to 100RC. In another city, researchers were well established in children's rights and participation but did not have direct connections to 100RC and, as a result, these relationships were sought during the time period of engagement, without success. In the last city, the facilitator was directly tied to 100RC. While each of these projects was important in supporting children and youth in expressing their views on matters that affect them, in some ways each project also struggled with how to authentically integrate youth voices into a new realm of urban resilience planning. This article shares the approaches and objectives individual to each city and reflects on what can be learned from these experiences when trying to integrate children and youth opinions and perspectives into community planning, particularly when guided by international frameworks or agendas.

International frameworks for realising children's rights to participation

The Preamble of the Universal Declaration of Human Rights of 1948 identifies the fundamental rights of all people, including principles of equality, access to resources for health and well-being, education, rest and leisure, and participation in cultural life (United Nations General Assembly Resolution 217A, 1948). Article 19 expressly calls for "the right to freedom of opinion and expression," which includes the right to "seek, receive and impart information and ideas," and Article 21 provides the right to take part in government.

While these rights ostensibly could be extended to all people, including children, children's rights advocates promoted the establishment of the United Nations Convention on the Rights of the Child of 1989 (CRC) as a way to ensure that these rights would extend directly to children (Edmonds & Fernekes, 1996). Similar to the Universal Declaration of Human Rights, the CRC is a broad convention, with rights consistent with the 1948 declaration, including rights to health and well-being, education, freedom of expression, rest and leisure, and participation in cultural life. Article 12 of the CRC specifically states that children have the right to express their views on all matters that affect them and to have their opinions taken into account (U.N. General Assembly resolution 44/25, 1989). Article 12 specifically states that "States parties shall assure" that the views of the child be given due weight "in accordance with the age and maturity of the child." According to Lansdown (2014), this policy was innovative in that it not only acknowledged that children's ability and the means by which children exercise their rights will change with age but also that it calls for active measures to be taken in order for children to express their views and have them taken seriously. Importantly, in 2009, the Committee on the Rights of the Child has deemed that the clause "State parties shall assure" is a legal obligation and is not just "to be encouraged" (Lansdown, 2014). The Committee also interpreted "all matters affecting the child" to be broadly defined and not just to the measures included within the CRC. In its interpretation, "it recognized that children are affected by most areas of public policy including, for example, macro-economics, environment, transport, and social protection" (Lansdown, 2014, p. 173). Lansdown summarizes the scope of Article 12 as including "space, voice, audience, *and influence*" (2014, p. 174, emphasis added).

After the CRC, other international frameworks began providing provisions for children and youth to play an active role in decision-making and action, including Agenda 21, which includes a chapter on the role that young people can play in shaping the environment (United Nations, 1992), and Habitat II and III, which include provisions for children and youth to shape urban decision-making (United Nations, 1996, 2016).

The Optional Protocol to the Convention on the Rights of the Child on a Communication Procedure (UN General Assembly A/RES/66/138 of 2011) establishes the possibility for children, as individuals or collectively, directly or by representatives, to petition the Committee on the Rights of the Child if their rights are violated. As of 2018, only 37 countries have ratified

this protocol. This low rate illustrates the difficulties in effectively enacting children's rights to participation (United Nations, 2018). The small number of countries who have ratified the Optional Protocol suggests that many countries consider children's participation to be optional

In her analysis of the CRC 25 years after its establishment, Lansdown notes that many children across the world have been given voice in a wide range of sectors and that many local and national governments have established youth councils as a means of institutionalizing youth voice. However, in terms of a full and meaningful implementation of Article 12, she notes that there is still much work to do: "Most children in the world continue to be denied a voice, and where progress has been made, it is often inconsistent and partial" (Lansdown, 2014, p. xx). More broadly, children's participation has been critiqued in that it can often be consultative or tokenistic, providing an opportunity for children and youth to voice their opinions but not to meaningfully engage in decision-making (Hart, 2014). While new initiatives often set forth broad goals for public participation, the realization of children's rights to participate and meaningfully contribute to decision-making remains isolated and inconsistent (Lansdown, 2014).

Planning for Urban Resilience

Urban resilience planning emerged in response to the growing uncertainties and threats cities face in the twenty-first century. In response to the escalating number of natural disasters that can devastate cities, increased economic and social threats, pervasive and chronic stresses such as poverty or failing infrastructure, resilience planning seeks to help cities build their resilience to physical, social, and economic stresses that are a part of society today. In 2013, the Rockefeller Foundation pioneered the 100 Resilient Cities (100RC) initiative, which is dedicated to promoting resilience around the world. This is a network of 100 cities that represents more than one-fifth of the world's urban population. The 100RC takes a holistic approach to understand resilience in cities. Individual cities create resilience strategies to meet the context of each city and, collectively, network cities collaborate by sharing approaches and lessons in addressing urban challenges. The 100RC seeks to make cities better, "in both good times and bad, for the benefit of all its citizens, particularly the urban poor and vulnerable." The 100RC approach is grounded in the belief that "by strengthening the underlying fabric of a city and better understanding the potential shocks and stresses it may face, a city can improve its development trajectory and the wellbeing of its citizens" (100RC, 2018a).

An important aspect of this approach is that it is broader than disaster planning, or most resilience planning (e.g., Meerow, Newell, & Stults, 2016) in that it includes a range of issues that weaken the fabric of the city and thus affect resilience. These issues include social cohesion, safety, poverty, and unemployment, with a focus that includes but goes beyond recovery and response to acute shocks (100RC, 2018b). Vale (2014) emphasizes that cities reflect social and economic disparities and that marginalized populations require more or different resources to persist. Campanella (2006) also suggests that while emergency management and disaster planning can make cities more resilient, resilience also requires the construction and maintenance of social and cultural networks. Resilience requires more than responding or rebuilding. Thus, addressing diverse perspectives within a city is an essential component of resilience and requires that city governments understand and create pathways to respond to their community's everyday lived experiences and the stressors that are a part of urban residents' lives (Derr, Corona, & Gülgönen, 2017). It also enables communities to collectively consider wellbeing, economics, and environmental conditions as a part of socio-ecological resilience (Cretney, 2014). This framing aligns strongly with the UN CRC Committee interpretation referenced previously that outlines "all matters affecting the child" include economics, environment, transportation, and social protection (Lansdown, 2014).

As an example of how addressing diverse perspectives within a city might be accomplished, the World Resources Institute recently launched an Urban Community Resilience Assessment tool, which they will pilot in four 100RC cities with significant slum populations. They aspire to employ this tool as a "bottom-up" approach to participatory planning that "empowers community members to access and participate in urban planning processes," where community members are involved in identifying risks and vulnerabilities within their communities (100RC, 2017a).

This bottom-up, participatory approach aligns with the goals and mandates of the CRC. Yet, integration of children and youth perspectives into such a broad network has been limited to a handful of cities. Beyond the 100RC, children and youth have been directly involved in resilience initiatives focused on disaster planning (Delicado et al., 2016; Peek, 2008; Scannell, Heykoop, Tobin-Gurley, & Peek, 2016), climate change adaptation (Napawan, Simpson, & Snyder, 2017), and participatory mapping of risks and quality of life (Martinez, McCall, & Preto,

2017). The UN Sendai framework (UNISDR, 2015) also calls for engaging relevant stakeholders, including youth, and that "youth leadership should be promoted." During the policy formation, a Child & Youth Forum engaged young people in developing directives for the policy's implementation (Cumiskey, Hoang, Pettigrew, & Herrgård, 2015). In the context of the 100RC, Boulder and Mexico City also explored children's perceptions of resilience through their identification of assets and vulnerabilities in their communities (Derr, Chawla, & Van Vliet, 2017; Derr, Corona, & Gülgönen, 2017).

Despite these emerging efforts, many of these same authors identify a lack of children's integration in resilience planning despite the important role children can play in this realm (Delicado et al., 2016; Derr et al., 2017b; Fothergill & Peek, 2006). Delicado and colleagues' (2016) broad analysis of disaster prevention in the Portuguese context, however, suggests that there is a growing awareness of the active role children should play in creating successful resilience strategies. Blanchet, Cohen, and Torres (2015) have found that children's involvement not only benefits children but also benefits the municipalities who support it, through strengthened collaboration across sectors, increased leveraging of resources, and increased sense of openness. These benefits are also supported in resilience planning, and so bringing resilience planning and participation together can help realize greater resilience within cities (Derr, et al., 2017a).

Writing about children's potential role in climate change mitigation, Hart, Fisher, and Kimiagar (2014) advocate that it is time to move "beyond projects" and integrate children's participation into multiple sectors and processes. These include:

- *Encouraging participatory and democratic children's membership groups.* In this context, children can learn to govern their own groups, and in so doing, children can learn together, collaborate, and establish themselves as "flexible community actors" who are "prepared to build and manage their communities" (Hart et al., 2014, 97).
- *Encouraging networking and collaboration of children's organizations within and between communities*. This collaboration can allow children's enthusiasm to cut across local organizations within a community or even to cross international boundaries. Just as for adults, networking can allow young people to learn new practices and effective means

of achieving community or environmental goals while connecting to others trying to accomplish the same goals (Hart et al., 2014).

- *Experimenting with new forms of authentic participation in local government and decision-making*. Hart and colleagues (2014) suggest that we need to move beyond more traditional models of participation, such as youth councils, which can support a small number of children within a city, to those that can engage all children in meaningful participation. Addressing the latter two goals might be a means to achieve this.

Diverse Contexts for Resilience Planning

By embracing the "spirit of experimentation" (Hart et al., 2014), facilitators in three 100RC cities sought to meaningfully engage young people in resilience planning. Each of the three cities where children's engagement in resilience planning occurred – Boulder, Mexico City, and Thessaloniki – are part of the 100RC initiative. Boulder and Mexico City became part of the network in the first round of 33 cities in 2013. Thessaloniki became part of the network in the second round of cities, in 2014. Facilitators in each city were experienced in children's environments research and children's participation and worked in their respective countries. Each facilitator is a co-author of this paper. Facilitators in each city approached children's participation in resilience planning differently, although some of the Boulder and Mexico City research was paired (Table 1). In addition, all three cities have some relationship to the CRC. Greece and Mexico have ratified the CRC. While the United States has not ratified the CRC, the City of Boulder supports a formalized agreement to institutionalize children's participation based on children's rights in the CRC through its Growing Up Boulder program (Derr, Chawla, Mintzer, Cushing, & Van Vliet, 2013). Previous publications share details, including theoretical and methodological approaches, for resilience participation from Boulder and Mexico City (Derr et al., 2017a; Derr et al., 2017b; Gülgönen & Corona, 2015; Growing Up Boulder, 2015, 2016). Thessaloniki's participation is more recent and is newly presented here.

Table 1. Integration of Children & Youth into Resilience Planning in Three Cities						
City	Phase of Resilience Planning	Relationship to 100RC	Duration of Engagement	Participants	Methods	Outcomes
Boulder, Colorado, USA	Initial 2 years	Initiated by 100RC Officer	18 months	120 children and youth, ages 5-16; 22 university students	Photography Drawing Murals Video Poetry Presentations to the public	Voicing & Influencing: Ideas included in Reports and Plans, Immigration Summit, Citizen Science
Mexico City, Mexico	Initial 2 years	None established, despite efforts	1 month	24 children, ages 9-11	Drawing Murals Photography Video	Voicing ideas about the city
Thessaloniki, Greece	Initial 2 years	Integrated within 100RC process through resilience team	1 month	137 children, ages 5-18; 28 parents	Mapping workshops with a focus on Safe-Route-to-Schools	Voicing & Influencing: Ideas integrated into GIS risk maps, educational and safe routes initiatives

Boulder

Boulder has a population of about 102,000 people. Nestled in the foothills of the Rocky Mountains, Boulder's assets also create some of its vulnerabilities, including risks from wildfire and flooding. The city's resilience strategy identified many environmental risks, including

energy and water insecurity, loss of biodiversity, and risks from flooding and wildfire, but the strategy also identified social challenges, including an aging population and a lack of affordable housing. Boulder's Resilience Strategy focused on working within existing structures, organizations, and assets within the city while identifying new methods to address gaps and weaknesses, with the long-term goal "to create an integrated, strategic, and intentional approach" to resilience, while also drawing on Boulder's history of planning innovation, environmental strengths, and emerging economic markets (100RC, 2016a).

Boulder's 100RC Chief Resilience Officer approached Growing Up Boulder in 2014. His goal was to mobilize existing resources within the city where resilience thinking could occur. Growing Up Boulder is a child- and youth-friendly city initiative that began in 2009. It is a formalized partnership between the City of Boulder, Boulder Valley School District, and the University of Colorado's Environmental Design Program. The Resilience Officer and Growing Up Boulder's faculty coordinator at that time (also the lead author of this paper) identified a shared goal of understanding children and youth perspectives of resilience that would otherwise be excluded in resilience planning (Derr et al., 2017a; Derr et al., 2017b). This partnership was established in the early stages of the planning process such that children and youth's views helped shape the overall resilience strategy.

Over about 18 months, Growing Up Boulder worked with four different groups of children and youth (a total of 120 young people) for its engagement. An initial engagement project was conducted with an after-school program that serves both 5-11-year-olds and 12-14-year-olds. This program serves children and youth who live in Boulder's public housing, who are low-income and primarily Latinx. The younger children developed a mural and the youth participated in a photovoice activity (GUB, 2016). They shared the assets and vulnerabilities (phrased as "what makes you happy and feel supported" and "what makes you sad or scared or feel unsupported") with the Chief Resilience Officer and other city staff. A second participatory initiative was conducted with approximately 60 third grade students (ages 8-9) at an elementary school and with 25 AVID (Advancement via Individual Determination[i]) students (ages 15-16) at a secondary school. Both schools serve an overall population of about 30-40% Latinx. In the case of the AVID program, 75% or more of students are Latinx. Methods of engagement were developed in collaboration with program leaders and teachers to fit the contexts of learning goals

but included drawing, poetry, and public presentations, to city staff and university students (GUB, 2016). Twenty-five of the primary school students participated in a coordinated resilience project with Mexico City children. This Boulder sub-group made drawings, murals, and a video that they shared with the children in Mexico City remotely (Derr et al., 2017b). In all cases, young people were introduced to an adaptation of the 100 Resilient Cities definition of resilience: "the ability to survive, adapt, and grow no matter what kinds of stresses and shocks I experience."

In general, children identified access to nature and family, friends, and supportive networks (from school and community), along with activities that help young people develop skills, as supporting resilience. Children and youth identified social, environmental, and economic concerns, including the need for greater care of homeless residents, fracking, and the cost of living, as vulnerabilities in the community. Children spoke about bullying and youth spoke about a feeling of cultural exclusion as aspects of their community that need to be addressed within the city (Figure 1). High school students who participated in the poetry project described moments of resilience, particularly in dealing with a recent flood in Boulder along with coping with serious family health and immigration issues, these being the times they needed supportive networks and resilience the most (GUB, 2015, 2016).

Figure 1. A Boulder youth took a picture of this lock to represent "the bonds of brotherhood" that helped support his resilience. Other youth viewed the lock as a symbol of the cultural oppression

they feel in the city – a sense of feeling "locked out" and excluded because of their language and heritage.

Mexico City

Mexico City is a megacity of nearly nine million people. The city has a rich cultural history but faces vulnerabilities resulting from earthquakes and flooding with aging and insufficient infrastructure, wealth disparities, and a lack of social cohesion across the vast city. Mexico City's Resilience Strategy focuses on five pillars, including regional coordination, water resilience, urban and regional planning, improving mobility throughout the city, and developing innovation and adaptive capacity (100RC, 2016b).

While the resilience strategy includes the goal to promote community resilience through citizen participation, strategic communication, and education, children and young people are seen as a vulnerable sector, and not as a population that can participate in discussions about the problems they face in the city. Actions contemplated for children include the creation of an internal resilience program in schools through the United Nations Office for Disaster Risk Reduction (UNISDR) initiative, which focuses on school safety from disaster risks (United Nations, n.d.).

In Mexico City, the two facilitators worked with a total of 24 children (ages 9 to 11) who participated in the paired process with Boulder. These children drew pictures of the assets and vulnerabilities of their homes, streets, and neighborhoods, created a mural, took photographs and discussed them, and created a video. The video was shared with Boulder children who participated in the paired project. The children lived near the Xochimilco campus of the Universidad Autónoma Metropolitana (Autonomous Metropolitan University) and were from primarily low-income families working in service industries, construction, or self-employed.

As a nation, Mexico has ratified the CRC; however, Mexico City itself has no authority responsible for children's inclusion in the city and in that time there were no mechanisms for children to express their opinions on matters that affected them (Gülgönen 2016a, 2016b)[ii]. Participation was facilitated by two researchers whose focus is on children's rights and access to public space and nature in Mexico.

In general, children identified family and home as their greatest assets for resilience, with friends, play spaces, parks, and soccer fields, or natural features in the city or Mexico also being mentioned. Children described a range of vulnerabilities including witnessing or experiencing acts of physical or verbal violence, and filth in the city (Figure 2). In their commentaries, children's evaluation of the city often related to whether the city enabled or inhibited play, which they associated with people, places, or things in the pictures that they took and discussed (Derr et al., 2017b).
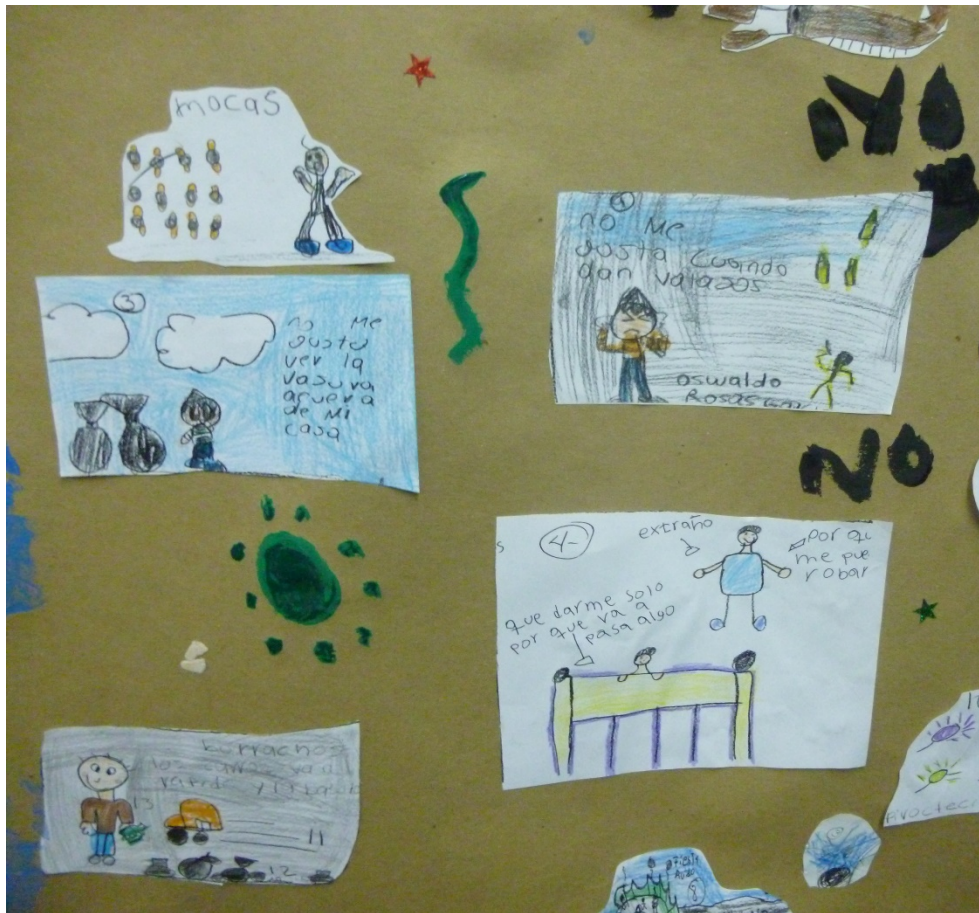

Figure 2. Mural made by the children with their drawings on assets and vulnerabilities. Children did not like: to see the trash outside my house (top left), "when they shoot" (top right), drunk people (bottom left), or when they have to stay home alone "because something can happen to me; they can steal me" (bottom right).

Thessaloniki

Thessaloniki is a mid-sized port city situated in northern Greece. The population of the Municipality is 324,766 people (2011 Census) while the surrounding metropolitan area hosts approximately 1.12 million (100RC, 2017b). The city has a rich history and cultural heritage. Through the 100RC strategy, the city has identified a range of issues, from earthquake risk, transportation shortfalls and aging infrastructure to youth unemployment and social inequities. The Resilience Strategy, released in 2017, draws on eight city values that include social cohesion, local identity and heritage, health and well-being, youth empowerment, and multi-stakeholder engagement. These eight values were integrated into four goals for resilience planning. Of particular relevance is Goal 2, which calls for the co-creation of an inclusive city, with specific objectives of both increasing women's and youth participation in decision making and improving the urban conditions to become more child friendly, focusing on the wellbeing of the children growing up in the city (100RC, 2017b).

While Greece is among the countries that have ratified the Convention on the Rights of the Child (CRC), little has been done to promote children and youth inclusion in decision-making and urban planning. However, many independent NGOs and institutions implement the goals of the CRC through their work in Greece, including the Network for Children's Rights (2017).

As a municipality, Thessaloniki has a broad range of approaches to resilience. One initiative involved a partnership with the World Bank to create a risk data platform through a process of multi-stakeholder engagement, aiming to create a portal that will enable anyone to access and use data related to risk and disaster management. The data included flooding, earthquakes, and other natural hazards. While working on this initiative and populating the database with high-risk locations for natural hazards, another idea emerged: *"what if we also include street safety to address the incidence of car accidents with pedestrian children?"*

At the same time, an area school had faced a recent accident with a pedestrian child, urging the Municipal Department of Mobility to prioritize street design improvements around this specific school complex. Through a series of workshops, the Resilient Thessaloniki team engaged parents of kindergarten and elementary students as well as middle and high school

youth of this area school in participatory mapping to consider safe routes to school. The school is located in a residential area and serves a district of primarily middle-income families.

The participants were asked to map the routes they follow every day on their way to and from school, their transportation mode, travel time and the locations they perceive as most dangerous and most pleasant within the neighborhood (Figures 3 and 4). The activity was conducted in 7 workshops with a total of 137 students and 28 parents. The workshops were co-designed with the school teachers and school administration, who were informed, consulted, and trained during the program planning stage. The workshops with middle school and high school students took place in the classroom, during school hours and with the valuable contribution of the school teachers. The workshops with kindergarten and elementary pupils took place during afternoon hours during a special event, where children were invited to attend with their parents.
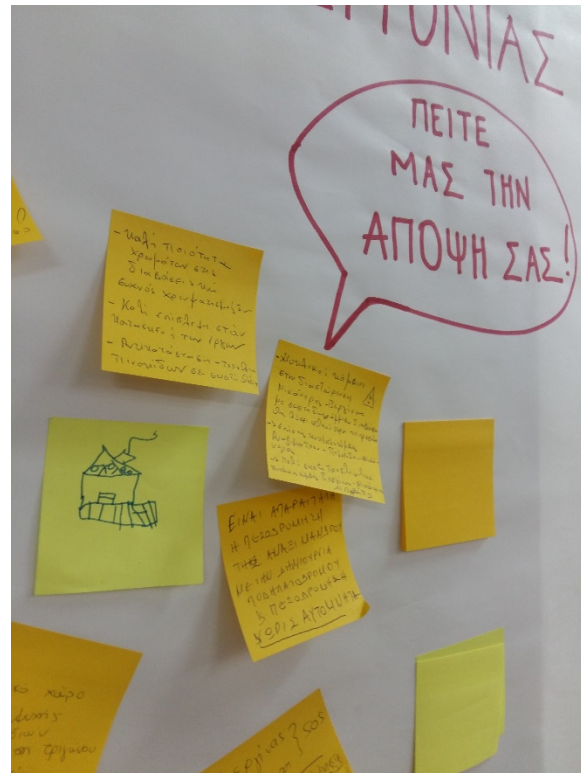
Figures 3 and 4. Children mapped their routes to school (left) and described places they thought were most dangerous as well as desirable spaces to move through (right).

While the discussion among parents began with a focus on transportation and parking at the school, the conversation eventually led to parents who had grown up in the same

neighborhood considering how their own childhood was different from that of their children. Some spoke with passion about how "we do not need the car," or "we need to give our children the experience we had."

The issues addressed during the mapping activity and discussions were traffic safety, children's independence, children's lack of exercise, and the quality of neighborhood public spaces. The meetings produced maps as well as new thinking about the root issues of transportation and what child friendliness might mean in the context of their neighborhood.

The mapping activity became an integral component of the pilot "Thessaloniki Safe Routes to School" Scheme (100RC, 2017b). The overall Scheme will include a set of specific physical measures and policies for successfully improving the urban conditions as well as a set of activities for public awareness and school community participation.

The maps revealed specific areas or types of street features that need to be addressed. For example, some of the roundabouts, which can be appropriate design solutions for traffic safety, are confusing for pedestrians, especially children and the elderly and therefore, dysfunctional. In addition, children and parents mapped flooding locations that the local authorities were not aware of. These inputs gained by involving the neighborhood in participatory activities provided added value to resilience planning.

How Participation Influenced Resilience Planning

Boulder

In Boulder, children and youth perspectives were shared throughout the process with the Chief Resilience Officer, city planners, school administrators, and city leaders. Boulder's approach to resilience – to draw on existing structures while also identifying methods which can help fill gaps – was successful in that the resilience strategy drew from the children's ideas and the established Growing Up Boulder program. High school students also presented their ideas to a group of undergraduate planning students from the University of Colorado, the Chief Resilience Office, and school board members. The university students identified ways to build resilience through their research during the semester, including researching ways to address homelessness in the city and create public spaces for social inclusion. This latter project engaged

youth in thinking through design. University projects were shared with the city resilience and planning staff. Specific concerns were taken up by city planners, such as transportation and a citizen science program, which emerged from both adults and children as an interest in protecting wildlife along Boulder's greenways (Derr et al., 2017b). Many of the concerns children and youth raised were of a social and economic nature, however, the resilience strategy largely focuses on environmental concerns in the city and less on social issues. The strategy does discuss housing affordability, which is an on-going issue for the city as a whole, and other initiatives such as a county-wide immigration summit that prompted an important conversation about language, ethnicity, and acceptance of immigrants within the city. The diffusion of social and economic issues into diverse sectors of municipal government was an explicit strategy of Boulder's resilience planning effort, but the result is that it can be hard to directly identify young people's influence within a single planning document.

While some children and youth perspectives influenced planner's thinking, Growing Up Boulder has discussed that sometimes the embeddedness of its program within urban planning is both an asset and a challenge for children's participation (Derr et al., 2013). On the one hand, city planners are listening and hearing young people's recommendations on how to improve the city – giving young people not only a voice but also ways to influence the direction of their city. On the other hand, these processes are sometimes integrated and diffuse through other processes such that it can be hard to recognize when youth have influenced city processes directly (Derr et al., 2013). Growing Up Boulder has been identifying ways to address this, with youth input, and is increasing its efforts to have planners directly communicate back what they heard youth say and desire, and how planners have integrated young people's ideas into plans. This not only builds accountability within government but also demonstrates genuine listening and taking ideas seriously (Mintzer & Cushing, 2017) thus helping fulfill the goals of the CRC and community resilience.

Mexico City

Facilitators in both Boulder and Mexico reached out to the 100RC network on multiple occasions to try to connect with the 100RC office in Mexico City. The purpose of pairing research between Boulder and Mexico City was in part related to the spirit of 100RC's network – to share resources and ideas about how to engage young people in resilience planning. While

municipal leaders in Mexico City had not shown interest in prior participatory efforts, our hope was that the 100RC initiative could create a new forum for integrating children's ideas into a relevant context and approach to planning. In implementation, however, participatory activities with children occurred in isolation from resilience planning (Derr et al., 2017b).

We have reflected that international frameworks, such as the CRC, are in themselves insufficient: "Initiatives such as the 100RC can promote children's participation, but ultimately local governments also need to understand and prioritize these goals" (Derr et al., 2017b, 9). The absence of a regional strategy for public spaces in Mexico City, and the absence of the consideration of children in public policies are the two main factors that explain the difficulty of considering and including children's voice in urban planning at the city level (Gülgönen, 2016a).

Thessaloniki

The maps generated in Thessaloniki's workshops distinctly showed the high-risk locations regarding traffic safety but also the places of an attractive, but usually hidden, spatial quality. These maps provided defining measures and priorities that engineers needed to take into consideration. However, the usability of these results was initially questioned by engineers and decision makers as the information marked on the maps was illustrated with stars and happy faces. Therefore, the harvested information was converted into GIS maps and came to be regarded and integrated on equal par with the regular transportation map data. Based on the outcomes of the participatory activity, the Resilient Thessaloniki team aims to create a replicable process that will enable every neighborhood and school to obtain their own safe routes map.

The primary goal of the Thessaloniki Safe Routes to School Scheme is to enable more children and teenagers to walk and cycle to school by both improving the urban conditions and actively involving the school community in the process. Nevertheless, the significance of the maps generated through participatory processes is not limited to traffic safety. Their value also extends to the city's emergency planning, as the maps could also indicate the optimal evacuation route for each school to appointed emergency gathering points and thus could be used to help each family create their own emergency plan.

Maps created through this exercise are particularly valuable for the Municipal Planning Department, schools, parents, and children because they are based on the actual conditions and experiences on the street and in the neighborhood. Local knowledge is particularly valuable in this context because physical conditions, as well as socio-economic conditions, change over time. Not only were the mapping outcomes useful for the engineers, but they also inspired the community to consider creative solutions to getting children to school, such as via the walking school bus (e.g., U.S. Department of Transportation, n.d.). The community is now considering educational initiatives as well as safe routes strategies inspired by these workshops.

Discussion

While we know that young people can meaningfully engage in and influence resilience thinking, integration of young people into resilience planning has been challenging in the three cities described here (Derr et al., 2017b). We collectively considered the outcomes of each city's participatory processes, with some broad lessons for how to realize Article 12 in international planning initiatives that occur within local governments. We recognize that effective participation needs to occur both at high levels of government and within local or grassroots initiatives that can engage children in dialogue and decision-making (Derr et al., 2017b; Hart et al., 2014). Comparison of the frameworks for resilience planning exemplifies that no matter the framework, integration of children's perspectives can be challenging. In Boulder, despite a lack of the CRC's ratification, progressive leadership and a formalized program for participation the challenge of clear integration into city plans remains. In Mexico City, lack of local institutional authorities or frameworks to support children's integration has led to inconsistent participation and lack of interest. Facilitators in both Boulder and Mexico City sought to influence the 100RC network so that children's perspectives could be included in resilience planning; however, by the end of the project, this had not been achieved (Derr et al., 2017b). In Thessaloniki, the resilience team integrated social policies and participatory planning position into its efforts. The resilience strategy specifically called for young women and youth participation as goals. And yet, finding the "sweet spots" for integration of children and youth, particularly in planning efforts that focus on risk identification, has been challenging. Lessons from all the cities include the importance of:

- Thinking creatively and persistently about how children's interests and issues can support the development of a Resilient City.

- Broad frameworks for resilience that consider well-being, economics, and environmental conditions, particularly from a children's perspective, can provide an entrée to integrating children's perspectives and concerns into resilience planning. For example, pedestrian safety has emerged as an issue affecting resilience in Mexico City and was a focus of work in Thessaloniki through the integration of safe routes to school with emergency mapping. Resilience planning in Cali, Colombia has also addressed safety concerns through a Safe Routes to School approach (100RC, 2018c).

- Looking for existing programs and resources where engagement can occur, thus building also on Hart and colleagues' (2014) suggestion to work within children's membership structures and find creative ways to reach a broader constituency of youth.

- Finding the right intersection of interests – in this case, a need to understand community perceptions (in Boulder), and a mapping initiative that also helped a community think through safe routes to school (in Thessaloniki).

- Providing "translation" – of children's ideas into "adult" or "expert" language – which was particularly important in the case of Thessaloniki's mapping project.

- Planning for and identifying resources that can sustain project implementation after initial resilience planning takes place. Boulder and Thessaloniki have sustained resources for engagement but not necessarily project implementation. Without resources for both engagement and implementation of ideas, the lasting influence of participation may be lost.

- Recognizing the time-lines inherent to large-scale cultural shifts, in this case, related to understanding and appreciating the role young people can play in authentic planning, and persisting. This also reflects an obligation for participatory researchers, as adults, to play advocacy roles in order to fully realize children's rights (Kindon, Pain, & Kesby, 2007).

In some ways, these three cities, each of which contained child advocates and facilitators for participation, help achieve one of the goals of the 100RC: to establish a network of people across cities who share resources and approaches to the challenges cities face. It is indeed a challenge to meaningfully integrate children and youth perspectives into urban planning so that these perspectives becomes a norm rather than an exception. And yet at this writing, only 2 out of 100 cities within the network have sought to accomplish this directly through the 100RC approach (since Mexico City's work was conducted outside of 100RC).

In her discussion of lessons learned from 25 years of the CRC, Lansdown (2014) identifies that many governments and donors have sought evidence of effectiveness as well as solutions that are capable of widespread replication prior to putting resources towards children's participation. Yet Lansdown refutes this argument, stating that, "Measures to promote and protect the exercise of fundamental human rights should not be contingent on being able to prove that they will produce given results" (Lansdown, 2014, 186). The rights have been ascribed and so should be realized. Despite this moral imperative, international NGOs sought such evaluation tools for children's participation (Lansdown & O'Kane, 2014), which were then piloted in nine countries over two years, demonstrating significant outcomes (Lansdown, 2014).

Delicado and colleagues (2017) identified lack of resources as one of the reasons why international agencies fail to engage young people in resilience planning. At the same time, they identify a wide range of youth-serving organizations in Portugal that engage in risk-reduction activities, including participation in risk awareness campaigns, training, clean-ups after disasters, and forest protection. Like the efforts of the three participatory projects presented here, Delicado and colleagues (2017, 255) suggest that as a whole, Portugal still sees youth largely as passive and vulnerable and "is still a long way from achieving the aim of engaging children as active members of their communities with valuable knowledge and skills that can be mobilized."

More broadly, researchers have described two challenges in professionals' abilities to implement children's participation: i) a lack of understanding of the differences between participation and simple consultations, in which children's opinions are voiced but not necessarily taken seriously nor able to influence decision-making (Cele & van der Burgt, 2013), and ii) failure to recognize children as social actors with existing competencies that can be drawn upon for planning efforts (Cele & van der Burgt, 2013; Le Borgne & Tisdall, 2017). In the context of the three cities which sought to integrate children into resilience planning, each of the facilitators had training and experience working in the context of children's participation. Thus while the facilitators did not reflect the challenges Cele and van der Burgt (2013) described, each was working within a broader institutional context that did exhibit these challenges. After the Mexico City research was completed, Mexico implemented a national system for the integrated protection of children and youth (Sistema Nacional de Protección Integral de Niñas, Niños y Adolescentes). This system includes an obligation for municipalities to implement children and

youth committees for participation in public policies. It has been challenging to implement because many authorities do not understand children's participation—neither what it is nor how to implement it—thus illustrating the issues Cele and van der Burgt raised for planners in Sweden. Both Derr (2015) and Rudner (2017) promote the need for universities to incorporate training about children's participation into professional planning programs so that future planners can overcome the systemic challenge other authors have identified (Cele & van der Burgt, 2013; Le Borgne & Tisdall, 2017). Only when young people's inclusion is normalized as a part of the spectrum of ways to engage communities, will children's participation become fully realized.

Finally, Lansdown (2014, 188) emphasizes that in order to achieve the goals of Article 12 of the CRC, "the task ahead is to address the power balance between adults and children to afford all children definitive opportunities to take action to influence their own lives." Participation must move beyond the scattered engagement processes that currently exist. She writes that "The journey has started. The onus now rests with everyone committed to the human rights of children to keep the momentum going." From our own experiences working with resilience planning, children can lend valuable perspectives at multiple stages of the process. They can help shape priorities for resilience strategies through early engagement to identify perceptions of assets and vulnerabilities, as in the cases of Boulder and Mexico City (and in the climate change adaptation work of Napawan et al., 2017). They can also contribute to processes where local knowledge is valued, as in the mapping initiative with Thessaloniki (and in participatory mapping in Portugal as in Martinez et al., 2017).

What seems to be essential, aside from the CRC framework, is the means of redressing power. When high-level officials within municipal governments or resilience teams identify youth perspectives as important, these benefits can be achieved. But operating without both political will and resources will mean participation remains spotty, at best. While Lansdown points to the importance of "everyone committed to the human rights of children" as an essential component, we also have found that this is a hard row to hoe without broader institutional support at the municipal level. High-level international frameworks that celebrate, promote, and financially support children's voices and contributions, as well as cities that mandate them and seek staff who can support them, can help children realize their rights.

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Notes

[i] Advancement via Individual Determinism (AVID) is a nationwide program in the United States designed to provide support for middle-performing students who have an expressed interest in attending university. Many of these students are from families of low-income or will be first-generation university students.

[ii] In February, 2016, after the Mexico City research, a national system for integrated protection of children and young people (Sistema Nactional de Protección Integral de Niñas, Niños y Adolescentes) was developed in Mexico. This system includes an obligation for municipalities to implement children and youth committees for participation in public policies. It has been challenging to implement because many authorities do not understand children's participation: neither what it is, nor how to implement it.