

Best Practice Child- and Youth-friendly Cities

Development of an Integrated and Comprehensive Framework through a Systematic Review

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Received: 11 August 2024, Accepted: 14 August 2025, Published online: 09 September 2025

Abstract

Creating a city that prioritizes the needs of children and youth is crucial for sustainable urban development. This paper reviews and explores best practices from international experiences excelling in Transportation Safety, Mobility, Accessibility, Sustainability, Climate Change, Inclusivity, 6 Es Approach, and Youth Empowerment and proposes an integrated and comprehensive framework for the establishment of the best practice child- and youth-friendly cities that would contribute to enhancing the safety of young people. The practices were assessed using predefined evaluation criteria to identify gaps, and then the elements and the requirements of the integrated and comprehensive framework were determined to bridge the identified gaps. An intensive review of 13 practices revealed that most studies (10 out of 13) fully considered Inclusivity and partly considered the 6 Es Approach criteria. However, the least considered criteria were Transportation Safety, Mobility, Climate change and Youth Empowerment. Interestingly, among all studies, only one considered Climate Change. The study concludes that future studies should incorporate underrepresented areas to bridge gaps. It emphasizes that local governments should prioritize child- and youth-friendly initiatives, adhering to human and child rights principles and recognized standards like the UNICEF Local Governance Approach. The study also highlights the importance of fostering meaningful participation from youth and children, focusing on capacity building, and committing to non-discrimination. Finally, it calls for clear roles and responsibilities for local governments, partnerships with public and private sectors, and regular monitoring and assessment to ensure the sustainability and success of these initiatives.

Keywords

accessibility and mobility, child and youth empowerment, climate change and sustainability, inclusive cities, transportation safety

1 Introduction

Urban environments greatly impact the health and well-being of children and youth. Therefore, ensuring their safety is essential for their holistic development. According to the "Global Status Report on Road Safety 2023" by the World Health Organization (WHO, 2023), road traffic deaths and injuries remain a primary global health challenge. As for 2019, road traffic crashes are the leading cause of death of children and youth aged 5 to 29 years.

Considering the significant consequences of an ineffective transportation system, particularly the severe impact of road traffic crashes, there is a critical need to create a more efficient and safer environment. This improvement will enhance people's well-being and save lives, especially for children and youth, who are the most vulnerable road user groups.

There is no "one model" for a child and youth-friendly city. However, it is a combination of policies, strategies, initiatives and programs that are designed to satisfy the needs of children and youth. The United Nations Children's Fund (UNICEF) defines a child friendly city as a city, town, community or any system of local governance committed to improving the lives of children within their jurisdiction by realizing their rights. In practice, it is a city, town or community in which the voices, needs, priorities and rights of children are an integral part of public policies, programs and decisions (UNICEF, 2024).

This study aims to develop an integrated and comprehensive framework through identifying the primary elements and requirements that should be considered in determining the best practice child- and youth-friendly city.

This framework is designed through young eyes, offering a solid foundation for creating the ideal urban environment for the younger population. The paper presents an intensive review of international experiences, evaluates them, and attempts to bridge the identified gaps. The evaluation criteria on which the international experiences are assessed include Transportation Safety, Mobility, Accessibility, Sustainability, Climate Change, Inclusivity, 6 Es Approach (Engineering, Education, Enforcement, Encouragement, Equity, and Evaluation), and Youth Empowerment. Creating an integrated and comprehensive framework for the best practice child- and youth-friendly city enables countries to use it for the purposes of setting effective strategies and plans, benchmarking their efforts, and reaching out to countries pursuing Vision Zero policies.

2 Literature review

This section presents international experiences of child- and youth-friendly cities from leading countries worldwide.

A study by Agarwal et al. (2021) explored children's perceptions of local parks through their drawings. By examining children's drawings, the researchers aimed to understand the factors that make gardens appealing and supportive of children's development. The study showed that children value places that are safe, accessible, and equipped with a variety of playgrounds and natural features. Key findings of the study included more greenery, play equipment, open spaces for activities, facilities that support social interaction. Furthermore, the study highlighted the importance of considering children's perspectives to provide an environment that will ensure their physical, emotional, and social well-being. Moreover, the findings recommended the creation of community parks that are inclusive and responsive to the needs of children, ultimately contributing to the development of child-friendly cities.

Tranter and Malone (2003) explored children's perspectives on urban environments to advocate for sustainable and child-friendly cities. Utilizing qualitative methods, including participatory activities and interviews, data were gathered from about children's urban experiences. Analyses revealed that children feel restricted in urban areas due to traffic, lack of safe play spaces, and social fears, expressing a need for more accessible, green, and safe public areas. The study concluded that children's insights are crucial for urban planning, emphasizing the need for a cultural shift that prioritizes children's rights to safe and accessible spaces. Recommendations included

increasing children's participation in planning, developing more safe play areas, implementing traffic calming measures, integrating child-friendly policies into urban planning, and fostering a cultural change towards valuing children's perspectives. Overall, the study advocated for inclusive urban planning to create sustainable and livable cities for all residents.

Another study by Sanson et al. (2019) highlighted the unique vulnerability of children and youth to climate crisis, underlining how climate change exacerbates existing disparities and affects younger generations, including heat stress, respiratory problems and infectious diseases, as well as mental health issues such as anxiety, stress and trauma. Furthermore, education and social networks, distress, financial burden on families, and the importance of recognizing the role of children and youth in the decision-making process was also discussed. Moreover, mitigation measures were proposed to reduce these effects, including health system strengthening, climate integration including education, increasing mental health support, and promoting programs that prioritize the needs of children and young people. Finally, the study concluded by emphasizing the need for urgent global actions to help in achieving the best results.

Brown et al. (2019) examined the concept of child-friendly cities and the various dimensions that contribute to making urban environments supportive of children's needs and rights. The authors discussed the importance of designing cities that prioritize the health, well-being, and active participation of children in urban life. Key outcomes included the provision of safe, accessible, and inclusive public spaces, the role of green areas and play spaces in children's development, and the integration of children's voices in urban planning and policymaking. The study highlighted successful experiences and best practices from different cities that had implemented child-friendly initiatives, demonstrating the positive impact on children's quality of life. Additionally, it addressed the challenges to creating child-friendly cities, such as urbanization pressures, economic constraints, and the need for cross-sectoral collaboration. The authors emphasized the need for a holistic approach that considers social, environmental, and economic factors to create sustainable and livable cities for children. Overall, the study advocated for a child-centric perspective in urban development to ensure that cities are designed to nurture and empower the youngest residents.

Derr et al. (2018) explored the role of children and youth in resilience planning within urban environments.

Through case studies of three cities, the authors examined how young people's participation can enhance the effectiveness and sustainability of resilience planning. The research highlighted that involving children and youth in the planning process not only empowers them but also brings innovative perspectives and solutions to resilience challenges. Key lessons from the study included the importance of creating inclusive and accessible platforms for youth engagement, ensuring meaningful and sustained participation, and integrating young people's insights into policy and decision-making processes. The findings demonstrated that youth participation leads to more comprehensive and context-sensitive resilience strategies, addressing the unique needs and vulnerabilities of younger populations. The study concluded by advocating for institutionalizing youth engagement in resilience planning, emphasizing that cities become more adaptable and robust when the voices and contributions of the youngest residents are incorporated.

Malone and Rudner (2017) delved into the intersection of urban sustainability and child-friendliness by examining global research on children's freedom, mobility, and perceived risks in urban environments. Through a comprehensive review of various international studies, the impact of urban settings on children's ability to move freely and safely was analyzed. The findings highlighted significant barriers such as traffic dangers, lack of accessible play spaces, and social fears that restrict children's mobility and independence. Furthermore, the study underscored the importance of designing urban areas that are safe, inclusive, and supportive of children's developmental needs. It was concluded that enhancing children's freedom and mobility is essential for fostering sustainable and resilient cities. Recommendations included implementing child-friendly urban design principles, increasing safe and accessible public spaces, and incorporating children's voices into urban planning and policy-making processes. The study advocated for a holistic approach to urban development that prioritizes the well-being and active participation of children to create more sustainable and livable cities.

Cushing (2016) investigated the role of Youth Master Plans (YMPs) in fostering urban environments that are conducive to the well-being and development of children and youth. YMPs are strategic frameworks that outline goals, policies, and actions aimed at enhancing the quality of life for young people in cities. The study examined how YMPs can serve as effective tools for cities to

systematically address the needs and rights of young populations, ensuring their active participation in community life and decision-making processes. Furthermore, it underlined several case studies where YMPs had been successfully implemented, showcasing their impact on improving access to services, creating safe public spaces, and promoting youth engagement in civic activities. This research employed a mixed-methods approach, including an online questionnaire, plan analysis and semi-structured interviews with key community informants. Key findings indicated that YMPs have significant potential to guide cities in becoming more child- and youth-friendly by providing structured, long-term approaches to addressing the challenges faced by young residents. The study recommended broader adoption and implementation of YMPs, focusing on the physical environment, considering safety, access to nature, and sustainable transportation, as part of urban planning efforts to create more friendly environments for children and youth.

Haider (2007) examined the importance of incorporating inclusive design principles in urban planning to create public spaces that cater to children's needs. Reviewing existing literature, the current state of urban public spaces and their accessibility for children was assessed. The analyses highlighted that the deficiencies in traditional urban planning often overlook the requirements of younger populations, resulting in spaces that are unsafe or unwelcoming for children. The study concluded that integrating inclusive design principles, such as accessibility, safety, and engagement, into urban planning can significantly enhance the usability of public spaces for children. It recommended involving children in the design process, prioritizing pedestrian-friendly areas, creating diverse and interactive play environments, and implementing policies that support child-friendly urban development. Ultimately, the study advocated for a holistic approach to urban planning that considers children's perspectives to develop inclusive and accessible public spaces that promote their well-being and active participation in urban life.

Derr et al. (2013) studied the inclusion of marginalized children and youth in urban planning processes with the aim of understanding the specific needs and perspectives of young people from marginalized communities and how these can be integrated into city planning to create more equitable and inclusive urban environments. Insights were gathered directly from marginalized youth about their experiences and challenges in urban settings. The analyses showed that underrepresented children and youth often face

significant barriers, including lack of access to safe spaces, social exclusion, and inadequate representation in decision-making processes. The study concluded that actively involving these young populations in urban planning not only addresses their unique needs but also enhances overall urban resilience and inclusivity. Recommendations included adopting participatory planning approaches, ensuring equitable access to resources and services, and implementing policies that prioritize the voices of marginalized youth. The study urged for a comprehensive and inclusive urban planning framework that recognizes and values the contributions of all citizens, especially those from marginalized groups, to create cities that are truly inclusive and supportive of every resident's well-being.

Malone (2001) explored the integral role of children and youth in the development of sustainable urban environments. The study examined how young people's perspectives and active participation could contribute to creating cities that are not only sustainable but also child-friendly. The analyses revealed that children and youth are often overlooked in urban planning, leading to environments that do not meet their needs or support their well-being. The study highlighted the benefits of involving young people in the planning process, including the creation of more vibrant, safe, and inclusive public spaces. The study concluded that recognizing the unique insights of children and youth is crucial for developing sustainable urban strategies. Recommendations included integrating voices of young people into policymaking, designing urban spaces that promote safety and accessibility, and fostering educational programs that encourage environmental supervision among young people. Overall, the study urged for a more inclusive approach to urban sustainability, emphasizing the importance of the meaningful engagement of children and youth to build cities that are equitable and resilient.

Elsley (2004) investigated how children perceive and utilize public spaces. Through qualitative research methods, including interviews and participatory activities with children, the factors that influence children's experiences in public areas were explored. The analyses revealed that children value spaces where they can engage in play, socialize with peers, and interact with the environment. However, many public spaces are perceived as unsafe due to issues such as traffic, inadequate facilities, and adult dominance. The study concluded that children's perspectives are often not considered in urban planning, resulting in public spaces that do not meet their needs. It recommended designing public spaces that are inclusive and

cater specifically to children's requirements, such as providing safe play areas, ensuring accessibility, and creating environments that encourage social interactions and physical activity. The study advocated for engaging children in the planning process to create public spaces that are both child-friendly and supportive of their well-being.

Hubsmith (2006) examined the Safe Routes to School (SRTS) program, which aimed to improve the safety and accessibility of walking and bicycling routes for school children across the United States. The ultimate goal of the SRTS program was to reduce traffic-related injuries and fatalities among children while promoting healthier lifestyles and reducing traffic congestion around schools. The methodology behind the program included infrastructure improvements, safety education, and community engagement initiatives designed to make routes to school safer and more appealing for children. The analyses underlined the program's success in increasing the number of children walking and biking to school, enhancing safety, and fostering community involvement in school transportation planning. The study concluded that SRTS had a significant positive impact on student safety and physical activity levels. It recommended the continued expansion and funding of SRTS programs, along with integrating these initiatives into broader urban planning and public health strategies to create safer and more sustainable communities for children.

Yates (2005) detailed the development of a Child Impact Assessment (CIA) tool designed to evaluate how municipal policies, programs, and projects affect children in Edmonton. The objective of the study was to create a practical framework that city planners and policymakers can use to ensure that decisions made at the municipal level consider the needs and well-being of children. Furthermore, the methodology used in developing the tool involved extensive consultations with experts in child development, city planners, and community stakeholders. The analyses of the tool's implementation showed that it helped identify potential positive and negative impacts on children, ensuring that their rights and interests were safeguarded in urban planning processes. The study concluded that the CIA tool is an effective means of promoting child-friendly urban environments by systematically incorporating children's needs into city planning. It was recommended that other cities adopt similar tools to prioritize the well-being of children in their urban development strategies, ultimately contributing to more inclusive and supportive urban communities.

It is worth mentioning that previous works lack comprehensiveness in creating child- and youth-friendly environments. In other words, some aspects related to transportation and climate were not completely considered in previous practices.

3 Methodology

This section delves deeper into the study methodology and describes the evaluation criteria on which the assessment process is carried out. The study first prepares a literature review on international best practices. Second, it evaluates the practices to identify gaps. Finally, it attempts to bridge the identified gaps to develop an integrated and comprehensive framework that countries and cities can take advantage from to set efficient strategies and effective plans towards achieving their national road safety vision and goals. The study's holistic methodology is presented in Fig. 1.

The evaluation criteria are set making use of the UNICEF's Child Friendly Cities Initiative (CFCI) Guidance Note (UNICEF, 2022), as an internationally accepted standard, alongside the intensive experience by the researcher in the field of Road Safety, to conduct a highly integrated and comprehensive assessment process. These criteria are further elaborated in the following context.

3.1 Transportation safety

Transportation safety is crucial in protecting children and youth from road traffic crashes, as the leading cause of death, and ensuring their safe mobility. Highlighted practices and transportation safety initiatives include:

- *Vision Zero* which aims at eliminating traffic fatalities and severe injuries through stringent traffic safety measures, strategies, and community involvement.
- *Safe Routes to Schools (SRTS) Programs* which focus on creating safe pathways for children and

youth to travel to and from their schools, incorporating the 6 Es approach.

3.2 Mobility

Mobility solutions that cater to the unique needs of children and youth enhance their independence and social development. Notable practices include:

- *Child- and Youth-friendly Public Transport*: This includes offering public transportation systems that are designed to prioritize children and youth, featuring low-floor buses, priority seating, and comprehensive safety protocols.
- *Active Transportation Infrastructure*: This primarily contributes to enhancing children and youth health and well-being by encouraging physical activity and reducing reliance on motor vehicles. It can be achieved by promoting walkability and cycling through various measures such as dedicated pathways, bike-sharing programs, and safe pedestrian crossings.

3.3 Accessibility

Ensuring that all children and youth can access essential services and spaces is a base of an inclusive city. Key strategies include:

- *Universal Design Principles*: It is crucial to incorporate universal design in public spaces and facilities, ensuring accessibility for children and youth, including those with disabilities.
- *Inclusive Playgrounds and Recreational Spaces*: Creating accessible play areas and recreational spaces with diverse equipment and sensory experiences fosters inclusivity and social interaction among children, youth of all abilities, and other community members.

3.4 Sustainability

Sustainability is critical for ensuring a livable environment for young and future generations. Major practices include:

- *Sustainable Urban Planning*: Implementing comprehensive urban planning strategies that prioritize green spaces, energy efficiency, and sustainable building practices to create environmentally friendly urban areas.
- *Renewable Energy Initiatives*: Promoting the use of renewable energy sources, such as solar, water and wind power, substantially contributes to reducing carbon emissions and fostering sustainable urban development.

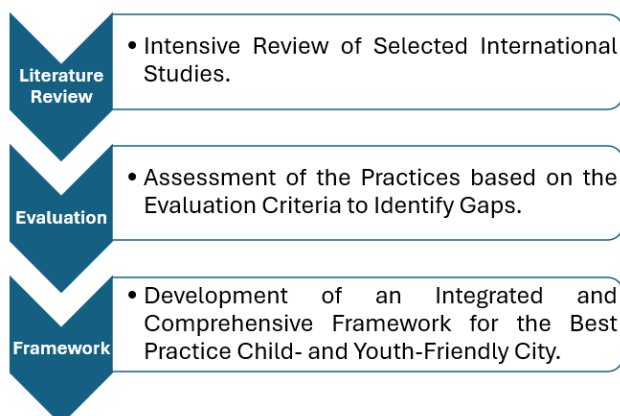


Fig. 1 Holistic study methodology

- *Waste Management and Recycling Programs:* Implementing robust waste management and recycling programs helps reduce negative environmental impacts and promotes sustainable living practices among all residents.

3.5 Climate change

Building climate resilience is necessary for safeguarding the future of all community member, including children and youth. Best practices include:

- *Green Infrastructure:* Integrating green infrastructure, such as parks, green roofs, and urban plants can greatly mitigate climate change impacts and enhance urban resilience.
- *Sustainable Transportation:* Promoting sustainable modes of transportation, such as electric buses and bike-sharing programs can enormously reduce carbon emissions and foster a healthier environment for future generations.

3.6 Inclusivity

An inclusive city embraces diversity and fosters a sense of belonging among all residents. Leading initiatives include:

- *Multicultural Programs:* Promoting multiculturalism through national and international programs and events that celebrate diversity and encourage intercultural exchange.
- *Anti-Discrimination Policies:* Implementing strict anti-discrimination laws and policies protects the rights of marginalized groups, particularly youth and children, and promotes an inclusive urban environment.

3.7 6 Es approach

6 Es approach includes Engineering, Education, Enforcement, Encouragement, Equity, and Evaluation. It is vital for addressing disparities and providing equitable opportunities for all children and youth for an efficient society. Effective practices include:

- *Engineering:* Providing safe, rapid, economical, convenient, comfortable and environmentally compatible transportation infrastructure is a main player for saving people's lives, especially for children and youth.
- *Education:* Promoting educational programs in schools and universities and conducting workshops and training courses to raise the public awareness towards the importance of having a safe and

comprehensive transportation system and its ability to save lives, highlighting aspects concerning children and youth.

- *Enforcement:* Regularly reviewing the current legislations to develop more comprehensive and stricter laws that can more efficiently ensure the safety of children and youth.
- *Encouragement:* Promote encouraging initiatives that focus on the well-being and capacity building for children and youth.
- *Equity:* Implementing policies to ensure equitable distribution of resources, such as quality education, healthcare, civil rights, and recreational facilities, across all neighborhoods, regardless of their genders, and engaging children and youth in urban planning processes ensure their voices are heard and their needs are met in policymaking.
- *Evaluation:* Regularly assessing policies, laws, legislations, and initiatives, considering feedback from all stakeholders and other community members, including children and youth, to ensure that all people's needs are satisfied is crucial for the development of child- and youth-friendly societies.

3.8 Youth empowerment

Empowering youth is essential for their growth and active participation and meaningful engagement in society. Effective initiatives include:

- *Youth Councils and Participation:* Establishing youth councils that actively involve young people in decision-making processes, ensuring their perspectives and ideas shape urban policies and programs.
- *Youth Employment and Skill Development Programs:* Programs such as training courses and youth entrepreneurship schemes provide young people with opportunities to gain skills, secure employment, and contribute to the local economy.
- *Youth-Led Projects and Initiatives:* Encouraging youth-led projects empowers young people to take leadership roles in community development and enables them to feel engaged by showing their abilities of what they can bring to the decision-making table, fostering a sense of ownership and responsibility.

This framework provides a detailed roadmap for cities aiming to become exemplary urban environments for children and youth. By integrating these criteria, cities can

ensure a brighter, safer, and more inclusive future for their youngest residents.

4 Results

This section shows the outcomes of the evaluation process for the selected international practices from leading countries around the world. The experiences are assessed against the evaluation criteria and gaps are illustrated in Table 1. Tick marks indicate the specific evaluation criteria that the assessed study considers.

Thirteen previous studies were selected and assessed against the evaluation criteria. According to the identified gaps, the most comprehensive studies among the previously evaluated studies were Cushing (2016); Hubsmith (2006) and Malone (2001) with 6 partly and fully considered

criteria (6 colored rectangles). Studies of Haider (2007); Malone and Rudner (2017) and Tranter and Malone (2003) each partly and fully considered 5 out of 8 criteria (5 colored rectangles). Agarwal et al. (2021); Brown et al. (2019) and Sanson et al. (2019) partly and fully considered 4 out of 8 criteria (4 colored rectangles). Elsley (2004) partly and fully considered 3 out of 8 criteria (3 colored rectangles). However, the lowest consideration of the evaluation criteria occurred in the studies of Derr et al. (2013; 2018) and Yates (2005), with only 2 out of 8 partly and fully considered criteria (2 colored rectangles).

In addition, the results revealed that the most considered evaluation criteria in the assessed studies were criterion 6 (Inclusivity) and criterion 7 (6 Es Approach), which were considered in 10 out of 13 studies. It should be noted that criterion 7 was fully considered by only one study (Hubsmith, 2006), with one green rectangle.

Further, it was also remarked that criterion 3 (Accessibility) was considered in 9 out of 13 studies, and criterion 4 (Sustainability) was considered in 7 out of 13 studies.

Interestingly, criterion 5 (Climate Change) was considered in only one study (Sanson et al., 2019), with one colored rectangle.

Finally, the findings revealed that the least considered ones were criterion 1 (Transportation Safety), criterion 2 (Mobility), and criterion 8 (Youth Empowerment), which were considered in 6 out of 13 studies for criteria 1 and 2, and 5 out of 13 studies for criterion 8.

5 Discussion




The findings from the assessment of thirteen previous studies revealed a varying degree of alignment with the eight predefined evaluation criteria, offering a comprehensive view of the strengths and gaps within existing research.

Among the studies, those conducted by Cushing (2016); Hubsmith (2006) and Malone (2001) emerged as the most comprehensive, addressing 6 out of 8 evaluation criteria. This suggests that these studies provide robust experiences for understanding the integration of key aspects such as inclusivity, sustainability, and accessibility within the broader context of transportation and urban planning.

The studies by Haider (2007); Malone and Rudner (2017) and Tranter and Malone (2003) followed closely, meeting 5 out of 8 criteria. Although being slightly less comprehensive, these studies still offer significant insights into important dimensions of relevant areas, particularly in mobility, accessibility and sustainability.

Table 1 Identified gaps in the selected international studies

Study No.	Author(s)	Criterion No.								No. of considered criteria
		1	2	3	4	5	6	7	8	
1	Agarwal et al. (2021)									4
2	Tranter and Malone (2003)									5
3	Sanson et al. (2019)									4
4	Brown et al. (2019)									4
5	Derr et al. (2018)									2
6	Malone and Rudner (2017)									5
7	Cushing (2016)									6
8	Haider (2007)									5
9	Derr et al. (2013)									2
10	Malone (2001)									6
11	Elsley (2004)									3
12	Hubsmith (2006)									6
13	Yates (2005)									2

 The criterion is fully considered.
  The criterion is partly considered.
  The criterion is not considered at all.

Agarwal et al. (2021); Brown et al. (2019) and Sanson et al. (2019) partly and fully addressed 4 criteria, indicating moderate alignment with the evaluation criteria. Even though these studies provide useful contributions, they may lack depth in certain areas, particularly in addressing emerging challenges such as transportation safety.

Elsley (2004) met only 3 criteria, showing a more limited scope. The least comprehensive studies, conducted by Derr et al. (2013; 2018) and Yates (2005), addressed just 2 criteria, indicating significant gaps in their approach to evaluating key issues such as transportation safety, mobility, accessibility, sustainability, and climate change.

The analysis highlights that criterion 6 (Inclusivity) and criterion 7 (6 Es Approach) were the most considered across the assessed studies, with inclusivity being addressed in 10 out of the 13 studies. However, it is noteworthy that the 6 Es Approach was fully considered by only one study (Hubsmith, 2006), indicating that while the concept is recognized, its comprehensive application is still limited.

Criterion 3 (Accessibility) and criterion 4 (Sustainability) were also well-represented, appearing in 9 and 7 studies, respectively. This reflects a growing recognition of the importance of these factors in shaping child- and youth-friendly urban environments.

On the other hand, criterion 5 (Climate Change) was noticeably underrepresented, appearing in only one study (Sanson et al., 2019). This gap highlights a critical area where further research is needed, particularly given the increasing relevance of climate change in transportation planning and its impact on the life of the most vulnerable road user groups, especially youth and children.

Finally, criteria 1 (Transportation Safety), 2 (Mobility), and 8 (Youth Empowerment) were among the least considered, appearing in just 6 studies for the first two and 5 studies for the latter. This can be attributed to that some of the studies considered only children while others consider only youth. However, this suggests a need for greater emphasis on these aspects, particularly in research aimed at creating efficient and empowering environments for all young people, youth and children.

6 Conclusions

Creating the best practice city for children and youth involves a multifaceted approach that prioritizes their Transportation Safety, Mobility, Accessibility, Sustainability, Climate Change, Inclusivity, 6 Es Approach (Engineering, Education, Enforcement, Encouragement, Equity, and Evaluation), and Youth Empowerment.

By learning from international practices, urban planners and policymakers can develop strategies that foster an efficient and sustainable urban environment for the younger population. Collective efforts and collaborative work of making use from the UNICEF's guidance note, international experiences, and the intensive experiences by the author led to an integrated and comprehensive approach which serves as a framework for the best practice child- and youth-friendly cities.

The importance of this study appears in achieving its targeted objectives of developing an integrated and comprehensive framework for the establishment of the best practice child- and youth-friendly cities that would contribute to enhancing the safety of young people. Furthermore, the study also recommends that the predefined 8 evaluation criteria are to be considered to serve as elements of the framework. In addition, the global requirements should be applied when a child- and youth-friendly city is being designed, including:

1. **Prioritize the Initiative:** The initiative to create a child- and youth-friendly city should be a key focus for local governments, prioritizing it in their annual plans and allocating resources for its implementation.
2. **Adhere to Human and Child Rights:** The city must adhere to human rights and child rights principles, ensuring that all policies and actions respect these frameworks.
3. **Contribute to Measurable Outcomes:** The city's initiatives should lead to measurable and positive outcomes for youth and children.
4. **Integrate Established Standards:** The city should adopt the UNICEF Local Governance Approach to Programming and other recognized standards to guide its development.
5. **Promote Inclusive Participation:** The city should actively enhance meaningful and inclusive participation of youth and children, ensuring their voices are heard in decision-making processes.
6. **Incorporate Capacity Building:** The city should focus on capacity building to achieve sustainable and long-term benefits for children and youth.
7. **Commit to Non-Discrimination:** The city must demonstrate a commitment to eliminating discrimination against youth and children in all forms.
8. **Clarify Government Roles:** The roles and responsibilities of the local government should be clearly defined and publicly declared to ensure accountability.

9. Foster Partnerships: The city should develop partnerships with community members and organizations across the public and private sectors, including Public-Private Partnerships (PPPs), to support its initiatives.
10. Monitor and Assess Impact: The impact of the city's initiatives should be regularly monitored and assessed to ensure they are effective and meeting their intended goals.

In conclusion, while several studies have made significant contributions in addressing key aspects of

transportation and urban planning, there remains a critical need for research that fully integrates all relevant criteria. Future studies should aim to bridge these gaps, particularly by incorporating underrepresented areas such as transportation safety, climate change, and youth empowerment. By doing this, research can more effectively contribute to the development of safer, more inclusive, and sustainable urban environments for all society members, including young population, youth and children.

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