





# What we talk about when we talk about inclusive play-space: A children-caregiver perspective

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**Abstract.** Every child has the right to engage in play and recreational activities. Public play-spaces offer venues and opportunities for children to socially interact with their peers through play. The literature on inclusive play-space design has considered the needs of children with mind–body–emotional differences, who are the direct users. However, current research has not considered that these play-spaces are also used by children’s caregivers, who are of diverse ages and cultural backgrounds. Thus, the needs of these indirect users of play-spaces have rarely been assessed. In this systematic review, we address this issue by examining recent studies that focus on the needs and design factors related to both direct and indirect users of play-spaces from a children-caregiver perspective. Our review focuses on older adults, who represent a vulnerable group based on age, and mi-grant domestic workers, who represent a socially vulnerable group based on culture. We identify the importance of considering caregivers’ needs through an inclusive approach. Evidence-based practices of inclusive play-spaces are reviewed and analysed to provide insights into inclusive play. We propose design directions that both safeguard children’s right to play and address the needs of their caregivers.

**Keywords:** Caregiver, Play space, Inclusive.

## 1 Introduction

Every child has the right to participate in recreational activities and play. Researchers have identified the numerous advantages of less-supervised forms of outdoor play that are exploratory and involve elements of challenge and risk. Such play has been found to encourage social, cognitive, emotional and physical development [1]. Public play-spaces offer a setting in which children can interact with their peers while having fun. While children are the direct beneficiaries of such spaces, their caregivers (such as parents, older family members and domestic workers) can also indirectly benefit from such resources [2].

Play-space designs are considered inclusive and successful if they are simple to comprehend, require minimal physical effort, accommodate different play prefer-

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ences, offer various forms of play engagement (cognitive, sensory, motor and social) and strike an adequate balance between challenge and risk [1]. The literature on inclusive play-space design has predominantly considered child-friendly design aspects and the factors that hinder children's play experiences. Researchers have argued that the needs of children with mind-body-emotional differences should be considered. However, some research into inclusive design has acknowledged the importance of older-adult-friendly public spaces at the policy and planning level. For example, the World Health Organization (WHO) age-friendly city initiative recognises that inclusive and accessible public spaces are essential for the wellbeing of older adults. The WHO promotes public space as a central aspect of the active ageing concept [3]. In addition, employing migrant domestic workers from diverse cultural and social backgrounds as caregivers is increasingly common. Thus, inclusive play-spaces where the needs of both children and migrant caregivers are considered can potentially become spaces for social interaction and can benefit both groups' health and wellbeing. Play-spaces that are inclusive of such caregivers can be significant in reclaiming the right to the city for this vulnerable group of workers. Design considerations should include the provision of appropriate facilities. Settings consisting of simple benches with or without shelters outside the play-spaces are, however, common [2]. Methods of promoting interactions between children and their direct carers and facilitating encounters among the caregivers are lacking, and are challenging given the diverse ages and cultural backgrounds involved. Taking a user-centric approach to address these concerns in which the perspectives of numerous groups would be recommended [1], such as migrants, those from low-income neighbourhoods and intergenerational users with disabilities, are considered. They suggested that design solutions can support childhood growth through play [1].

This paper delves into recent studies that explore the needs and design factors of inclusive play-spaces, particularly from the perspectives of children and their caregivers. Our focus is twofold: we consider the elderly as an age-based vulnerable group and domestic workers as a culturally-based socially vulnerable group. Our goal is to deepen the understanding of the 'meanings' embedded in play-spaces and the concept of play, emphasizing a more balanced consideration for both direct (children) and indirect (caregivers) users. Rather than presenting definitive design guidelines, this paper aims to spark reflection and dialogue. To this end, we introduce four guiding questions that are designed not to prescribe solutions, but to encourage a critical rethinking of inclusive play-space design. While these questions primarily emerge from the context of Hong Kong, their scope extends far beyond. Our aim is to draw global attention to this issue, advocating for children's right to play in tandem with acknowledging and addressing the multifaceted needs of their caregivers.

## **2 Four questions to guide inclusive play-space design**

Inclusive design should first involve the identification and acknowledgement of the diverse focal user groups and an understanding of the needs of individuals. The de-

sign approaches that most effectively promote outdoor play, social engagement, and inclusion in public playgrounds can then be determined [4]. Drawing on psychology, sociology, design and urban studies, we propose a framework of four questions that can serve as a guide for researching inclusive play-spaces from a children-caregiver perspective.

## **2.1 What kind of play-space?**

Public open space (POS) provides individuals from different socio-economic backgrounds with the opportunity to strengthen their social relationships, which has been associated with numerous health benefits [5]. An integral component of POS is public play-spaces, recognized as crucial for children's development. While play is a fundamental aspect of childhood that can occur in various settings, public play-spaces provide a dedicated environment for this activity [6].

Typically situated in neighborhoods or locations accessible by driving or public transportation, public play-spaces are managed by adults and designed specifically for children. They are equipped with play equipment that is designed to accommodate children. Public play-spaces play an important role in facilitating social inclusion by providing meaningful opportunities for cultural and ethnic diversity between children, parents and the local community [6]. Beyond just recreation, these spaces offer important resources for children to gain practical experience, develop their physical, social and motor skills and interact in a social and physical environment [1]. Public play-spaces convey the message that children are welcome to enjoy recreational activities in the area.

The role of caregivers in these settings is increasingly prominent. Many caregivers utilize public play-spaces for recreation, often due to limited space at home [2]. Playgrounds have become a source of entertainment for both children and their caregivers, which highlights the significance of providing a suitable space for caregivers and children to bond. Therefore, it is crucial that the design of play-spaces takes into account the requirements and preferences of caregivers, ensuring these environments are beneficial for both children and adults.

## **2.2 What are the issues?**

A study conducted in Hong Kong found that caregivers displayed a range of behaviours, including, but not limited to, standing or sitting close by and observing the children while they played, using their phones, walking with elderly family members, offering verbal guidance and providing physical assistance [2].

In Hong Kong, only a few playgrounds provide seating areas around the play-spaces and they generally lack any area or facility where people can store their personal belongings. Only limited spaces were provided for caregiving, including spaces for carers to accompany and assist their children (Figure 1). Although there were more adults than children present, no facilities were specifically designed to enable caregivers to actively play with children [2]. The caregivers were limited to the role of assistant and within a hierarchy rather than being actively involved; this does not

consider the possibility that they can be play companions. The potential and need for caregivers to become playmates have not been explored.



**Fig. 1.** Typical playground setting in Hong Kong

While inclusive play-space design is increasingly considered [1], caregivers are still generally unacknowledged as important users of the space. For example, researchers investigated the caregivers' perceptions of inclusive playgrounds design but mainly focused on whether the provided facilities cater to the needs of children with disabilities [4,6]. Inclusivity was described as 'the value placed on inclusive and usable playgrounds that promoted equal access and equity amongst children', with no attention given to the needs and heterogeneity of caregivers [6].

### **2.3 Are play-spaces senior friendly?**

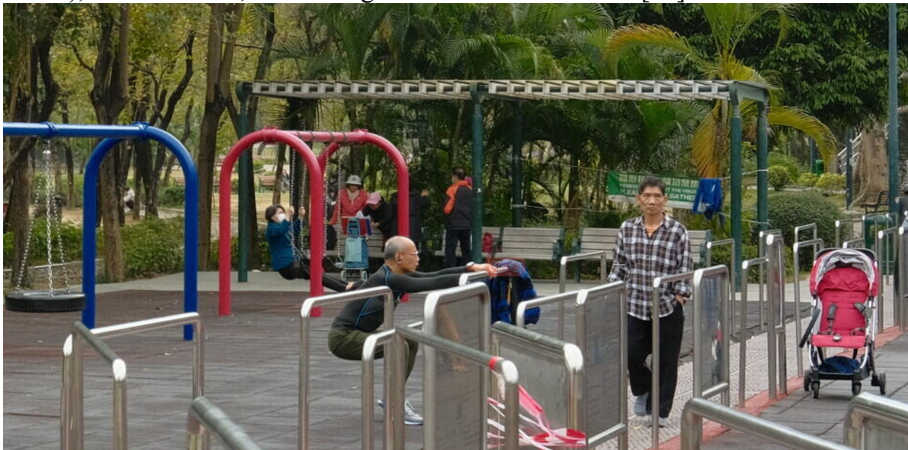
Inclusive play-spaces should cater to both the physical and social needs of older populations. This demographic often requires specialized services and has distinct perceptions and requirements compared to other users of public spaces [7]. Studies have shown that elderly individuals frequently use public open spaces like parks, typically spending 1-2 hours per visit and often visiting daily [8,9]. Their activities range from relaxation to socializing, underscoring the importance of these spaces in their daily lives [10].

Older adults are not only parkgoers but also serve as caregivers for their grandchildren in these environments (Figure 2) [2]. Key factors influencing their use of POS include accessibility, quality of facilities, and safety. In compact cities, the quality of open spaces, such as the presence of vegetation and gardens, becomes even more crucial due to its positive impact on mental states [11,12,13]. Elderly people prefer shaded, quiet, clean, and well-maintained areas, with amenities like chess tables, playgrounds, benches, and fitness areas that are accessible and comfortable, especially for those with physical limitations [14]. Social features, such as benches arranged for group interactions, are also valued [9].



**Fig. 2.** Elderly wait by the playground, bored, for their grandchildren (left); Elderly take care of their grandchild in the playground (right)

However, despite the presence of inclusive equipment in some playgrounds, few resources are dedicated specifically to seniors (Figure 3). This oversight can lead to feelings of disrespect or insecurity and perpetuate a sense of segregation [9]. The location of POS, such as proximity to community centers (e.g., within a 500-metre radius), is also critical, influencing mental health outcomes [13].



**Fig. 3.** Elderly making use of the facilities in the playground

The social aspect of POS is vital for elderly individuals, offering opportunities to build and maintain connections, which can have significant health benefits [3, 11]. If seniors are able to communicate and receive support from peers and family, they can build strong social networks, which can enhance their feeling of social connectedness. Researchers examined Hong Kong as a unique case and identified the fundamental elements to consider when creating POS with the elderly in mind [14]. These include social networks, social ties, social connections, place attachment and mobility [14]. Considering opportunities for older citizens to socialise, build relationships and maintain strong bonds with local communities for longer periods of time is important [15]. Cross-generational integration in public parks, as suggested by gerontologists and

psychologists, can reduce isolation for the elderly and foster inclusive environments [3].

Incorporating various uses in different areas can improve inclusive play-space design. Special equipment and facilities can be provided for elderly users that also allow non-elderly use, maintain safety and exclude any activities deemed dangerous for the elderly [3]. Such facilities also provide an inviting environment for grandparents to interact with their grandchildren, allowing them to watch each other playing and engage in conversation.

Although the literature has documented how effective public spaces for the elderly can be designed from various perspectives and has thoroughly examined open space design (e.g., parks), research specifically on play-spaces (e.g., playgrounds) is limited. Few studies have assessed how well play-spaces are tailored to the needs of the elderly, with research largely disregarding both their unique needs due to physiological changes and the need for intergenerational contact, along with the importance of social connections with those in similar caregiver roles.

#### 2.4 Are play-spaces catering to different cultural groups?

The increased diversity of urban environments has led urban design and planning scholars to recognise the potential for public spaces to provide encounters and social interactions between different socio-cultural groups, such as migrant and local populations [8]. Everyday public spaces such as parks, squares, streets and transport spaces reflect the ambivalent connotations of diversity. They can constitute settings of positive social interactions or, and sometimes concurrently, increase social tensions [16]. Public spaces that foster inter-ethnic interactions, even if fleeting, have been found to accommodate the various socio-spatial practices of migrant users, including domestication and the sharing of space [17]. By allowing access to diverse groups, some public spaces such as public parks constitute sites for ‘bringing together’ multicultural users, thus potentially providing social capital [18].



**Fig. 4.** Different socio-cultural groups using the corner area in the playground

Although research into migrant caregivers' activities in play-spaces is limited, several studies have examined the conditions, characteristics and patterns of use of other types of public spaces that are inclusive of culturally diverse populations. Most of this research focuses on specific geographical contexts, such as ethnically mixed neighbourhoods in European cities where various migrant groups have settled over time [19]. In these contexts, state-led initiatives aimed at promoting the socio-cultural inclusion of migrant groups have been effective when migrant and local groups interacting in local community spaces work on projects of common interest [19].

Social considerations are important when assessing culturally inclusive parks for migrants. Based on observations in the Netherlands, local neighbourhood parks were claimed to be crucial transitional settings, situated between the familiarity of the home and urban areas that are unknown to migrant families [20]. The prerequisites for public spaces that foster inter-ethnic social interaction include regular use and the availability of activity-specific and socially-conducive facilities. In the Netherlands, migrant groups gather in parks. Meetings of large, culturally similar groups enable them to carve their own space by sharing food and music [21]. In these settings, active play such as football requires mobility and thus assumes the important role of social interaction, as visitors are likely to come across others in the space.

Although migration pathways in Western and Asian cities differ, similar patterns of public space use can be observed. These are relevant when examining dimensions of culturally inclusive play-spaces. In Asian cities, low-income migrants have restrictions in terms of employment type, living conditions, citizenship and labour rights. In Hong Kong, migrant domestic workers lack access to private space, thus during their days off they reclaim and domesticate public spaces available in this high-density environment [22]. The location of these meeting spaces is typically in commercial locations far from residential neighbourhoods, which are generally avoided by the local population. Migrant domestic workers can be observed gathering in large groups, sitting on pavements chatting, sharing food, resting or dancing [23]. The spaces appropriated during weekly gatherings are primarily designed for pedestrian and vehicle mobility, and thus lack facilities and urban furniture.

As migrant domestic workers' weekly duties can involve caring for children, play-spaces are potential sites of inter-ethnic group encounters and social interactions. Local neighbourhood parks and particularly play-spaces are places that domestic workers frequently visit with children. These local public spaces were claimed to have a major effect on the sense of inclusion or exclusion of migrants in the receiving city [24]. Thus, local play-spaces represent a type of infrastructure for inclusion and social interaction among culturally diverse groups. While research on play-spaces that are inclusive of migrant caregivers remains limited, researchers can build on the notion that inclusion can emerge through collaboration on projects of common interest [25]. For example, in the design phase of programmes related to culturally inclusive play-spaces, spaces for large-group play, sport, dance, urban gardening and public engagements can be considered.

### 3 Conclusion

While play-spaces are traditionally child-centric, our examination underscores the imperative to rethink these contemporary public facilities in the context of diverse user needs and modern urban lifestyles. This necessitates a broader lens—one that encompasses both children and their caregivers in homes and public spaces alike.

Our literature review illuminates the critical need to recognize and differentiate among the various user groups of modern play-spaces, with a particular emphasis on caregivers as indirect users. We further suggest that the needs, demands and aspirations of two vulnerable populations, the elderly and those from ethnic minorities, should be considered when aiming to create inclusive play-spaces for all.

Looking ahead, we advocate for future research to delve into the heterogeneity of the caregiver demographic. This includes exploring the unique needs of subgroups like older women caregivers and examining intersectional needs that span across gender, age, and cultural lines. Empirical studies are crucial in this regard, as they can provide deeper insights into these varied needs and experiences. Such data not only validate existing assumptions but also offer a more comprehensive understanding of this multifaceted topic. Ultimately, these efforts will contribute to the development of play-spaces that are inclusive and responsive to the evolving dynamics of urban life.

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