

*Dialogue*

# Free Play, Youth Mental Health, and the Role of Cities: An Opinion on Uncertainty and Opportunity

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## Abstract

Where did you play as a child? Do you remember playing in public places, or away from direct adult supervision? Children and adolescents are experiencing rising rates of mental health issues, coinciding with a long-term decline in outdoor free play. Free play is a self-directed and voluntary activity that supports autonomy, emotional regulation, and social competence. We evolved using these innate resources in relation to the environment and each other. But, urban environments today often provide fewer opportunities for natural, free play than experienced by previous generations. This article argues that designing streets and open spaces to enhance safety, visibility, and spontaneity is a key part of restoring outdoor play, with potential benefits for youth mental health, which in the long-term is collective wellbeing. Although anecdotally evident, demonstrating this scientifically requires proactive, mixed-method research across diverse urban contexts, alongside co-creative interventions that recognize free play without directing it. This approach can support more thoughtful urban design and contribute to healthier developmental trajectories for current and future generations.

Keywords: free play; youth mental health; uncertainty; urban design; public space

## 1. Youth mental health since the 1950s and current trends

Mental health conditions predominantly emerge during childhood and young adulthood, with nearly half of all disorders beginning before age 18 and over 60% before age 25. The peak onset occurs in mid-adolescence, around 14.5 years, highlighting this developmental window as critical for prevention and intervention (Solmi et al. 2022). Since the 1950s, mental health conditions such as anxiety, depression, and suicide have worsened among youth (referred here as up to 24 years old) (Twenge et al. 2010).

Evidence from multiple studies indicates increasing prevalence of psychological distress among adolescents in several high-income countries (Twenge et al. 2010; McGorry et al. 2024). In recent years, youth mental health in the United States (US) has reached crisis levels, with sharp increases in depression, suicidality, and substance-related deaths, particularly during the COVID-19 pandemic (CDC 2024). Global estimates further suggest that by 2030 approximately 42 million years of healthy life may be lost annually due to mental disorders and suicide among adolescents (Baird et al. 2025).

Recent evidence also indicates that these trends are not evenly distributed. Mental health risks are disproportionately higher among young people facing poverty or systemic discrimination, those living in underserved rural areas, and LGBTQ+ youth. Access to care remains uneven; for example, roughly half of the 7.7 million children in the US with treatable mental health disorders do not receive care (Whitney and Peterson 2019; Baird et al. 2025; Woolf 2025). In this article, 'children' refers broadly to individuals under 18 years of age, consistent with the United Nations Convention on the Rights of the Child.

Despite increasing attention, the causes of these trends remain uncertain. Proposed explanations include reduced social connection, academic pressures, and expanding digital

environments. Although mental health problems have risen alongside digital engagement, it remains unclear whether social media specifically, broader digital life, or other societal changes are primary drivers. The COVID-19 pandemic introduced further disruption, and its long-term effects remain uncertain. This uncertainty complicates policy responses, as few population-level interventions have demonstrated consistent effectiveness. One societal trend receiving increasing attention is the decline of children's outdoor free play, which may represent an additional environmental shift affecting youth development.

## 2. Youth mental health and the decrease in play

Free play is self-directed, intrinsically motivated, and often social, supporting skills such as emotional regulation, problem-solving, and social interaction (Gray 2011). It exists across human history and in many animal species (Spinka et al. 2001), and its absence is associated with difficulties in emotional regulation (Lafreniere 2011). Free play does not require the absence of adults; rather, it depends on degrees of autonomy that increase with age. Jane Jacobs described how everyday street life can provide informal social oversight, where the presence of others engaged in routine activities supports safety while allowing children relative independence (Jacobs 1961). Children once played freely in open urban spaces, but in most western cities today it is rare to see children playing outdoors without adult supervision. Between 1981 and 1997, US children experienced declines in self-directed play alongside increases in school demands (Sandra L. 2001). Even when indoor play is included, total playtime declined, suggesting an even steeper reduction in outdoor free play. Independent mobility has also decreased substantially since the 1970s (Roe and McCay 2021).

Recent public and academic discourse has also highlighted the role of changing childhood environments, with Haidt (2024) arguing that the shift from a play-based to a phone-based childhood since the 2010s has contributed to rising mental health problems among young people. A growing body of research indicates that free play may be linked to mental health and social-emotional development in children and adolescents. Observational studies show that outdoor and unstructured play are associated with fewer psychosomatic symptoms and better well-being (Piccininni et al. 2018), while more adventurous play (i.e., child-led play involving excitement and age-appropriate risk-taking) is linked to lower internalizing problems and higher positive affect, particularly among children from lower-income backgrounds (Dodd et al. 2023). Limited longitudinal evidence suggests that early free play predicts later self-regulation (Colliver et al. 2022), and that outdoor and physically active play is associated with improved peer relationships in adolescence (Hilliard 2020). Experimental studies further indicate that increasing opportunities for self-directed and nature-based play can reduce anxiety and depressive symptoms, while improving attention, social behavior, and emotional regulation (Brussoni et al. 2017; Al-Yateem and Ros-siter 2017; Farmer et al. 2017; Walters et al. 2025). In parallel, reduced opportunities for autonomy, including overprotective parenting, have been associated with higher risks of anxiety and related outcomes (McLeod et al. 2007; der Bruggen et al. 2008; Raudino et al. 2013).

Despite these converging findings, important uncertainties remain. Much of the evidence is correlational, longitudinal data are limited, and causal pathways are not yet fully established. In particular, it remains unclear how reductions in free play influence long-term mental health trajectories, how independent mobility translates into meaningful opportunities for play, and how structural inequities shape these relationships across populations and contexts.

## 3. Can the city be part of the solution?

Cities may not be the primary cause of rising youth mental health problems, but they hold significant potential to contribute to solutions, particularly given increasing urban populations and the central role of everyday environments in shaping behavior and development. Jane Jacobs described sidewalks as a 'uniquely vital and irreplaceable organ' of city life, sustaining informal social networks through continuous, everyday use (Jacobs 1961). Yet, over time, many cities have reallocated this more and more urban open space toward vehicular movement. Streets that once functioned as shared social environments have become traffic-dominated corridors, in part through deliberate shifts in regulation, design, and cultural norms (Norton 2011). This transition has reduced opportunities for casual

interaction (Appleyard and Lintell 1972) and unfolds alongside rising levels of loneliness (Buecker et al. 2021).

Within this broader transformation of urban space and everyday life, opportunities for children's free play have also diminished. Several factors may be contributing to this decline in urban areas, including increased schooling, structured activities, digital engagement, and parental concerns about safety. These dynamics interact with socio-spatial conditions such as traffic-related community severance, perceived neighborhood safety, socio-economic inequality, and norms shaping how freely children can move and play without adult supervision. Increased traffic and fragmented street networks can restrict independent mobility, while parental perceptions of danger, often influenced by road conditions, crime, and urban design, strongly shape whether children are allowed to play outdoors. Digital technologies further compete for time and attention and are often used at vulnerable times, such as before sleep, affecting rest and mental health.

These constraints are not experienced uniformly. Opportunities for free play are shaped by structural inequities across neighborhoods and populations, as urban design and public space policies interact with factors such as race, gender, disability, and socioeconomic status. These inequities produce uneven access to safe, welcoming, and playable environments across cities worldwide (Baird et al. 2025; Collins et al. 2024; WHO 2025). For example, children in low-income areas are more likely to live near high-traffic roads with limited access to green space; girls may face harassment or safety concerns that restrict their use of public space; and children with disabilities may encounter physical and social barriers that limit participation in play (WHO 2025). Such disparities shape not only where play occurs, but who is able to engage in it, and under what conditions.

These patterns raise questions about how play is considered within urban policy and planning. Recent international surveys identify youth-friendly cities as those with safe, inclusive public spaces and meaningful youth participation in planning (Collins et al. 2024). Rather than requiring explicit designation, such conditions may allow opportunities for free play to emerge as a byproduct of environments that support accessibility, autonomy, and social interaction. In this sense, play can be understood not only as an activity to be provided, but as an outcome of how urban environments are structured and experienced in everyday life.

Streets, plazas, and informal spaces can function as sites of encounter, where unplanned interactions and activities, including play, emerge as part of daily routines rather than as designated functions. Foundational work has highlighted how such everyday environments support informal social networks, safety, and collective life, particularly when they are accessible, walkable, and active (Jacobs 1961; Gehl, 1971). These spaces enable forms of engagement that are not programmed but arise through presence, movement, and interaction, supporting autonomy and social connection. From this perspective, play is not confined to playgrounds but embedded in the fabric of urban life, occurring along everyday routes such as streets and paths, as well as transitional (building to sidewalk) and shared public spaces.

Examples from cities such as Barcelona and Regensburg illustrate how play can be embedded within broader planning frameworks that integrate mobility, public space, and environmental quality (Roe and McCay 2021). In Barcelona, interventions such as school streets and the transformation of schoolyards into greener, low-traffic environments expand opportunities for everyday play while improving air quality and safety. In Regensburg, child-led audits and legally binding planning instruments incorporate accessibility, proximity, and play value into urban development, ensuring that opportunities for play are distributed across the city rather than confined to isolated sites. Together, these approaches suggest that enabling play is less about introducing discrete facilities and more about shaping urban systems that support interaction, movement, and presence in everyday life.

#### **4. Urban design and free play**

Urban design can support free play, but it cannot prescribe it. Free play depends on children's ability to explore, improvise, and use space on their own terms. The role of design is therefore less to determine specific uses than to create conditions that make spontaneous activity possible.

Evidence from interventions such as play streets, shared streets, and traffic calming shows that reducing constraints on movement can enable play (Meyer et al. 2019; NACTO 2020). Measures including lower traffic speeds, wider sidewalks, and active street edges

can increase safety and visibility, creating environments where play emerges as part of everyday life rather than as a designated function.

Children's play is closely linked to independent mobility. Historically, much of children's play occurred during everyday movement through streets and neighborhoods; this is far less common today (Frohlich and Collins 2023). When children are able to move freely, they can discover, adapt, and bring their intensity and presence to spaces for play, rather than relying solely on supervised or purpose-built environments. This autonomy is central, as play emerges through exploration, encounter, and improvisation.

Efforts to increase free play must navigate competing pressures, including structured schedules, digital engagement, and regulatory constraints. In many cities, rules limit activities such as street play, music, or informal gathering, reflecting tensions between safety, traffic management, and everyday use of space (Figure 1). These constraints often respond to legitimate concerns, but they also illustrate how design and governance shape the conditions under which informal, unstructured activity can occur.



Figure 1. Photograph taken by the author in Harlem, Manhattan (November 2025), illustrating how regulatory signage and traffic prioritization can constrain spontaneous street play and reflect broader governance decisions about the allocation of public space.

Design approaches that support free play often emphasize openness rather than prescription. Designers such as Cas Holman highlight how environments and objects can invite interaction without dictating specific uses, allowing children to explore and invent their own forms of engagement (Holman 2025). Applied to urban contexts, this perspective suggests that open-ended environments, such as flexible plazas, streets with reduced traffic, or overlooked and residual spaces, hold potential for free play to emerge organically. These spaces create opportunities for experimentation, interaction, and social connection without defining how they should be used.

If children's free play is, in evolutionary terms, a natural element in any society, embedded in the fabric of every day city life, how might contribute to the social systems it is a part of? I offer the analogy of a beehive (Maeterlinck 1901). Just as worker bees forage through space to gather resources and return to the hive, sustaining the colony through continuous circulation, children's everyday movement and play can be seen as a form of social 'pollination' that contributes to the vitality of urban environments. These movements generate encounters, reinforce social ties, and support learning and adaptation. If barriers prevent bees from leaving or returning, the collective system weakens; similarly, when urban environments constrain children's independent mobility and opportunities for play, the effects extend beyond individual experience (Figure 2). Reduced opportunities for exploration and interaction may diminish not only developmental processes for children, but also the everyday social exchanges that sustain community life. In this sense, play is not a peripheral activity but part of the underlying processes through which urban environments remain socially and developmentally functional. This view raises the question of how such processes can be better understood, measured, and supported within urban systems.



Figure 2. Free play as urban "social pollination": children's everyday movement and play generate encounters and connections that sustain the vitality and functioning of city life.

## 5. Is more research needed on free play, urban design, and mental health?

A key research gap is not only whether free play supports mental health, but under what spatial and governance conditions it can be enabled and sustained in contemporary cities. This requires moving beyond isolated interventions toward comparative, cross-city research that examines how mobility, regulation, and everyday urban form shape opportunities for spontaneous play.

Rather than treating play as a discrete amenity, future work could focus on how it emerges within ordinary urban systems, including streets, sidewalks, and overlooked everyday spaces. In this sense, play can be understood as an emergent property of urban environments, arising from the interaction of mobility, safety, spatial openness, and social presence, rather than from designated infrastructure alone. This shift has direct policy implications: it reframes play from a localized intervention to a distributed outcome of how cities are planned, regulated, and experienced in everyday life.

The interventions already mentioned including play streets, school streets, and temporary street closures demonstrate that reclaiming space for social use is possible. However, their implementation remains localized, fragmented, and unevenly evaluated. As a result, cities risk treating play as an exception rather than as a routine component of urban life. Strengthening the evidence base, particularly through comparative and context-sensitive research, could be useful to support broader integration of play into urban planning and governance.

Advancing this agenda will require research frameworks that combine experimentation, evaluation, and comparison across contexts, capable of translating local initiatives into generalizable knowledge. Such approaches are necessary to inform policy and support the integration of play-supportive conditions into urban planning at scale, while accounting for social and spatial inequalities. Looking ahead, this also implies a shift in how future urban environments are imagined and governed. Rather than anticipating a continued decline of free play, cities could be conceived as environments where opportunities for spontaneous play expand alongside improvements in safety, accessibility, and social cohesion. In such scenarios, streets and public spaces function as intergenerational environments that support everyday interaction, creativity, and exploration, contributing not only to individual development but to collective wellbeing. Reframing play as a routine and distributed feature of urban life opens the possibility for cities that are more vibrant, inclusive, and resilient, where mental and physical health are supported through the ordinary experiences of movement, encounter, and shared use of space—cities where the sounds of play, conversation, and curiosity are once again part of the everyday urban rhythm.

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