



# Towards healthier, enabling environments for all: positioning the 'runnability of cities' as a spatial planning approach

Jua Cilliers & Slawomir Ledwon

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## Towards healthier, enabling environments for all: positioning the ‘runnability of cities’ as a spatial planning approach

Jua Cilliers <sup>a,b</sup> and Slawomir Ledwon<sup>c</sup>

<sup>a</sup>School of Built Environment, Faculty of Design, Architecture and Building, University of Technology Sydney, Ultimo, Australia; <sup>b</sup>Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa; <sup>c</sup>ActiCity.org, Gdynia, Poland

### ABSTRACT

The interplay between urban design and public health is a critical concern in modern cities, with the COVID-19 pandemic underscoring the necessity of accessible, safe, and health-promoting urban environments. This paper aimed to unpack the concept of ‘runnability’ as a cornerstone of healthy urban environments, advocating for the integration of running-friendly spaces into city planning, in order to enhance border public health and well-being. The paper followed a reflective praxis methodology, combining academic research with introspective analysis of running experiences, and offers novel insights into the subjective dimensions of urban runnability. Our findings advocate for a global initiative to promote runnable cities through transdisciplinary collaboration, infrastructure development, policy reform, educational efforts, and design innovation. By positioning ‘runnable cities’ as a spatial planning approach, there could be global progress towards healthier, enabling environments for all.

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Runnable spaces;  
sustainability; community;  
urban spaces; runnability;  
urban environment

### Introduction: understanding healthy cities, healthy communities and our status quo

Following the recent COVID-19 pandemic, there is a renewed understanding of the inter-linkages in the way cities are designed, planned, built and governed and how this directly affects human health. This realization is supported by two pivotal developments in global policy, namely the endorsement of the 2030 Sustainable Development Agenda by the United Nations in 2015 and the introduction of the New Urban Agenda by UN Habitat in 2016, which both have been instrumental in highlighting the significance of integrating health considerations into urban planning and governance (Ramirez-Rubio *et al.* 2019). These milestones have positioned ‘health’ as an overarching concern within the urban planning discourse, explicitly recognizing it as essential to the development and management of cities. However, despite these clear directives, Zheng *et al.* (2021) point out the challenges in translating these agendas into actionable strategies on the ground. The concept of a healthy urban ecosystem includes stability, healthcare, culture, environment, education, and infrastructure, necessitates a comprehensive, interdisciplinary management approach, highlighting the critical need for a holistic view of urban planning that not only acknowledges but actively incorporates public health as a pivotal component of city design and governance (Ndaguba *et al.* 2022).

In essence, a healthy city leverages Sustainable Development Goals 3 (good health and well-being) and 11 (sustainable cities and communities) to prioritize health in the urban agenda. This approach encompasses a broad spectrum of multidisciplinary aspects including satisfaction, well-being, happiness, education quality, public healthcare, efficient public transportation, green spaces, safety, and low pollution and noise levels (Pietra 2022). The World Health Organisation (2022) defines a healthy city as one continually enhancing its physical and social environments, boosting community social capital to enable mutual support, and facilitating the fullest potential of life for its inhabitants.

Yet, paradoxically, our living environments, the very physical and social settings meant to nurture health, often undermine public health and exacerbate health disparities. Since the industrial revolution, the shift of populations from rural to urban areas has introduced challenges like congestion, pollution, infrastructure deficiencies, poor housing conditions, and increased crime, creating unsafe environments (Renkow and Hoover 2000). These urban issues have profoundly impacted health and well-being. Initiatives like the Garden City Movement and New Towns Movement have aimed to refocus attention on urban life quality (Meacham 1999), but the quest for healthier cities continues amidst ongoing and unprecedented challenges, both natural and man-made.

**CONTACT** Jua Cilliers  [juaneep@gmail.com](mailto:juaneep@gmail.com); [jua.cilliers@uts.edu.au](mailto:jua.cilliers@uts.edu.au)  School of Built Environment, University of Technology Sydney, Ultimo 2007, Australia; Unit for Environmental Sciences and Management, North-West University, Potchefstroom, 2531, South Africa

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The COVID-19 pandemic highlighted the importance of the environment to our collective health and quality of life, emphasising the work that has been done by De Groot (1992), Naveh (1997), Ward Thompson (2002) and Chiesura (2004) in this regard. It also underlined work of Rode *et al.* (2017) that stated that accessibility plays a major role in shaping cities. As larger cities and metropolises have not necessarily developed with ‘societal health’ in mind (Frumkin 2003), it became very apparent that environments which stimulates health, happiness and welfare would be increasingly important, going forward. The promotion of healthy and active lifestyles is now considered a contemporary topic in practices as across multiple disciplines, including fields of sports studies, urban design, geography, sociology and psychology. On the contrary the research on sedentary behaviour, physical inactivity and the concomitant recent health concerns have positioned the need for physical activity as one of the grand societal challenges of our times (Friedmann 2010, Rode *et al.* 2017).

Given that the design and arrangement of urban spaces hold the capacity to facilitate an active lifestyle and thereby enhance well-being, prioritizing spatial planning becomes imperative. This prioritization enables local and national governments to emphasize health values within their urban planning strategies (van Renswouw *et al.* 2019).

There is ample evidence that physical activity, especially in the urban context, is influenced by individual, social and environmental factors (Cleland *et al.* 2012, Larson *et al.* 2014). Understanding the influence of built environment on activity and recreational behaviour is a significant step towards developing related landscape strategies (Huang *et al.* 2023). Within the context, the notion of ‘runnability’ is gaining importance, as it intersects the concepts of walkable cities and bicycle-friendly cities. Runnability, or ‘runnable cities’, offers a new planning perspective when it comes to healthy cities and health communities.

This study adopted a reflective praxis approach, blending traditional academic research with introspective reflection on the experiences and perceptions of running in urban environments. The methodology is structured around three primary components: literature review, a reflection on case studies, and reflective analysis, each drawing upon and informing the others to provide a comprehensive understanding of urban runnability. A scoping review of existing literature on urban planning, public health, and physical activity sets the foundational framework of our study. This review not only identifies gaps in the current research landscape but also shapes our reflective inquiries and case study selection. According we selected a diverse range of urban environments for case studies based on preliminary insights from the scoping literature review and our personal experiences as urban runners. These case studies involve both qualitative and quantitative data collection methods, including

direct observation, runner surveys, and interviews with urban planners and public health experts. The aim is to capture a broad spectrum of experiences and perceptions regarding runnability in cities. Finally, and central to our methodology is the integration of personal reflection. This involves critical contemplation of our own running experiences in the context of the studied urban environments, alongside reflections gathered from case study participants. By comparing these personal insights with findings from the literature review and empirical data, we engage in a reflective praxis that deepens our understanding of the runnability concept. This process allows us to question and refine theoretical assumptions, and consider the implications of our findings for urban planning and public health policy.

By employing this reflective praxis methodology, we aim to produce a nuanced analysis of runnability that encompasses not only the physical and spatial attributes of urban environments but also the personal and collective experiences of individuals navigating these spaces. This approach highlights the importance of considering human experiences and perceptions in urban planning and public health initiatives, ultimately contributing to the development of more liveable, runnable cities.

## Literature review and case study reflection

The concept of runnability within the urban planning and public health context emphasizes designing cities in a way that supports and encourages running as a form of physical activity, directly contributing to the health and well-being of urban residents. It involves the thoughtful integration of accessible, safe, and engaging pathways, parks, and spaces that invite individuals to run, thereby fostering a culture of fitness and wellness. By prioritizing runnability, urban planners and public health advocates aim to address the challenges of urban living, such as sedentary lifestyles and limited access to recreational spaces, creating healthier, more vibrant communities.

In the wake of global urbanization and pressing public health challenges, this paper argues that the concept of ‘runnability’ is becoming increasingly significant. The burgeoning urban population, anticipated to comprise 68% of the global demographic by 2050 (United Nations 2018), amplifies the pressure on city infrastructure and services, leading to overcrowding and compromised urban living conditions. Furthermore, the inherent complexity of urban ecosystems, characterized by the interplay between land use, transportation, and socio-economic factors (Alberti *et al.* 2018), accentuates the urgency for integrated and health-centric urban planning solutions. This paper argues that embedding the principle of runnability within urban planning frameworks can significantly mitigate these challenges by promoting active living and enhancing the overall well-being of urban residents, as unpacked accordingly.

### Understanding runnability

The concept of ‘runnability’, while emerging in urban planning discourse, underscores a transformative approach to fostering active urban lifestyles. As the demand for accessible and healthy urban environments escalates, runnability intersects with broader discussions on sustainability, public health, and urban design. Scholars such as Ettema (2016) and (Heinsbroek 2022) have emphasized the significance of integrating runnability into urban planning to promote healthier lifestyles and enhance the social well-being of city dwellers. These studies highlight how thoughtfully designed urban spaces can encourage physical activity, contribute to public health, and improve the quality of life in urban settings.

As a convenient, comparatively low-cost and non-organized exercise for all ages, running activity has become one of the most popular sport activities (Huang *et al.* 2023) and one of the most frequently practiced sports (Strava 2019). The term ‘runnability’ encapsulates various dimensions of urban design that facilitate running as a seamless and enjoyable activity. Ettema (2016) first introduced it, focusing on the perceived attractiveness and quality of running environments and their influence on running behavior. This perspective was further expanded by Ledwon (2021) and Schuurman *et al.* (2021a), who delved into the environmental preferences and concerns of runners, providing a foundation for understanding the essential attributes of runnable cities, as captured in Table 1.

What sets runnability apart is its nuanced requirements for urban spaces. Unlike the broader applicability of walkability and cycling-friendly initiatives, runnability emphasizes uninterrupted movement and accessibility to less conventional public spaces, such as urban stairways and pathways through public buildings (Schuurman *et al.* 2021b). This specificity calls for a tailored approach in urban planning that respects the unique needs of the running community. Runnable cities are different in the sense that runners prioritized uninterrupted movement (thus avoiding stops, crossroads, railways, etc) and runners can go where cyclists hardly can or cannot go (urban stairways, steep trails, running through public buildings, etc). In this way, running could unlock additional ‘public spaces’ that are not accessible or attractive to walking or cycling. Nonetheless, a limited amount of studies uses walkability as a proxy for runnability, thereby misjudging the differing goals of walking and running: leisure,

sport or commute (Shashank *et al.* 2022). In general, runnability of the built environment has been largely overlooked in the literature as compared to walkability (Huang *et al.* 2023).

Some of the previous research conducted on runnability or runnable cities included the work of Ettema (2016) who investigated the impact of the running environment on perceived satisfaction, restoration, and running participation based on a questionnaire distributed to 1,581 novice runners as well as introducing in general the runnability features of built and natural environment in cities by Ledwon (2021). Study by Ledwon was additionally based on a survey of proximity to running spaces and their popularity among runners in Qatar, Poland and worldwide. These concepts were followed by the work of van Renswouw *et al.* (2019) who explored how user-generated data could help to define the running environment through generating activity ‘hotspots’ and ‘coldspots’, as well as the work of Jacobs (2022) who developed a runnability index, consisting of a score attributed to each area representing the quality of the area in supporting running. Likewise Shashank *et al.* (2022) described a generic runnability index as a composite measure of: slope, density of trees and other supporting infrastructure in combination with distance to parks and intersections to calculate a normalized measurement score of runnability. Recently Huang *et al.* (2023) adopted a volunteered geographic information (VGI) approach to measure urban runnability by quantifying environmental features that encourage or hinder running activities.

Despite its significance in terms of leisure, recreation and health benefits to broader societies, the academic exploration of runnability as part of spatial planning, is still in its infancy, with limited studies directly addressing the concept. This gap in research highlights a critical area for future inquiry, especially in understanding how runnability can be integrated into existing urban frameworks to promote active lifestyles effectively. As urban planners and public health advocates, we must ponder the implications of runnability beyond its definitions and existing research. The integration of runnability into urban landscapes is not merely a design challenge but a commitment to enhancing the well-being of urban dwellers. This reflection leads us to consider innovative strategies that prioritize green spaces, pedestrian-friendly infrastructure, and community engagement in the planning process.

**Table 1.** Definitions of runnability from previous studies.

|                         |      |   |
|-------------------------|------|---|
| Ettema                  | 2016 | The perceived attractiveness and quality of running environments and running behaviour        |
| Ledwon                  | 2021 | The features of built and natural environment that encourage running                          |
| Schuurman <i>et al.</i> | 2021 | The environmental preferences and concerns of runners   |
| Shashank <i>et al.</i>  | 2022 | A quantification of the features of the built environment that facilitate movement of runners |
| Huang <i>et al.</i>     | 2022 | The perceived satisfaction of the running environment   |

### Runnability in urban spaces

As urban environments continue to evolve, the integration of runnability into the fabric of city planning emerges as a vital conduit for promoting public health and sustainability. This reflection explores the nuanced role of the built environment in fostering opportunities for running. It draws upon seminal works and recent studies that illuminate the path towards creating runnable cities, emphasizing the integration of runnability within the broader place-making ideology.

At the heart of runnable cities lies a commitment to fostering environments conducive to physical activity. The built environment plays a pivotal role in this endeavor, influencing recreational behavior through spatial design (Huang *et al.* 2023). Investigating runnability and place-making reveals that environments ripe for running share critical qualities with the broader objectives of place-making, including accessible pathways, safety, and spaces designed for active use (PPS 2012, Rydin *et al.* 2012). These elements collectively contribute to a city's runnability, shaping how individuals interact with and navigate through urban

spaces, as illustrated in Figure 1. Place-making is not merely about aesthetic enhancements but involves designing urban spaces that accommodate the functions of everyday life, leisure, recreation, sports, and play. This approach ensures that public spaces are not only functional but also enjoyable, catering to a range of activities that promote healthier lifestyles. By situating runnability within this framework, urban planners can address the physical and psychological needs of city dwellers, creating spaces that encourage active participation in running and other physical activities.

Place-making and runnability share a significant overlap (as illustrated in Figure 1 with red dots) in terms of enhancing urban spaces across multiple dimensions, making them more vibrant and user-friendly. Both approaches focus on creating environments that are fun, active, vital, special, useful, and sustainable. These characteristics ensure that urban spaces are not only utilitarian but also enjoyable, supporting a wide range of activities that contribute to the city's liveliness and ecological health.

In terms of sociability, place-making and runnability foster spaces that are diverse, neighborly, friendly, interactive, and welcoming. These traits encourage

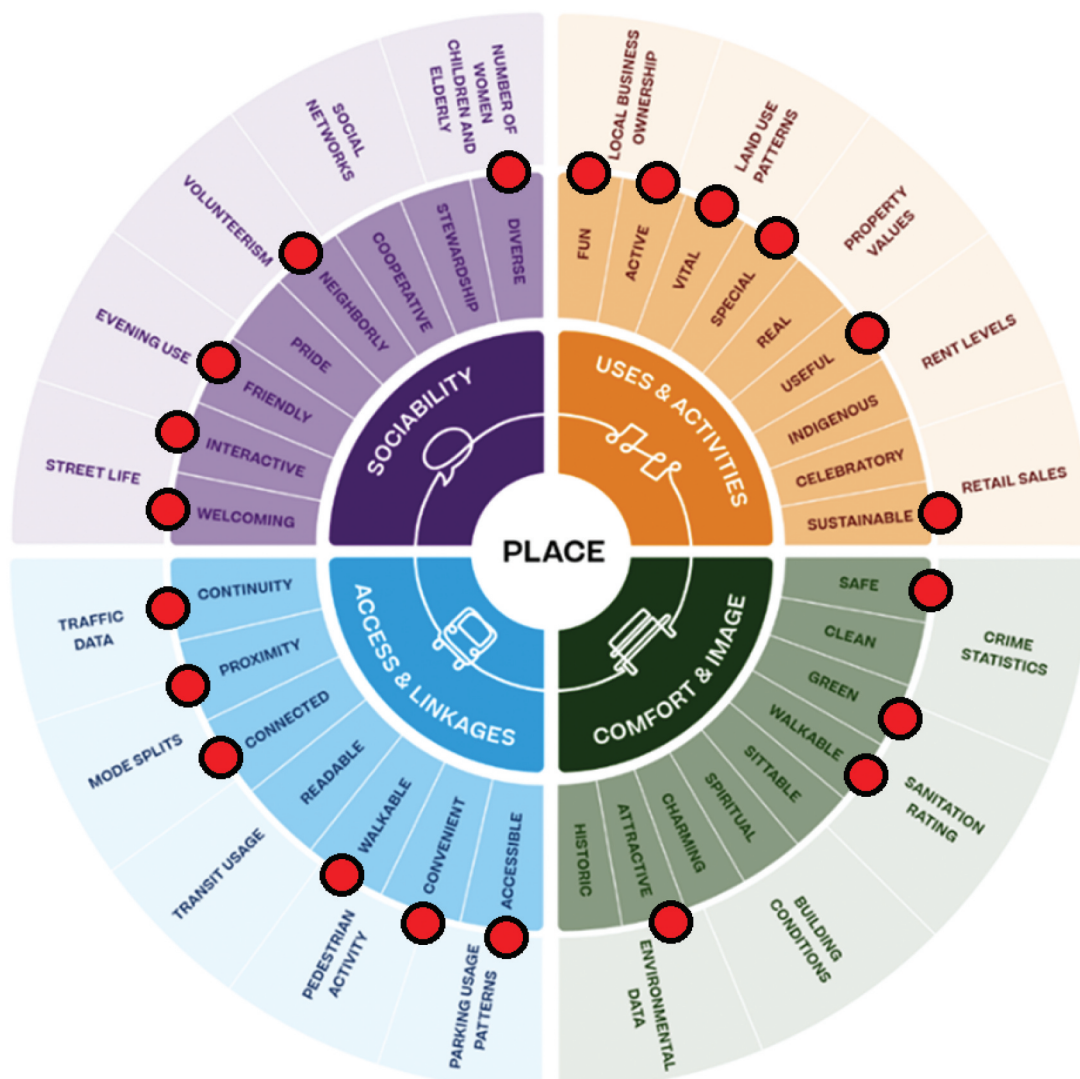


Figure 1. The place-making diagram and overlap with runnability characteristics. Source: PPS (2007).

social interactions and build community ties, transforming urban areas into hubs of social engagement where inclusivity is paramount. The attractiveness of running routes significantly impacts usage, with studies indicating a preference for diverse and engaging urban landscapes over monotonous neighbourhood circuits (Collinson 2008, Ettema 2016). The design of these spaces emphasizes human interaction, making them more than just transit points but places where people can connect and share experiences.

Regarding access and linkages, both strategies prioritize continuity, proximity, connectedness, walkability, convenience, and accessibility. This focus ensures that urban spaces are seamlessly integrated, facilitating easy movement and interaction. Enhanced connectivity not only makes running more feasible and enjoyable but also supports broader mobility within the city, catering to pedestrians and cyclists alike and reducing reliance on motorized transport.

Lastly, in terms of comfort and image, the integrated approach of place-making and runnability contributes to creating safe, green, walkable, and attractive urban landscapes. These attributes not only improve the aesthetic appeal of the city but also enhance the physical comfort and safety of its inhabitants, encouraging more people to engage in outdoor activities like running. Lee and Moudon (2004) emphasize the deterrent effect of physical and psychological barriers on active participation in running, highlighting the need for comprehensive planning that addresses these concerns. This focus on safety and beauty helps in cultivating a positive image of the city, making it a preferred destination for residents and visitors to live, work, and play.

The interaction between runners and their environment is complex, influenced by a myriad of factors ranging from the physical layout of spaces to microclimatic conditions. Environmental psychology and behaviour studies provide insights into how urban comfort and atmosphere affect runnability, depending on geographical location and seasonal variations. This intersection of environmental considerations and urban design is crucial for understanding the multifaceted nature of urban runnability. The synergy between place-making and runnability reflects a holistic approach to urban development, one that supports sustainable, sociable, accessible, and aesthetically pleasing environments conducive to both active lifestyles and community well-being. This comprehensive approach is further exemplified in Table 2, which categorizes factors impacting outdoor activities into three main forms: non-built, partially built, and built. This structured lens helps urban planners and stakeholders assess and enhance the runnability of urban areas, ensuring that each element contributes positively to the overall usability and enjoyment of the space (Ledwon 2021, Ledwon and AlNaimi 2018, Schuurman *et al.* 2021a, Shashank *et al.* 2022).

Reflecting on the multifaceted aspects of runnability within urban spaces prompts a re-evaluation of current urban planning practices. It calls for an integrated approach that not only prioritizes the physical infrastructure conducive to running but also considers the social and environmental dimensions that influence active lifestyles. By drawing inspiration from pioneering concepts such as Gehl's 'Cities for People' and Montgomery's 'Happy Cities', this exploration highlights the transformative potential of runnable cities in fostering healthier, more engaged urban communities. This

**Table 2.** Features impacting outdoor activities.

|                              |   |
|------------------------------|---|
| Non-built form related       | Availability of time<br>Culture<br>Activity level<br>Health   |
| Partially built form related | Temperature<br>Humidity<br>Precipitation<br>Safety<br>Elevation change, gradient<br>Flow of air<br>Surroundings<br>Connection and route length  |
| Built form related           | Proximity to recreational spaces<br>Quality of spaces<br>Road surfaces<br>Intersections<br>Street trees<br>Shading<br>Traffic calming infrastructure<br>Parks<br>Street lights<br>Major roads and trucking routes<br>Route length<br>Shared paths<br>Wayfinding |

Source: Own construction based on Ledwon and AlNaimi (2018), Ledwon (2020), Ettema (2016), Schuurman *et al.* (2021b) and Shashank *et al.* (2022).

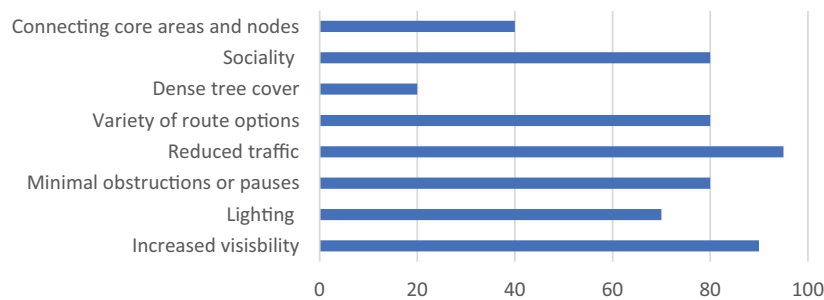
reflective review on runnability in urban spaces serves as a call to action for urban planners, public health professionals, and community stakeholders to collaboratively reimagine and reshape the urban landscape. It emphasizes the imperative of creating inclusive, adaptive, and vibrant cities that encourage and support running as an accessible and enjoyable part of everyday life, effectively integrating the principles of place-making to enhance the quality and functionality of urban environments.

### **User preferences and the culture of runnability in cities**

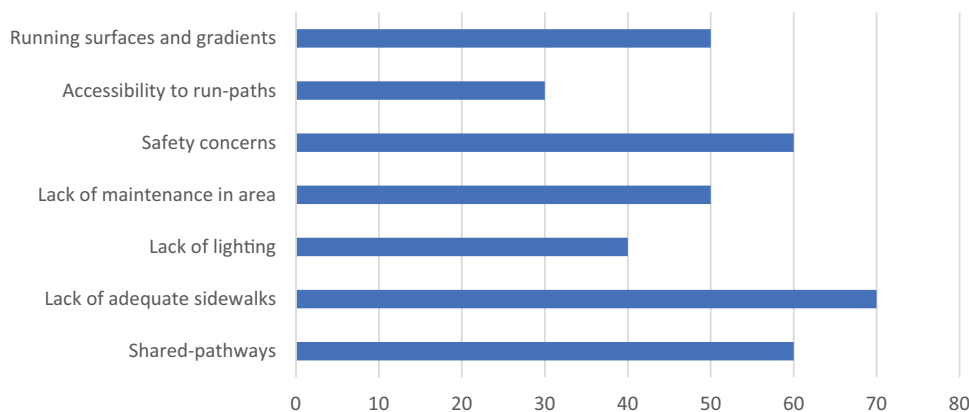
Understanding and incorporating user preferences into urban design is essential for the advancement of runnable cities. A case specific investigation conducted by Dambha (2020) included 52 participants as part of a quantitative investigation into running preferences. In identifying the factors that encourage running, the participants identified ‘reduced traffic’ and ‘increased visibility as main issues, both speaking to the issue of safety. Participants also valued social interactions, a variety of route options, and minimal obstructions or interruptions in their running paths, as illustrated in [Graph 1](#) below.

In terms of the factors that were identified as discouraging running activities, the participants listed ‘lack of adequate sidewalks’, ‘shared-pathways’ and ‘safety concerns’ as main issues as captured in [Graph 2](#) below.

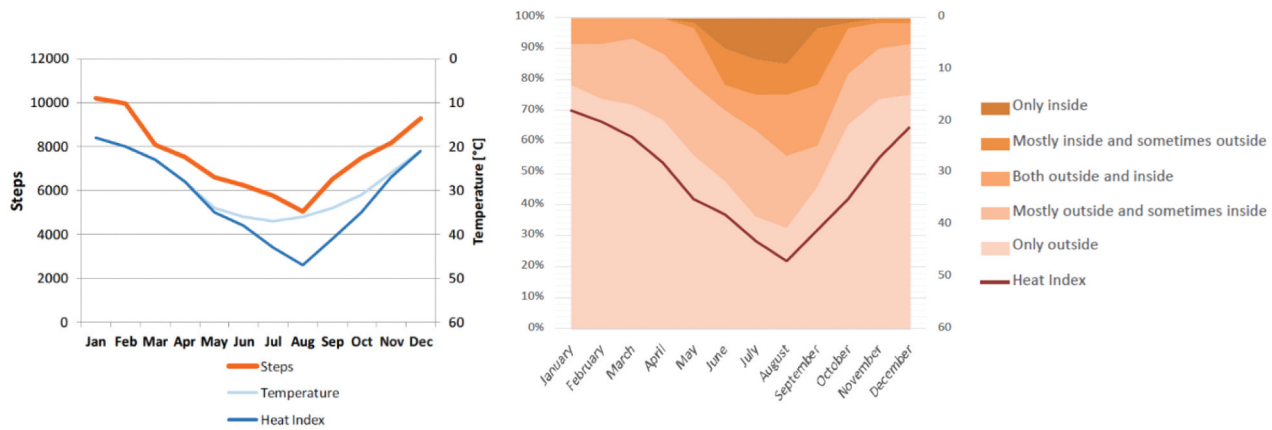
This insight into user preferences emphasizes the need for inclusive urban planning that accommodates a wide range of activities and geographic considerations, ensuring safety and accessibility (Giles-Corti *et al.* 2005, Ledwon 2021; Sallis *et al.* 2009). This underscores the importance of adapting urban spaces to accommodate the varied needs and preferences of users, promoting physical activity as an essential component of urban life. Furthermore, the influence of environmental conditions, particularly urban heat, emerges as a significant factor affecting runnability. Participants often cite the urban heat index, comprising both temperature and humidity, as a critical deterrent to engaging in outdoor activities. This preference underscores the interplay between user comfort and environmental factors, directly impacting the usage and enjoyment of urban spaces designed for physical activities. Studies like those by Tucker and Gilliland (2007) highlight how environmental features, including the availability of recreational facilities and the design of residential areas, influence physical activity levels. Moreover, extreme weather conditions, particularly high temperatures and humidity, significantly deter outdoor activities (Gomez *et al.* 2018, Hirsch *et al.* 2018), while favourable conditions encourage more physical engagement (Sallis *et al.* 2009, Van Holle *et al.* 2012). A detailed examination by Ledwon and AlNaimi (2018) specifically addressed how the heat index – a measure of how hot it feels considering both temperature and humidity – affects runnability. Their



**Graph 1.** Factors encouraging running activities.



**Graph 2.** Factors discouraging running activities.



**Graph 3.** Humidity and temperature impact on outdoor activity. Source: Ledwon and AlNaimi (2018).

findings confirm that the overall heat index is a crucial determinant of runnability, influencing daily activity levels as illustrated in [Graph 3](#).

Given the increasing challenges posed by climate change, which predicts higher temperatures and more erratic weather patterns, the need for urban planners and public health professionals to develop adaptive strategies becomes even more urgent. These strategies should consider the significant impact of the heat index on urban design and policy-making, aiming to maintain and enhance active lifestyles in the face of global warming. By linking environmental conditions with user preferences, particularly in terms of heat and comfort, urban planners can better understand and implement designs that not only meet safety and functionality standards but also enhance the overall quality of life, making cities more livable, healthy, and runnable. This integrated approach contributes significantly to global efforts toward creating healthier urban environments (IPCC 2014, Obradovich and Fowler 2017, WHO 2018).

### Reflective analysis: calling for a global runnable cities approach

#### *Integrating runnability into the urban fabric*

Runnability is an inherent characteristic of the built environment, as noted by Ledwon and AlNaimi (2018). Recognizing that the built environment directly influences individuals' physical activity and recreational behaviour (Huang *et al.* 2023) represents a crucial advancement in devising strategies to enhance runnability and overall community health within urban areas. By implementing these strategies, cities can contribute to the overarching global vision of promoting healthier cities and communities in the long run. The multifaceted nature of runnability, as reflected in the place-making diagram ([Figure 1](#), Source: PPS 2007) and [Table 2](#)'s classification of features impacting outdoor activities, suggests a comprehensive approach to urban design. Incorporating runnability alongside walkability and cycling, as advocated by Ledwon (2020), necessitates

a detailed understanding of the distinct and overlapping needs of these activities. This integrated approach not only enriches the urban experience but also aligns with the broader objectives of creating inclusive, sustainable environments (McCormack *et al.* 2018, Schuurman *et al.* 2021b). By acknowledging and addressing the unique considerations of walkability, runnability, and cycling, urban planners and policymakers can create environments that support and promote each mode of transportation and physical activity effectively.

In calling for a global runnable cities approach, several key actions should be considered including as captured in [Table 3](#) below. These considerations were drawn through the praxis methodology, combining academic research with introspective analysis of running experiences.

#### *Transdisciplinary thinking for global runnable cities*

The pathway towards global runnable cities demands a concerted effort that transcends traditional disciplinary boundaries. The synthesis of knowledge across urban planning, public health, and environmental sciences, as indicated by the studies of McCormack *et al.* (2018), Schuurman *et al.* (2021a), and encapsulated in [Table 3](#), outlines a strategic framework for embedding runnability into the urban planning agenda. Adopting transdisciplinary thinking can enhance the development of strategies for creating runnable cities (Lang *et al.* 2012). Collaboration supports the collective design and implementation of initiatives that prioritize runnability (De Gregorio Hurtado *et al.* 2020). Accessible and interconnected infrastructure encourages active modes of transportation and physical activity (Sallis *et al.* 2009). Policy interventions, such as zoning regulations that support mixed-use development and active transportation, contribute to the creation of runnable cities (Bopp *et al.* 2018). Education fosters behaviour change and community engagement (Cavill *et al.* 2021). Thoughtful design principles enhance the runnability of urban spaces (Hansen and Nielsen 2019). Thus, by embracing



**Table 3.** Key actions to progress a global runnable cities approach.

| Focus                      | Key action  |
|----------------------------|---|
| Transdisciplinary thinking | Aligning the global health vision with spatial planning thinking: Integrate health impact assessments into urban development processes to prioritize runnability, to incorporating health considerations in all planning initiatives. Enhancing synergies across disciplines: Enhance and organize cross-disciplinary research and innovation labs that focus on integrating green spaces, public squares, and running tracks in urban planning   |
| Collaboration              | Creating a collective network: Launch participatory design workshops between urban planners, policymakers, public health experts, and community members to co-create runnable cities<br>Enhancing inclusivity and diversity: Implement public forums for diverse community groups to voice their needs and preferences, ensuring runnable cities cater to a wide range of abilities and interests   |
| Infrastructure             | Investing in runnable infrastructure: Develop over- and underpasses for safer pedestrian crossings, and weather-protected pathways for all-season use, consider sidewalks, bike lanes, and public parks to make cities more runnable<br>Reallocating space for runnability: Transform car-dominant areas into pedestrian zones with amenities for runners. Providing amenities such as drinking fountains and restrooms   |
| Policy                     | Introducing zoning for active mobility: Enforce urban development regulations that mandate the inclusion of green spaces and running paths in new projects<br>Prioritizing active transportation: Implement policies that reduce car traffic in urban centers to create safer and more pleasant environments for running.   |
| Education                  | Raising awareness on physical activity: Launch city-wide campaigns that map out and promote safe running routes<br>Bridging disciplinary gaps: Enhance professional development workshops for urban planners and architects on integrating runnability into their projects  |
| Design                     | Ensuring accessibility and connectivity: Design running paths that are wheelchair accessible and well-connected to public transportation<br>Creating a continuous network of pathways: Develop continuous and interconnected running paths that link parks, waterfronts, and cultural landmarks<br>Planning for varied activities: Design urban spaces that offer diverse running experiences, from quiet, nature-filled paths to vibrant, cultural urban routes<br>Enhancing safety through design: Implement well-lit paths, emergency call stations, and clear signage to ensure runner safety<br>Considering climate and culture: Integrate shaded routes in hot climates and heated paths in colder areas for year-round running, and incorporate local cultural elements into the design of runnable spaces |

Source: Based on Giles-Corti *et al.* (2016), Rogers *et al.* (2019), WHO (2016), Ledwon and AlNaimi (2018), Dambha (2020), Shashank *et al.* (2022), Lang *et al.* (2012) and Huang *et al.* (2022).

transdisciplinary thinking, fostering collaboration, investing in infrastructure, enacting supportive policies, promoting education and awareness, and incorporating thoughtful design that aligns with health objectives, cities can become more liveable, healthy, and sustainable for all residents.

The reflective analysis emphasizes the critical need for an approach to runnable cities that is deeply rooted in the everyday and public life studies, focusing on how these environments interact with and enhance urban living. By incorporating a clear narrative that weaves together environmental conditions, user preferences, and a broad-based planning ethos, we can better understand and implement strategies that not only accommodate but actively promote running as an integral component of urban health and sustainability. Drawing upon empirical evidence, user feedback, and theoretical frameworks from every day and public life studies, this analysis presents a comprehensive set of insights and directives aimed at creating cities that are not just liveable but vigorously supportive of active lifestyles. By shifting the focus towards a more nuanced understanding of public interaction and the use of urban spaces, urban planners and policymakers are equipped to develop more effective strategies that contribute significantly to healthier, more vibrant, and runnable cities, aligning with global health and sustainability goals. This approach advocates for a transformative rethinking of urban planning, emphasizing the importance of integrating daily human activities into the fabric of city design to foster environments that are healthy, enjoyable and sustainable.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Notes on contributors

**Jua Cilliers** is the Head of the School of Built Environment at the University of Technology Sydney and President of the Commonwealth Association of Planners.

**Slawomir Ledwon** is an urban planner, researcher, tutor and an activist for healthy, physically active lifestyle. He is the Deputy Head of Design Studies Unit at Ministry of Municipality, Qatar.

## ORCID

Jua Cilliers  <http://orcid.org/0000-0002-8581-6302>

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