

Building on muscles:

How built environment design impacts modern sports science



This paper explores how built environment design science enhances athlete performance in modern sports science.

Three categories

Athlete-centric training built environment design

Enhanced fan and community engagement

Improved integrative accessibility

Athlete-centric training built environment design

Prioritising athletes' needs in built environment design.

Recreational spaces for athletes

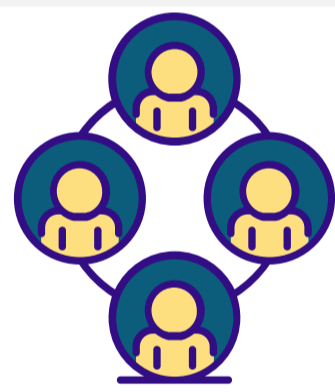


Personalised training zones

Enhanced fan and community engagement

Built environment design acts as a catalyst for fan and community.

Active transportation infrastructure



Community engagement zones

Integrative accessibility

Built environment design can influence athletes' performance through enhanced accessibility and functional dimensions.

Athletic accessibility

Integrated sportscapes

Conclusion & future directions

The relative impact of built environment design.



Financial and temporal requirements for built environment interventions.

Cost responsibility.

Emerging areas:

Metrics for athlete performance evaluation.

Traditional sports science lacks built environment focus, limiting awareness of its impact on performance.

Reference :

Mohammad Javad Koohsari, Andrew T Kaczynski, Motohiko Miyachi, Koichiro Oka - Building on muscles: how built environment design impacts modern sports science: BMJ Open Sport & Exercise Medicine 2024;10:e001908.

URBAN DESIGN SCIENCE FOR HEALTH LAB:

<https://urbandesignhealth.org/>

