

## **Developing a social space coefficient for urban public spaces. Case study: Karlstad's city-center pedestrian corridor.**

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### **Abstract**

Was there a way of gauging the carrying capacity of city public spaces? Or regulating it? How many people is too many? How many seats are too few? How much area does the public space need to set aside for social activities? According to the researchers, the size of public spaces and their utilization were shown to be roughly correlated, with popular public places having more social activity spaces than less popular ones. The researchers indicate that, the absence of qualitative characteristics makes this link weak, thus the researchers investigated weighting the quality in terms of points to better match, for instance, the association between popularity and sittable space. The study's objectives were to find a means of gauging the carrying capacity of urban public spaces by calculating the social space coefficient for Karlstad's pedestrian-only streets in addition to quantify this approximate relationship while accounting for the weighting factors on a point basis with quality. The social space coefficient refers to the link between the amount of social spaces and the size of the public area as a whole. The method first ascribed qualities to seven social activities that occur on Karlstad's pedestrian-only streets in order to calculate the weighting factors for those activities and their social spaces. These qualities were taken from well-known placemaking toolkits, transportation toolkits, and quality standards from more than 110 academic studies and references. By theoretically examining and objectively evaluating these seven activities' accessibility, traffic, social infrastructure, security, meeting location, senses and experience, architecture and aesthetics, development and maintenance, management, and programming, the weighting factors and effective social areas were determined. Moreover, this determination prompted the creation of a method for calculating the carrying capacity and figuring out the social space coefficient of Karlstad's pedestrian-only streets. Additionally, eight quality-control tools were created in this article to analyze seven social activities in public places. In terms of social space's carrying capacity, the coefficient was 0.37. Municipal planners may utilize these quality-control tools to assess the advantages and disadvantages of public places and implement improvements. Additionally, they will be able to decide the ideal amount of spaces for social activities in the public places. Furthermore, by using this methodology, future study will be able to determine a social area factor that is comparable to the green area factor.



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