

# Synergistic Strategies for Urban Linear Physical Activities Spaces: Insights From a Quantitative Review

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**Supplementary Table 1: Interpretation of the directionality for environmental factors**

Environmental factor	Positive directionality (+)	Negative directionality (-)
Road width	The wider the road, the better the experience; a higher positive value indicates stronger preference	The wider the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Road surface material	The more comfortable the road surface, the better the experience; a higher positive value indicates stronger preference	The more comfortable the road surface, the worse the experience; a higher absolute negative value indicates stronger aversion
Slope	The greater slope the road, the better the experience; a higher positive value indicates stronger preference	The slighter slope the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Road facility	The more complete the road infrastructure, the better the experience; a higher positive value indicates stronger preference	The more complete the road infrastructure, the worse the experience; a higher absolute negative value indicates stronger aversion
Greening	The more greening the road, the better the experience; a higher positive value indicates	The more greening the road, the worse the experience; a higher absolute negative value

	stronger preference	indicates stronger aversion
Traffic separation	The greater the level of traffic separation of the road, the better the experience; a higher positive value indicates stronger preference	The greater the level of traffic separation of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Safety	The safer the road, the better the experience; a higher positive value indicates stronger preference	The safer the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Microclimate	The more suitable microclimate of the road, the better the experience; a higher positive value indicates stronger preference	The more suitable microclimate of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Mixed land use	The higher the level of mixed land use of the road, the better the experience; a higher positive value indicates stronger preference	The higher the level of mixed land use of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Street network structure	The higher connectivity of the road, the better the experience; a higher positive value indicates stronger preference	the higher connectivity of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
POI density	The higher POI density of the road, the better the experience; a higher positive value indicates stronger preference	The higher POI density of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Service facility	The higher accessibility of service facilities of the road, the better the experience; a higher positive value indicates stronger preference	The higher accessibility of service facilities of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Population density	The higher population density of the road, the better the experience; a higher positive value indicates stronger preference	The higher population density of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Regional traffic pressure	The greater traffic pressure of the road, the better the experience; a higher positive value indicates stronger preference	The greater traffic pressure of the road, the worse the experience; a higher absolute negative value indicates stronger aversion
Blue-green space	The higher density of blue-green space of the road, the better the experience; a higher positive value indicates stronger preference	The higher density of blue-green space of the road, the worse the experience; a higher absolute negative value indicates stronger aversion