

Abstract, MAPS Global Paper [DRAFT, October 2016]

Objective: This study aimed to assess inter-rater reliability of the Microscale Audit of Pedestrian Streetscapes (MAPS Global) tool using direct in-field observation five countries around the world with varying levels of urbanity and walkability.

Methods: MAPS Global was based on prior instruments and was developed to assess details of streetscapes considered relevant for physical activity. MAPS Global items were scored in five cities (Melbourne (Australia), Ghent (Belgium), Curitiba (Brazil), Hong Kong, and Valencia (Spain)) by two independent raters for reliability analyses. There were 163 routes in the reliability sample. Individual inter-rater item reliability analyses were computed using Kappa, intra-class correlation coefficient (ICC), and percent agreement. Items were grouped into subscales, and subscales were analyzed for inter-rater reliability at tiered levels of aggregation.

Results: There were 119 items included in the subscales. Of those, 114 items (95.8%) had good/excellent reliability and 5 items (4.2%) had fair reliability. 46 of the 48 subscales and overall scores (95.8%) demonstrated good/excellent reliability and 2 demonstrated moderate reliability.

Conclusions: MAPS Global items and subscales predominantly demonstrated good to excellent reliability. This tool, subscales and scoring system may present a way to collect complex microscale data which can be compared across diverse environments.