

The moderating effect of built environment on the distance from home to school and active school transport——an empirical study in the context of Modifiable Areal Unit Problem

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摘要: Abstract: Active school transport is an important source of physical activity for children and plays an important role in their physical and mental health. Identifying and quantifying the factors that influence children's active school transport is essential for developing effective interventions. Several studies have demonstrated that the distance from home to school, and the built environment factors influence children's active school transport. However, most of the current studies on the effect of the distance from home to school on active school transport are based on linear studies, and ignore the moderating effect of the built environment and the MAUP effect. Using Xi'an City, China, as a case site, circular buffers of 100-1500 meter in a radius of the respondents' community and schools, school district, and school buffer zone, as study units. This study utilizes the XGBOOST, cross-classified multilevel logistic modeling, and multilevel logistic modeling, to address the non-linear relationship and thres

关键词: Active school transport; Built environment; Moderating effect; Modifiable areal unit problem