Neighborhood Built Environment and Leisure-Time Physical Activity Participation among Adults in Utah

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BACKGROUND: Research examining relative importance of multiple built environment features and their associations with leisure-time physical activity (LTPA) participation is limited in general and lacking in Utah. This study examined the role of the built environment in contributing to individual odds of LTPA participation in Utah. METHODS: Individual-level data were from Behavioral Risk Factor Surveillance System (BRFSS) collected in 2007, 2009 and 2011 in Utah and through a state-wide telephone survey of health and health behavior. The publically accessible BRFSS data has no information on individual identification. Neighborhood-level data were from the American Community Survey and a park database provided by ESRI in ArcGIS. Zip codes were used to define neighborhoods and to link the three data sources into one merged analytical file. Multilevel logistic regression analyses were performed to examine the research questions in the whole sample and then in gender and age subsamples. RESULTS: When examined separately, walkability and spatial park accessibility were both significantly and positively correlated with individual-level odds of reporting LTPA participation in the past month net of individual- and neighborhood-level confounding factors. When simultaneously examined, the walkability effects remained significant and the park effects disappeared. Participants aged 65 or older were more responsive to park accessibility but less affected by walkability. Walkability effect was slightly weaker for women than for men. CONCLUSION: The built environment matters to individual-level odds of LTPA participation over and above the impact of personal characteristics. The relative importance of walkability is greater than that of park accessibility in this sample.

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