

Association between physical activity resource quality and use in Mexicans

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ABSTRACT

Purpose: Nearly three-fourths (69.5%) of the Mexican population aged 15 and older is overweight or obese, and 37.7% fail to meet physical activity (PA) recommendations of 150 minutes per week. The prevalence of obesity in Mexican children has tripled since 1980 and is due to the imbalance between energy intake and expenditure. PA may reduce the prevalence of obesity in Mexican adults and youth. PA resources (PARs), such as parks and plazas, may aid in this effort, but little is known about the quality of resources in Mexico and their relationship to PA levels in adults and youth. The purpose of this study was to explore the relationship between PAR quality and PA levels in Mexican children and adults. **Methods:** Features, amenities and overall incivilities of two free PARs, one park and one plaza, in Puerto Vallarta, Jalisco, Mexico were assessed using the Physical Activity Resource Assessment© (PARA). Access to quality PARs was determined by a composite index based on a sum score of features and amenities, minus incivility ratings for each PAR. Indices were aggregated for each neighborhood to determine an overall access to quality physical activity resources (QPAR) index. Two trained research team members used the System for Evaluating Play and Recreation in Communities (SOPARC) to assess gender, age group, and PA level of PAR users through direct observations. **Results:** The park had more features and fewer incivilities; the plaza had greater amenities. The park was better quality (QPAR=21 vs. 14) and had a greater number of users (n=208 vs. 100). The majority of people using PARs were Latino (91.2%) adult (58.1%) women (58.4%). Age and gender did not vary between resources, but there were more Latinos (96.2%) at the park than at the plaza (81.0%). Overall, most users (61.4%) used resources for walking, with more people walking at the plaza (73.0%) than at the park (55.8%). QPAR was positively correlated with PA (Kendall's $\tau=.320$, $p<.001$). **Conclusions:** Resource quality may increase PA in users. Parks are better quality and have a greater number of features, but plazas are quite common in Mexico and still promote walking, the most popular form of

physical activity in adults. Improving the quality of plazas may be an economical strategy to increase PA in Mexicans.

KEY WORDS: Physical activity, physical activity resources, Mexicans