

Social Determinants of Health: Neighborhood and Built Environment

What Makes A Neighborhood Healthy?

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PICO QUESTION

How does the neighborhood and built environment affect the physical wellbeing of adults?

BACKGROUND

- The "built environment" refers to the physical characteristics of a neighborhood and its surroundings (Gomez et al., 2015).
- Structures of neighborhoods can promote physical activity or inactivity; therefore, the built environment correlates with chronic diseases' prevalence (Gomez et al., 2015).
- Research suggests that "the burden of chronic disease in the population can be reduced through an active lifestyle, proper nutrition, and reduced exposure to toxic conditions" (Perdue et al. 2003, para. 9).
- Accessibility to resources, violence and crime rates, neighborhood location (rural, suburban, and urban), socioeconomic status and environment all have affects.

CONCLUSION

There are many components to a neighborhood and environment that can positively or negatively influence a persons' health and quality of life. The public health and humans' wellbeing is closely correlated to neighborhood's design, affordability, safety, accessibility to nutritious food and other vital health resources.

SOCIAL DETERMINANTS OF HEALTH DEFINED:

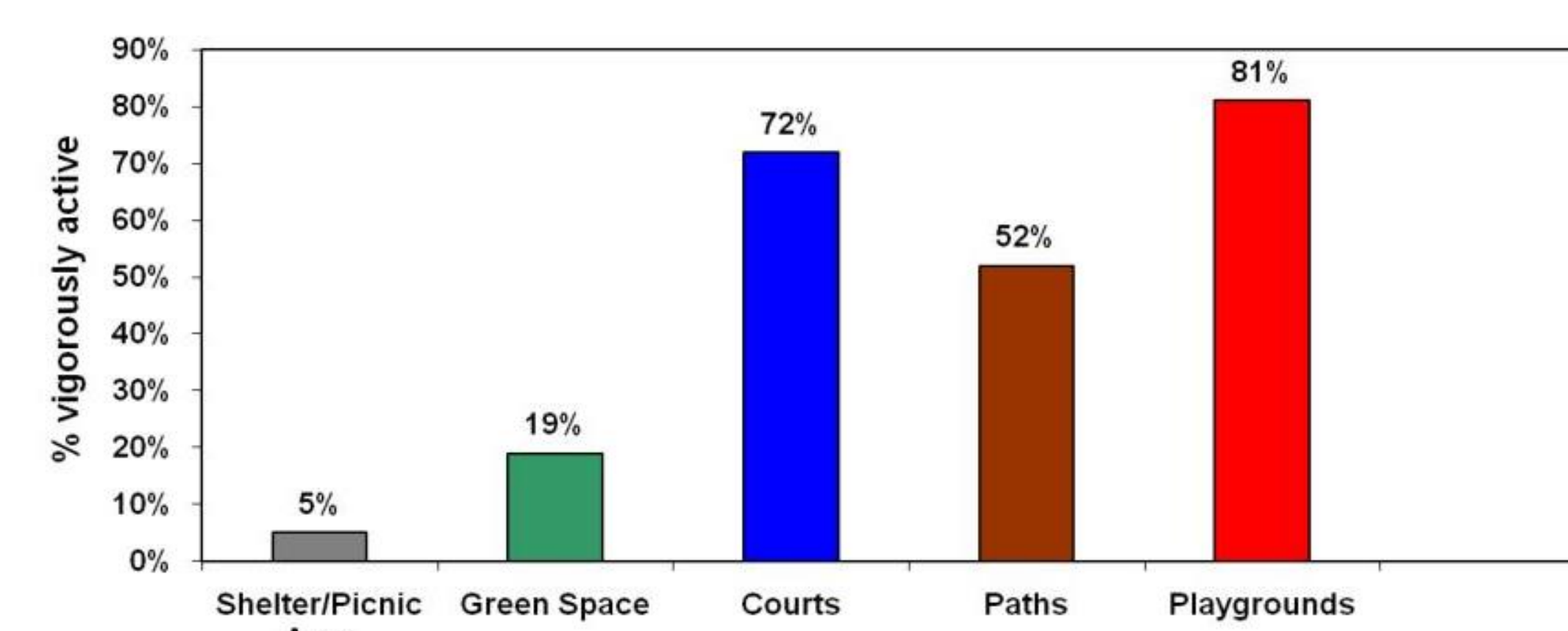
"Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (Office of Disease Prevention and Health Promotion, n.d., para. 4).

NEIGHBORHOOD CHARACTERISTICS

In the U.S., "many urban and suburban environments are not well designed to facilitate healthy behaviors or create the conditions for health. Convenience stores and establishments that serve fast food may vastly outnumber grocery stores where people can purchase nutritious food" (Perdue et al., 2003 para. 9). Liquor stores may also influence unhealthy behaviors (Gomez et al, 2015). Community amenities such as grocery stores, parks, gyms, and walking trails promote health by increasing levels of physical activity and access to healthy food (Gomez et al, 2015).



SOPARC* observations of four suburban parks in the southeastern US found that park visitors are more likely to engage in vigorous physical activity when using courts, paths, and playgrounds



* System for Observing Play and Recreation in Communities

Shores KA, West ST. The Relationship between built park environments and physical activity in four park locations. *Journal of Public Health Management and Practice*, 2008; 14(3):E9-E16.

<https://activelivingresearch.org/blog/2012/06/in-Public-Role-Communities-Promoting-Physical-Activity> Pubfographic-role-communities-promoting-physical-activity Public Domain

In cities and some suburban areas, more gyms and other group exercising facilities, like spin classes and CrossFit have been available to the general public to promote physical activity (Mundell, 2019). Rural environments have limited access to resources, but community trails provide the best opportunities for physical activity to residents in the area (Park et al., 2017).

EFFECTS AND OUTCOMES

A Neighborhood's characteristics highly influence health behaviors of its residents:

- The distance and connectivity among the different resources in the community influence the people's choices if to bike or walk to places or to drive (Saelens et al., 2003). Rural areas have issues of low population density, long distances between destinations, and have a lack of facilities nearby (Christman et al., 2015). People who live in highly dense areas are more likely to walk to places than people who live in low-density areas, which is correlated with the proximity of the resources, making it convenient or inconvenient to walk to shops, work, parks, and to family or friends' homes (Saelens et al., 2003).



- Frank et al. (2004) noticed a correlation between the walkability of a community and a reduction of air pollutants per capita, which suggests that promoting outdoor physical activity is vital for environmental improvements.
- Individuals of low SES neighborhoods have less time and energy to participate in physical activity due to long work hours and hard labor jobs (Stalsberg & Pedersen, 2018). Estabrooks et al. (2003) discovered that high SES neighborhoods have more access to free-for-use physical activity facilities. Kealey (2011) found that low SES neighborhoods have much shorter block lengths, high housing density, and more businesses creating a barrier for physical activities, like walking.
- Fear of crime was shown to be a barrier to engaging in health promoting physical and social activities. People who reported greater fear were more likely to suffer from depression and less likely to exercise and participate in social activities (Stafford et al. 2011).

References

Centers for Disease Control and Prevention. (2014). *Healthy Places: Parks, Trails and Health*.
<https://www.cdc.gov/healthyplaces/healthtopics/parks.htm>

Chrisman, M., Nothwehr, F., Yang, G., & Oleson, J. (2015). Environmental influences on physical activity in rural Midwestern adults: a qualitative approach. *Health promotion practice*, 16(1), 142–148. <https://doi.org/10.1177/1524839914524958>

Estabrooks, P., Lee, R., & Gyurcsik. (2003). Resources for physical activity participation: Does availability and accessibility differ by neighborhood socioeconomic status?. *Annals of Behavioral Medicine*, (25) 100-104.

Frank, L., Andresen, M., & Schmid, T. (2004). Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine*, 27(2),87-96. doi: 10.1016/j.amepre.2004.04.011. PMID: 15261894

Gomez, S., Shariff-Marco, S., DeRouen, M., Keegan, T., Yen, I., Mujahid, M., Satariano, W., & Kealey, M. (2011). Physical Activity, Socioeconomic Status, and Perceptions of Neighborhood Safety in Older Adults. [PhD dissertation, University of California, Berkeley].

Perdue, W., Stone, L., & Gostin, L. (2003). The built environment and its relationship to the public's health: the legal framework. *American Journal of Public Health*, 93(9), 1390–1394. <https://doi.org/10.2105/ajph.93.9.1390>

Mundell, E. J., (2019). *CDC: Exercise rates up for urban, rural americans*. WebMD. <https://www.webmd.com/fitness-exercise/news/20190613/cdc-exercise-rates-up-for-urban-rural-americans#1>

Office of Disease Prevention and Health Promotion [ODPHP]. (n.d.). *Healthy People 2020: Social Determinant of Health*.
<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health#five>

Park, T., Eyler, A. A., Tabak, R. G., Valko, C., & Brownson, R. C. (2017). Opportunities for Promoting Physical Activity in Rural Communities by Understanding the Interests and Values of Community Members. *Journal of environmental and public health*, 2017, 8608432. <https://doi.org/10.1155/2017/8608432>

Pinter-Wollman, N., Jelić, A., & Wells, N. (2018) The impact of the built environment on health behaviours and disease transmission in social systems. *Philosophical Transactions of the Royal Society B*, 373(1753). <https://doi.org/10.1098/rstb.2017.0245>

Saelens, B., Sallis, J., & Frank, L. (2003) Environmental correlates of walking and cycling: Findings from the transportation, urban design, and planning literatures, *Annals of Behavioral Medicine*, 25(2) 80–91, https://doi.org/10.1207/S15324796ABM2502_03

Stafford, M., Chandola, T., & Marmot, M. (2011). Association Between Fear of Crime and Mental Health and Physical Functioning. *American Journal of Public Health*. <https://doi.org/10.2105/AJPH.2006.097154>

Stalsberg, R., & Pedersen, A. V. (2018). Are differences in physical activity across socioeconomic groups associated with choice of physical activity variables to report?. *International journal of environmental research and public health*, 15(5), 922. <https://doi.org/10.3390/ijerph15050922>