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### Effect of crime and neighbourhood on physical activity

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Top line: Feeling safe during both day and night potentially has the largest effect on population levels of physical activity.

Perceptions of problems in neighbourhoods (noise, crime, air quality, rubbish/litter, traffic, graffiti) have been found to be predictive of poorer health.<sup>1</sup> With regards to physical activity promotion area-based interventions offer the potential to activity levels for many sedentary people. Physical activity is a public health priority because lack of regular activity is associated with marked preventable premature death and ill-health. Efforts to increase physical activity among individuals have had some small effect but modifying social, economic and environmental factors may be more successful at a population level.

A population-based health and lifestyle survey of adults was used to analyse associations between individual and neighbourhood perceptions and physical activity.<sup>2</sup> The population effect of eliminating a risk factor was expressed as a likely effect on population levels of physical activity. Of the 15 461 responders, 4193 (27.1%) were physically active.

The researchers found that individual perceptions of how well placed their neighbourhood was for leisure facilities were associated with physical activity. People who felt safe in their neighbourhood were more likely to be physically active. The number of physically active people in the study would increase by 3290 if feelings of “unsafe” during the day were removed, and by 11 237 if feelings of “unsafe” during the night were removed. An additional 8342 people would be physically active if everyone believed that they were “very well placed for leisure facilities”.

The research suggests that the greatest increase in physical activity would be achieved in the population if everyone was made to feel safe during the night, with only a small effect if everyone was made to feel that their neighbourhood was well placed for leisure facilities. Therefore, the researchers concluded that to increase population levels of physical activity, increasing feelings of safety seems to be a greater priority than improving perceptions regarding the provision of leisure facilities.

The relevance of this study to active travel may be through a greater appreciation of wider influences over and above issues such as traffic safety<sup>3</sup> which are largely cited as barriers to both walking and cycling (more so for the latter). Feelings of personal safety as a deterrent to cycling are voiced more by women<sup>4</sup> than men and so addressing neighbourhood safety may be particularly helpful in enabling more women to cycle.

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<sup>1</sup> Bowling, A., Barber, J., Morris, R., Ebrahim, S. 2006 Do perceptions of neighbourhood environment influence health? Baseline findings from a British survey of aging, *Journal of Epidemiology and Community Health*, 60: 476-483.

<sup>2</sup> Harrison, Gemmell, I, Heller, R. 2007 The population effect of crime and neighbourhood on physical activity: an analysis of 15,461 adults, *Journal of Epidemiology and Community Health*, 61: 34-39,

<sup>3</sup> See Essential Evidence No.s 1, 15, and 25 <http://www.bristol.gov.uk/ccm/content/Transport-Streets/Walking-Cycling/cycling-in-bristol/essential-evidence/essential-evidence.en>

<sup>4</sup> Dept. Transport 2006 Evidence Base Review on Mobility: Choices & Barriers for Different Social Groups <http://www.dft.gov.uk/adobepdf/163944/evidencebasereviewmobility> accessed 2nd July 2009.