

Essential Evidence on a page: No. 38 Women and commuter cycling

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Top line: Improved cycling infrastructure through bicycle paths and lanes that provide a high degree of separation from motor traffic is likely to be important for increasing transportation cycling amongst under-represented population groups such as women.

Countries with low rates of utilitarian cycling also have substantial gender differences in cycling. Few studies have systematically investigated women's perceptions and experiences of cycling and little is known about what motivates and sustains their involvement. Preliminary indications are that, for women, there may be an interest in and capacity to participate in cycling that is not being translated into practice. Safety concerns appear to be a significant deterrent to women cycling. Safety factors have a differential impact on women as they are generally more risk averse than men. Quantitative risk assessments suggest that the risk of injury associated with cycling is small and that the health benefits outweigh the health costs. Yet, females are substantially less likely than males to cycle for transport in countries with low bicycle transport mode share. This is consistent with gender differences in risk aversion, that female commuter cyclists prefer to use routes with maximum separation from motorised traffic.

A study conducted in Melbourne, Australia, investigated whether female commuter cyclists were more likely to use bicycle routes that provide separation from motor vehicle traffic.¹ Census of cyclists observed at 15 locations (including off-road bicycle paths, on-road lanes and roads with no bicycle facilities) within a 7.4 km radius of the central business district (CBD) during peak commuting times in February 2004 when the weather was fine and the average maximum temperature was 26°.

6589 cyclists were observed, comprising 5229 males (79.4%) and 1360 females (20.6%). Male cyclists outnumbered female cyclists at all locations, with the proportion of female cyclists ranging from 12.2% to 31.7%. After adjustment for distance of the bicycle facility from the CBD, females showed a significant preference for using off-road paths rather than roads with no bicycle facilities or roads with on-road bicycle lanes.

Findings from this study suggest that the provision of on-road lanes on busy arterial roads may not offer the level of separation from motor vehicle traffic needed to attract increased numbers of female commuter cyclists. These findings are consistent with international comparative data indicating that high bicycle transport mode share for both males and females occurs mainly in countries and cities with extensive networks of separate bicycle paths and lanes.

The authors also acknowledge that high variability in rates of cycling for transportation and in gender differences in cycling for transportation internationally suggests that non-route factors are also important determinants of female (and male) cycling. Overall, cycling promotion campaigns may achieve greater success with women if they enable them to experience cycling that is both safe and supportive.

¹ Jarrard, J., Rose, G., Kai Lo, S. 2008 Promoting transportation cycling for women: The role of bicycle infrastructure, *Preventive Medicine*: 46(1): 55-59.