

Healthy revolutions: promoting cycling among women

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Introduction

A casual observer amid the growing number of bicycle paths, lanes and trails in Australian cities and towns is likely to notice two things: (i) these facilities are increasingly being used by cyclists; and (ii) most of the cyclists using these facilities are male. These observations are supported by survey data. Annual surveys of bicycle use in the Melbourne central business district show an average increase in cycling numbers of 5% a year from 1999 to 2003, and a 360% increase in cyclists using the main north-south route through the city (Swanston Street) since it was closed to cars in 1993.¹ Gender-specific data are generally not available from observational bicycle counts; however, self-report surveys show a consistent pattern of substantially lower rates of cycling among women. A national survey of participation in physical activity for exercise, recreation or sport among individuals aged 15 years and over conducted in 2001 by the

Australian Sports Commission found that female participation in cycling was less than half that of men. Six per cent of females reported cycling at least once in the 12 months prior to interview compared with 13% of males.² Travel surveys in Australian capital cities consistently report significantly lower rates of cycling trips (travelling to work or school, shopping or for recreation) for females than males.^{3,4}

Substantial gender differences in cycling participation in Australia have led some researchers to suggest that women are simply not interested in cycling. For example, in a recent evaluation of a newly established bike trail in western Sydney, Merom et al.⁵ reported the usual inverse association between female gender and bikeway use and concluded that the gender differences in awareness and use of the trail "may imply that females are less interested in cycling..." This paper describes international data that challenge the assumption that cycling is an inherently

Abstract

Issue addressed: Australian women's participation in cycling for transport and recreation is approximately half that of men. These gender differences do not occur in several western European countries. Research is required to investigate the individual, social and environmental determinants of Australian women's participation in cycling for transport and recreation.

Discussion: 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. Cycling promotion campaigns may achieve greater success with women if they enable women to experience cycling in an environment that is, and is perceived to be, safe and supportive.

Conclusions: Research is needed to determine what strategies are likely to be most effective in promoting cycling among Australian women, as a basis for developing programs, policies and facilities to support women's participation in cycling.

Key words: Cycling, women, physical activity, active transport, recreation.

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So what?

The promotion of cycling as a form of active transport and recreation provides an ideal opportunity for health promoters to work collaboratively with sectors such as transport, environment, local government and town planning to simultaneously improve the health of individuals, urban environments and communities.

genderised activity and argues that research is needed to identify why relatively few Australian women cycle for transport and recreation.

International data

Inverse associations between female gender and cycling are common among industrialised, English-speaking countries such as Australia and the United States,⁶ but absent in several western European countries. In Denmark, more women than men use bicycles for transport (17% of all trips undertaken by women compared with 15% for men).⁷ In The Netherlands the figures are 31% for women and 26% for men.⁸ In Germany, among individuals aged 18 years and over, women make an average of 2.54 cycle trips per week, while men make 2.31 cycle trips per week, and since 1976 cycling rates have increased more rapidly among women than men.⁹ These international data suggest that social, cultural and environmental factors are likely to play an important role in women's participation in cycling.

Health benefits of cycling for women

The health benefits of physical activity, including cycling, for women are well documented. Women in the higher quantiles of physical activity participation live longer¹⁰ and are less likely to develop coronary heart disease,¹¹ stroke,¹² respiratory disease,¹³ colon cancer,¹⁴ breast cancer,¹⁴ and diabetes.¹⁵ Moderate intensity exercise such as cycling assists weight management¹⁶ and smoking cessation,¹⁷ reduces levels of depression and stress, improves mood, raises levels of self-esteem, and relieves symptoms of premenstrual syndrome.¹⁸

Cycling as a form of physical activity provides all these benefits and more. Cycling to work has been shown to meet metabolic criteria for achieving health benefits from exercise.¹⁹ In its complementary role as a form of active transport, cycling contributes to cleaner air, less congested cities and more people-friendly, liveable communities.²⁰

Reasons for gender differences in cycling in Australia – some preliminary indications

In light of the health, social and environmental benefits of cycling and data indicating no gender differences among some European populations, the gender difference in cycling participation in Australia requires investigation. There are indications that Australian women's low rates of cycling are not due to an intrinsic dislike of cycling. Although participation rates are relatively low, cycling features in the top 10 sport and recreation activities for women. Cycling appears in seventh position, with 6.1% of Australian women reporting having cycled in the previous 12 months. Cycling was more popular than bushwalking (5.5%), running (4.7%) and golf (3.2%).² Fifty per cent of households in the Melbourne metropolitan area have at least one bicycle.⁴ In the March 2002 survey of attitudes towards cycling conducted

for Bikewest in Western Australia, 37% of women indicated they expected an increase in the frequency of their cycling over the next six months.²¹ These data suggest that, among women, there may be an interest in and capacity to participate in cycling that is not being translated into practice.

Few studies have explored women's perceptions of cycling, but a recent pilot survey in Sydney found that safety concerns (encompassing safe cycleways, road safety and secure bicycle parking) were the main deterrents to women cycling.²² Focus group research has also identified these concerns as the main reason for parents not allowing their children to ride to school.²³ In countries such as Australia, which have developed an 'automobile monoculture',²⁴ cycling is perceived as hazardous. As women are generally more risk averse than men, this has a differential impact on women. However, quantitative risk assessments in the United States (US), United Kingdom (UK) and Australia suggest that the actual risk of injury associated with cycling is small. A study conducted in the US reported that injury rates for outdoor cycling were the lowest among five commonly performed, moderately intense activities (walking, gardening, weightlifting, outdoor cycling, aerobics).²⁵ Risk-benefit analyses have concluded that even under current road and traffic conditions, the health benefits of cycling outweigh the health costs.²⁶

In response to differences in perceived and actual cycling risks it is tempting to try to 'educate' women. However, the risk perception and communication literature indicate that personal experience of an activity is a more effective way of bridging the gap between risk perceptions and reality than trying to persuade people that their perceptions are 'wrong'.²⁷ Consequently, informing women that cycling is a relatively safe activity is unlikely to be effective. On the other hand, there is good evidence that when policies, environments and social norms change, so too does behaviour. In Oxford, England, the share of journeys by bicycle increased from 9.4% in 1972 to 26.4% in 1984 following the introduction, in 1974, of a 'balanced transport policy' that encouraged walking, cycling and public transport use.²⁸ Since 1976 in Germany, cycling rates have increased more rapidly among women than men due in part to appropriate transport and planning policies.⁹ Programs focusing on individuals have also been effective, but have had a greater impact on men than women. The Cycling 100 and TravelSmart projects in Perth, Western Australia, have reported increased cycling among program participants, including women (although in smaller numbers than men).²⁹

Conclusions

This report highlights a substantial gender imbalance in cycling in Australia and suggests that there is potential to increase women's participation in cycling. However, because few studies have systematically investigated women's perceptions and

experiences of cycling, little is known about what motivates and sustains their involvement. As Sherwood and Jeffery³⁰ note, relatively little information is available about what motivates individuals to initiate physical activity, to discontinue exercise after periods of regular physical activity, and to reinstate exercise following a lapse in regular activity. These knowledge deficits are particularly pertinent to women and cycling. Research is needed to determine what strategies are likely to be most effective in promoting cycling among Australian women, as a basis for developing programs, policies and facilities to support women's participation in cycling.

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