

## Encouraging community cycling and physical activity: a user survey of a community bicycle loan scheme

Sharon Miskell, Willa Xu and Chris Rissel

The public health benefits of cycling are well-recognised. Individual health benefits include reduced risk of mortality,<sup>1,2</sup> morbidity<sup>3</sup> and obesity.<sup>4,5</sup> Environmental health benefits include reduced pollutants, carbon emissions and traffic congestion.<sup>6</sup> To promote community cycling and reduce the landfill requirement for discarded bicycles, Fairfield City Council in 2007 established the Western Sydney Cycling Network (WSCN), which incorporates a bicycle donation, recycling and loan program.<sup>7</sup> Although targeted for the Fairfield area, anyone is able to borrow a recycled bicycle and new helmet for an indefinite period for \$25.

To assess the effectiveness of the Western Sydney Bicycle Loan Scheme in encouraging cycling and physical activity, a survey was conducted of adults 18 years and older who had loaned bicycles from the WSCN since its commencement in 2007. The survey tool incorporated questions from the Active Australia questionnaire and was conducted by telephone. Of the 262 people who had loaned bicycles for their personal use, 113 were contactable by phone (68 were not reached, 49 had not provided a number and for 31 the number was incorrect). Overall, 68 (60.2%) of eligible respondents participated in the survey. The frequencies of responses are shown in Table 1.

Most respondents (93%) had ridden their bicycles since their loans, and 74% had ridden their bicycles in the previous month. Almost one in five respondents (19%) had either upgraded to a better loan bicycle and/or bought a new bicycle. Forty-three per cent reported a greater level of physical activity than prior to their bicycle loan.

In the week prior to completing the survey, respondents had cycled twice on average, and for an overall average time of 102 minutes, either for recreation, exercise or transport. Almost one third of respondents (29%) had cycled more than seven times in the past week. Sixty-five per cent of respondents reported moderate and/or vigorous activity of more than 150 minutes.

Since having their loan bicycle, 46% of respondents reported an increase in cycling behaviour by family and friends, 56% reported being encouraged to ride by friends, family or work colleagues, and 81% reported having encouraged friends, family or work colleagues to ride. Almost one in four (23%) respondents were beginner or tentative riders, highlighting

Table 1: Western Sydney cycling network survey results (n=68)

	Frequency	Per cent
Duration of bicycle loan		
≤12 months	50	74
>12 months	14	21
Ridden bicycle since loan		
Yes	63	93
No	4	6
Upgraded to a better loan bicycle/Bought a new bicycle		
Neither	51	75
Both	2	3
Either	13	19
Last rode loan bicycle		
≤1 month	50	74
>1 month	16	24
Riding level		
Novice or beginner	7	10
Occasional but tentative	9	13
Occasional but competent	29	43
Regular	22	32
Participation in rides/events		
Yes	15	22
No	50	74
Increase in cycling amongst family/friends		
Yes	31	46
No	36	53
Encouraged to ride by friends/family/work colleagues		
Yes	38	56
No	29	43
Encourages friends/family/work colleagues to ride		
Yes	55	81
No	13	19
Physical activity compared to time prior to bicycle loan		
Less	6	9
Same	32	47
More	29	43
Postcode of residence		
Fairfield/Liverpool	43	63
Not Fairfield/Liverpool	25	37

the potential for increasing the prevalence of cycling through lending people bicycles.

The survey data indicates that the bicycle loan scheme is effective in encouraging community cycling and physical activity. The data indicate that loan recipients are actively using their bicycles, riding regularly and achieving the recommended weekly level of physical activity of 150 minutes or more.<sup>8</sup> The bike loan scheme appears to have helped generate a climate of encouragement for cycling. Future research should measure physical activity levels before, as well as after, borrowing a bicycle, to quantify increases in physical activity.

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## Authors

Sharon Miskell, formerly Health Promotion Service,  
Sydney South West Area Health Service, Camperdown,  
New South Wales

Willa Xu, Health Promotion Service, Sydney South West Area  
Health Service, Camperdown, New South Wales

Chris Rissel, Health Promotion Service, Sydney South West  
Area Health Service, Camperdown, New South Wales

## Correspondence

Dr Chris Rissel, Director Health Promotion Service, Sydney South  
West Area Health Service, Level 9, King George V Building,  
Missenden Road, Camperdown, New South Wales 2050.  
Fax: (02) 9515 9056; e-mail: [criss@email.cs.nsw.gov.au](mailto:criss@email.cs.nsw.gov.au)