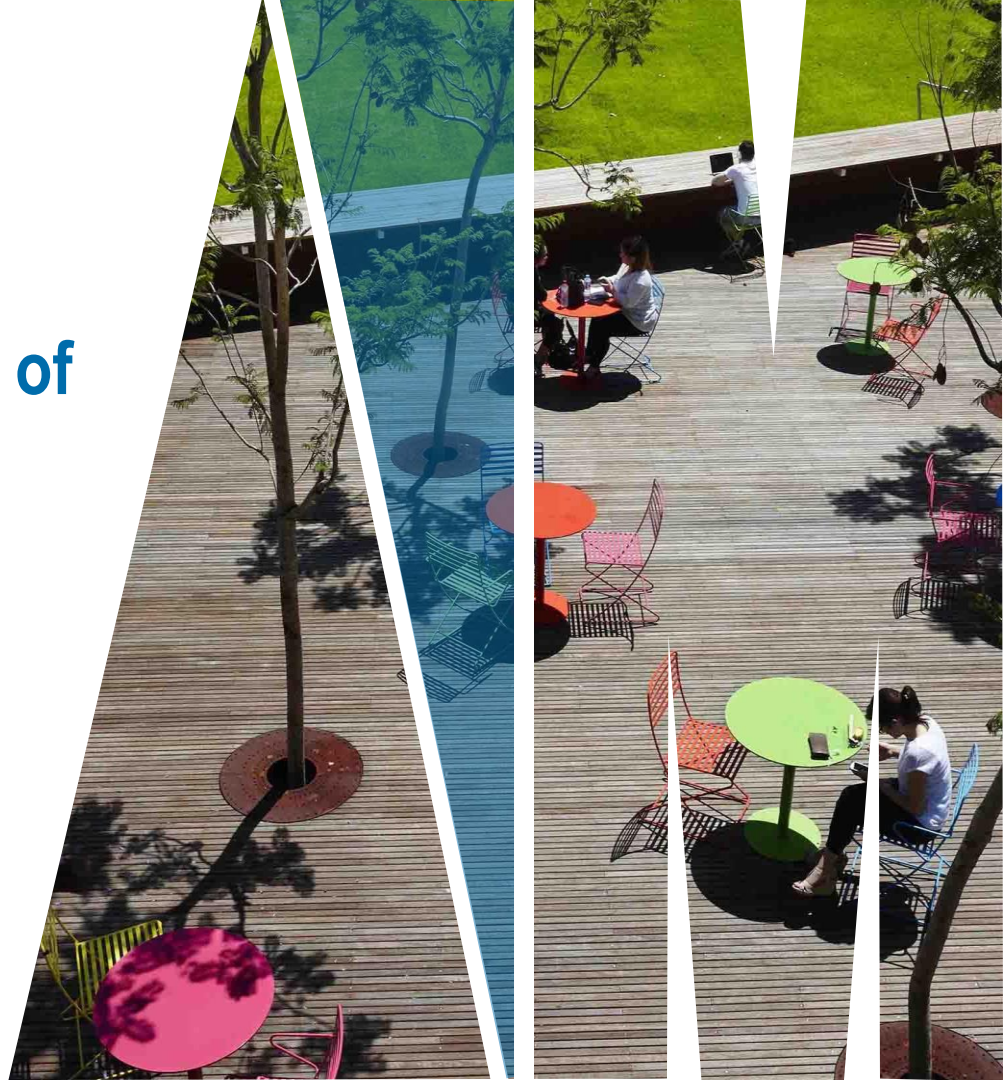


What do women want? A mixed-methods exploration of gender differences in barriers and enablers of cycling

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Background

- Victoria has an ideal climate for bike-riding, 78% of people 'Interested but Concerned'¹
- Despite this, very low participation overall, and mostly men riding²
- To increase participation safely, need to understand who is interested in riding a bike, what prevents them, what may encourage them



1. Pearson, L., Dipnall, J., Gabbe, B., Braaf, S., White, S., Backhouse, M., & Beck, B. (2022). The potential for bike riding across entire cities: quantifying spatial variation in interest in bike riding. *Journal of Transport & Health*, 24, 101290.

2. Victorian Integrated Survey of Travel & Activity (VISTA). Total journeys to work by region and mode. 2018.

Background

- Limited qualitative evidence available – no voice to people not usually captured and limited understanding of the ‘why’
- Conducted a survey & semi-structured interviews to **identify, quantify and understand** barriers and enablers



Survey design

What barriers do you experience to riding a bike? Tick all that apply.

- ☐ I don't have a bike
- ☐ Heatwave/severe rain forecast
- ☐ I don't have cycling clothes
- ☐ I am concerned about riding alongside motor vehicles

Please indicate how much of a barrier “I am concerned about riding alongside motor vehicles” is to you from 1 = not a barrier to 4 = very much a barrier

1 2 3 4



Unpacking the explanations through interviews with potential riders

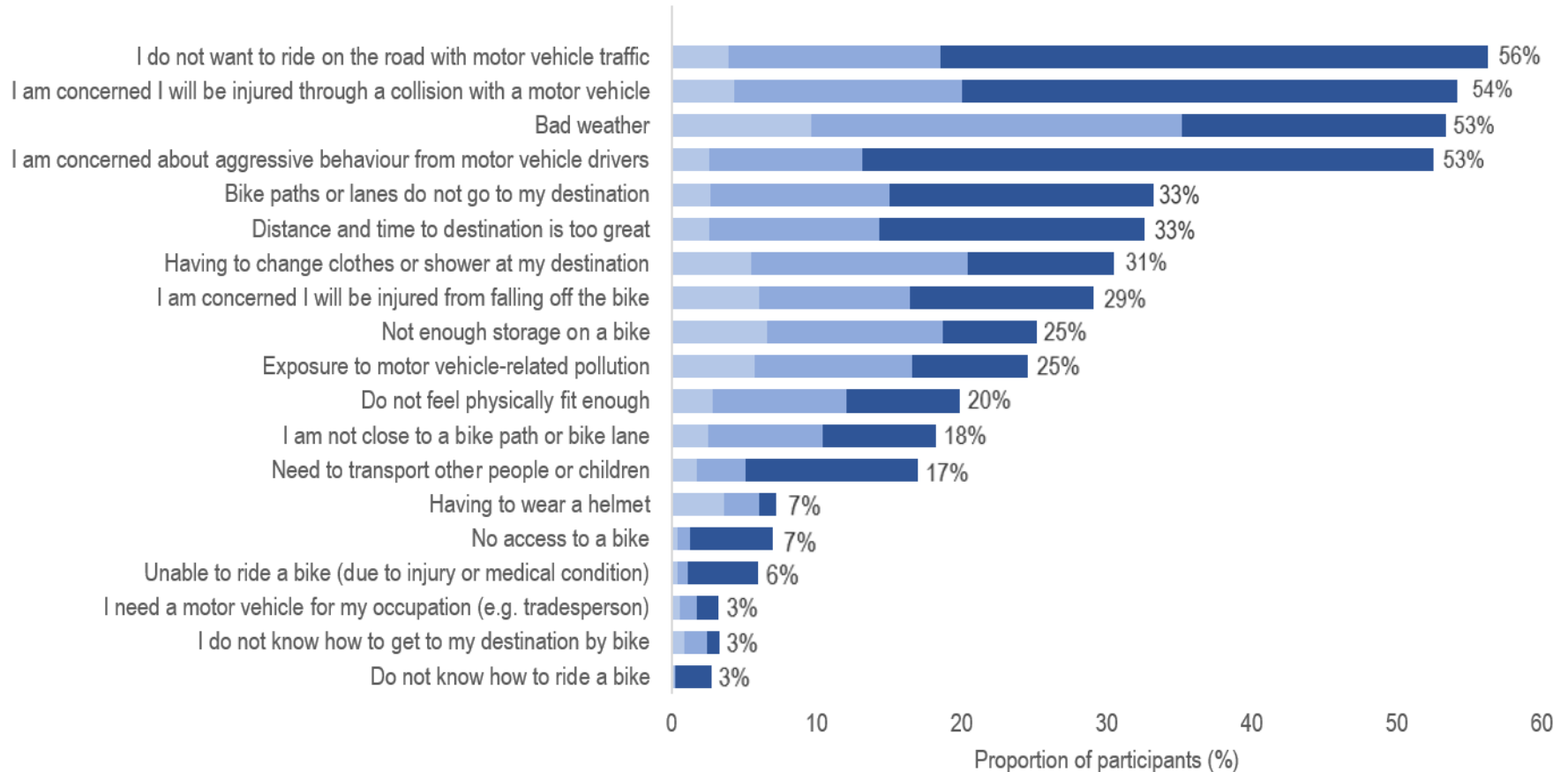
- Four Types of Cyclist tool used in survey to categorize as 'Strong & Fearless', 'Enthused & Confident', 'Interested but Concerned' or 'No Way No How' in relation to riding a bike ^{5,6}
- Interviewed 40 people who were 'Interested but Concerned' in riding



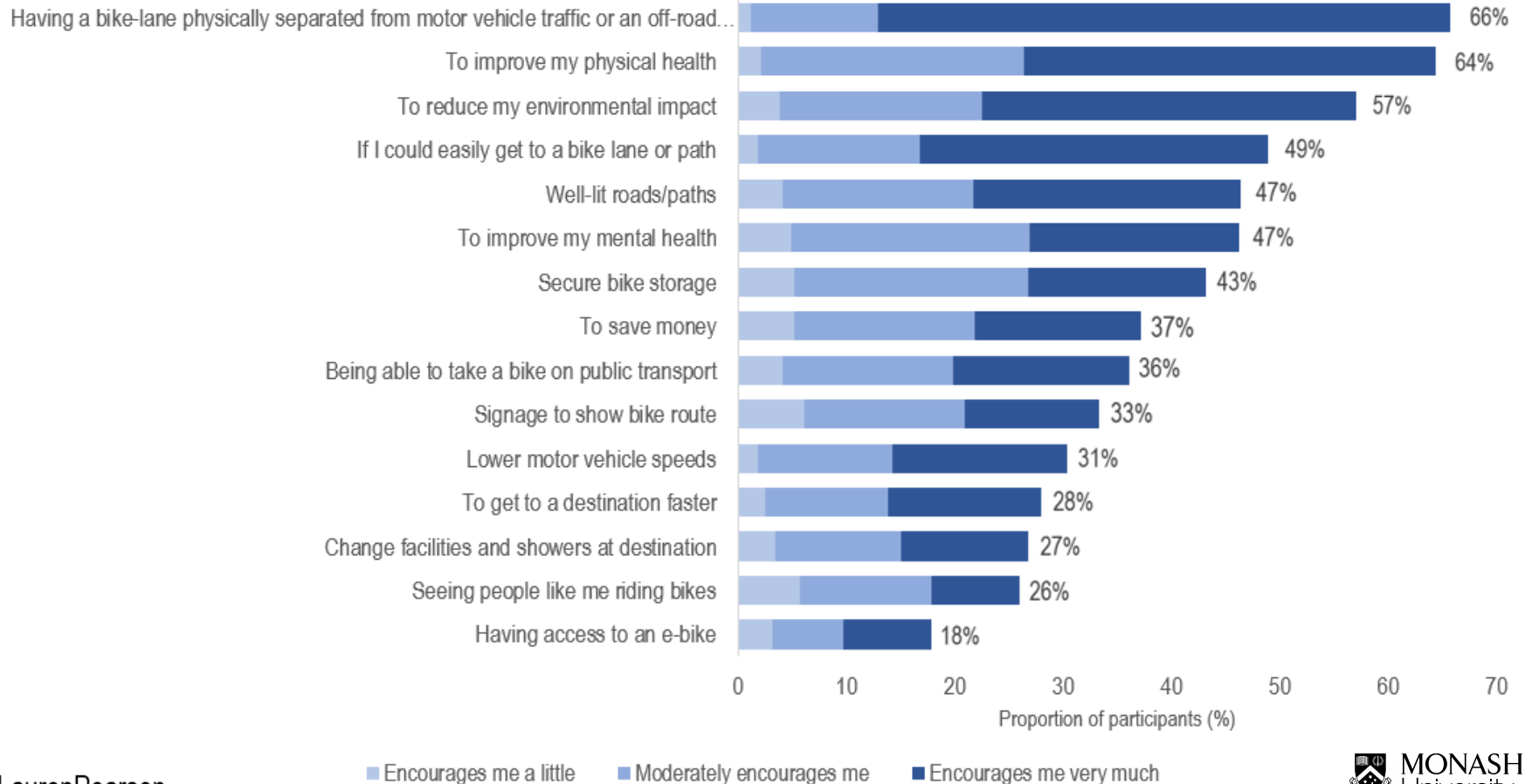
5. Geller, R. (2006). Four Types of Cyclists. Portland Bureau of Transportation, Portland, USA., 2006.

6. Dill, J., & McNeil, N. (2016). Revisiting the four types of cyclists: Findings from a national survey. Transportation research record, 2587(1), 90-99.

Barriers to riding a bike for transport



Enablers of riding a bike for transport



Barriers to riding a bike for transport by gender

0% 10% 20% 30% 40% 50% 60% 70%

I do not want to ride on the road with motor vehicle traffic

61%

45%

I am concerned I will be injured through a collision with a motor vehicle

59%

43%

I am concerned about aggressive behaviour from motor vehicle drivers

55%

45%

Bad weather

53%

53%

Distance and time to destination is too great

35%

30%

I am concerned I will be injured from falling off the bike

34%

15%

Bike paths or lanes do not go to my destination

33%

35%

Having to change clothes or shower at my destination

31%

30%

Not enough storage on a bike

28%

20%

Exposure to motor vehicle-related pollution

24%

25%

Do not feel physically fit enough

24%

12%

I am not close to a bike path or bike lane

19%

17%

Need to transport other people or children

19%

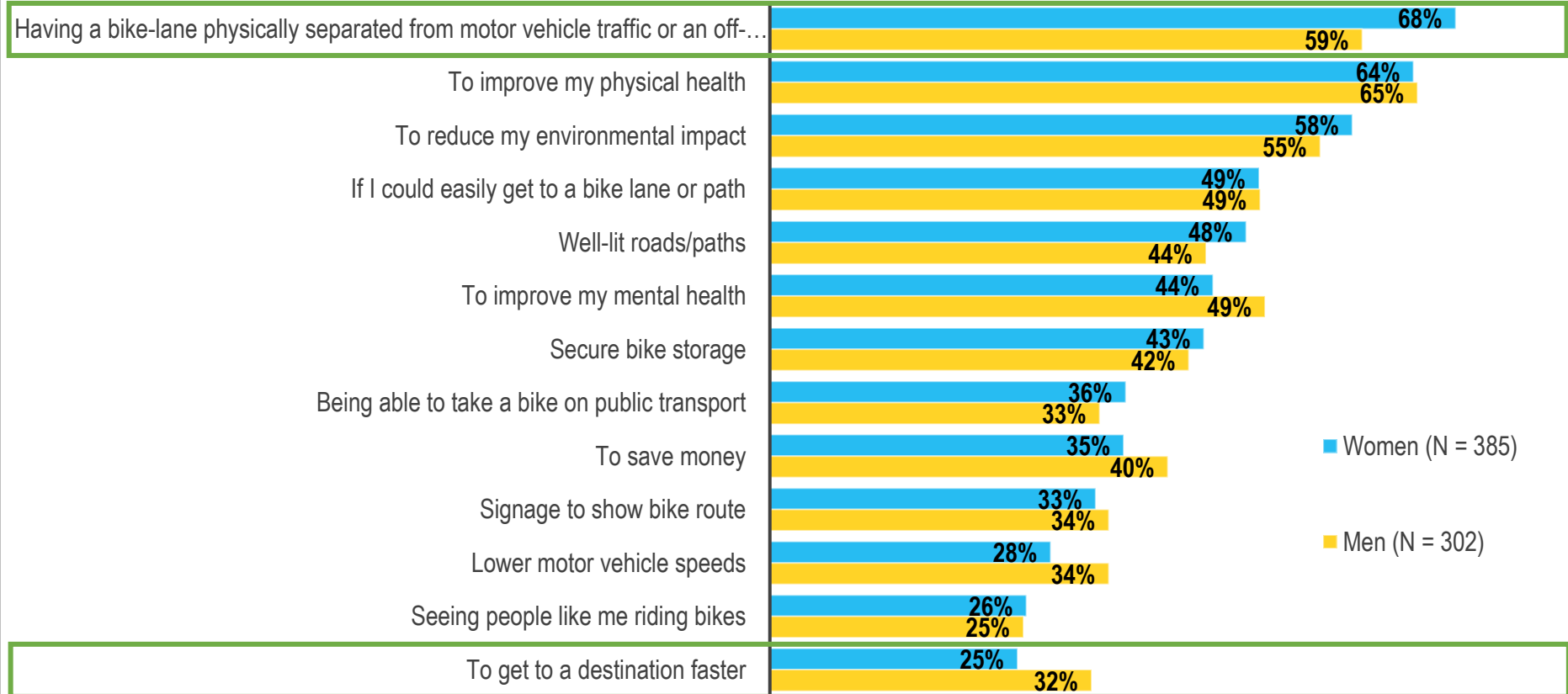
15%

■ Women (N = 385)

■ Men (N = 302)

Enablers of riding a bike for transport by gender

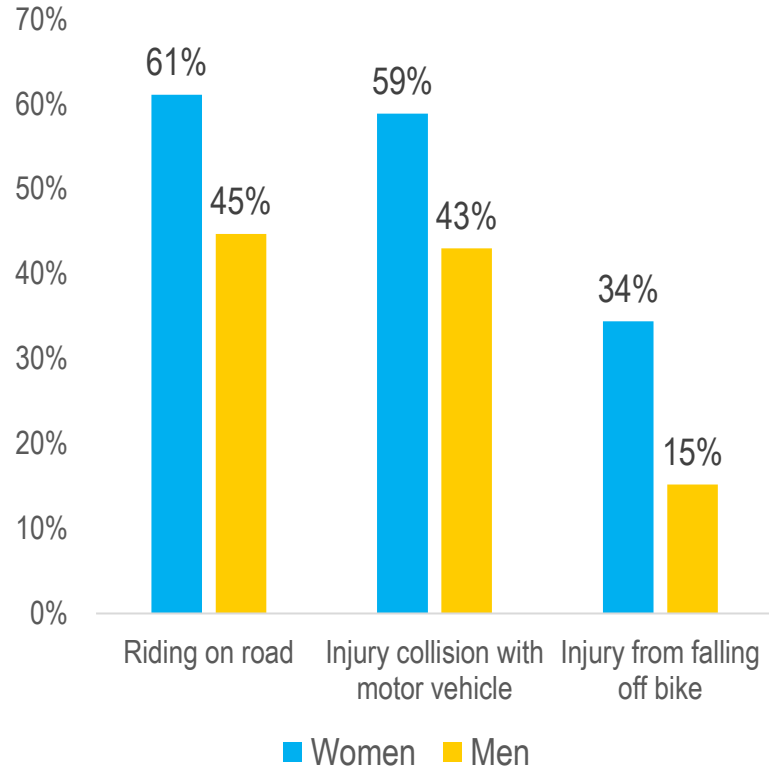
0% 10% 20% 30% 40% 50% 60% 70% 80%



■ Women (N = 385)

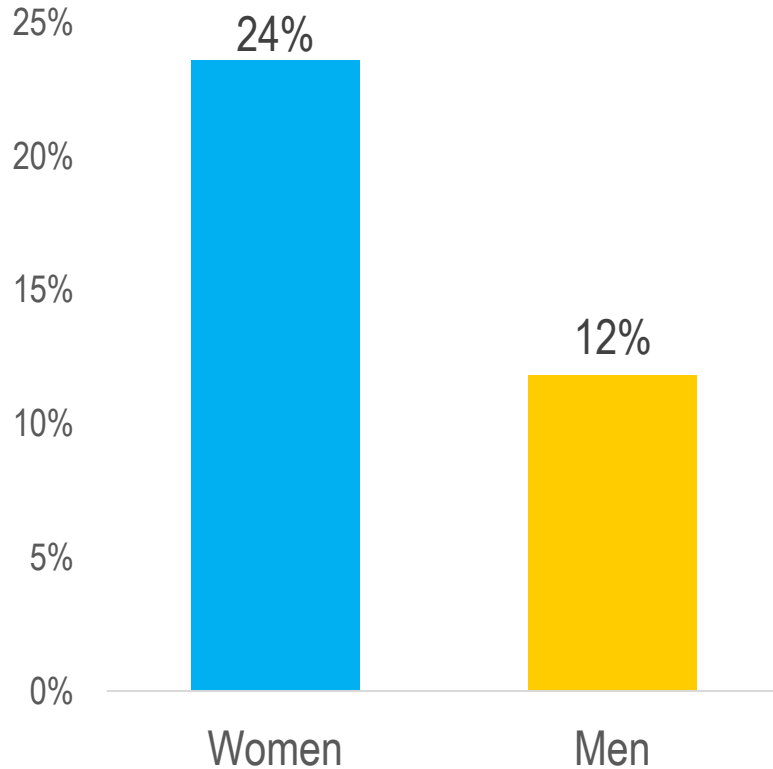
■ Men (N = 302)

Barriers to riding a bike for transport: *Women want space to fall*



“I’m probably concerned if I
stopped suddenly or like, **fell off
the bike, I was going to end up
in oncoming traffic**”
(18-24-year-old woman)

Barriers to riding a bike for transport: *Not feeling physically fit enough*



*“Hills can be unnerving. It's not so much that I don't think that I can get up them, but more that if I'm suddenly going at snail's pace and **cars are overtaking me or I'm holding them up...that can be stressful**”*
(35-44-year old woman)

Barriers to riding a bike for transport: *Bad weather a safety concern?*

“If days are really windy, honestly, that's the day that I won't ride. Like that's what scares me the most because the bike lanes are so tiny. **I'm scared that if a gust of wind blows me over, I'll just get rammed into a car** or something like that” (45-54-year-old woman)

“I don't like being covered in waterproof stuff and I don't like getting wet. I don't like being cold and wet.” (54-64-year old man)



Barriers to bike riding unique to women

Concern about falling off a bike and into incoming motor vehicle traffic

Concern about not being physically able to keep up with the speed of motor vehicle traffic and other bike riders

Fear of personal safety riding through badly lit areas and underpasses

Concern about safety implications of riding a bike in bad weather

Feel unsafe riding on the road with children, or in disconnected infrastructure

Lack of confidence in ability to buy, ride, repair and maintain a bike

Mutual barriers for women and men

Concern about collision with a motor vehicle

Concern about unpleasant sensory experience of riding on the road

Weather concerns related to comfort

Bringing it all together

- Most people report barriers relating to riding alongside motor vehicle traffic and the associated concerns
- Gender differences are substantial
- Are we designing spaces and services for people of all ages, abilities and experience levels? Or are we designing spaces for people already riding?
- Inclusive and diverse strategies needed





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