Women and Cycling: A Canadian Picture

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This report reviews literature on women and cycling, focusing on the Canadian context. It is intended to help planners and policy makers understand women's experiences with cycling as they work to support women cycling. This piece likely reflects the experiences of cisgender women, given there has been less research documenting the experiences of gender diverse people around cycling. We recognize that intersectional identities like class, age, race, and citizenship impact women differently and, where possible, highlight these distinct experiences.

Background

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Women are underrepresented in cycling in Canada, comprising 34% of people commuting by bicycle.¹ The proportion of women cycling in Canada is much lower than in countries with strong cycling cultures, such as Germany and the Netherlands, where women and men have similar rates of bicycle use.²

Importantly, in cities where more people cycle, more women cycle². One study found that in cities with cycling rates over 7%, women and men cycle at similar rates, whereas in cities where cycling rates are below 7%, women cycle 50-60% less than men.³

Women cycle for a plethora of reasons, including practicality, sustainability, pleasure, and health⁴. However, women face barriers to cycling due to concerns around personal and child safety, poor cycling infrastructure, and gendered caregiving responsibilities.⁴ Below, we look in depth at central themes in women and cycling - personal safety, infrastructure, gendered responsibilities and realities, and gender as a bodily performance – and provide evidence from both academic literature and public reports. We then identify the importance of intersectional analyses on women and cycling and end with a call for policy makers to consider women in neighbourhood and policy design.

Actions to Support Women in Cycling

- Prioritize protected bicycle infrastructure that separates riders from motor vehicles
- Provide and plan for diverse bicycle design: bicycles with cargo space for transporting children and goods, and/or e-bikes, and ensure these are affordable and accessible
- Expand research related to cycling and identity
- Promote gender-based approaches in cycling planning and in the evaluation of cycling investments



"...when physical activity is an incidental, "nonathletic" habitual part of everyday life that does not require additional exercise time, women are more likely to achieve physical activity parity with men"¹⁶



Personal Safety

Women are more likely than men to report personal safety, risk of injury from collisions, and environmental factors, such as weather, as barriers to cycling.^{2;5} For safety reasons, many women won't cycle at night, or will only cycle with friends and in well-lit areas.⁶ "I think it is often overlooked that what makes women feel unsafe is not only the poor bike infrastructure but also the harassment they endure. Cyclists as a whole are disrespected as road users, so add being a woman to the mix and you'll be disrespected even more."¹⁸

Women report 25 times more sexual harassment from male motorists while cycling than men do, which discourages women from wanting to engage in the activity for both recreational and commuter purposes.⁷ Additionally, some women report experiencing misogyny in the form of patronizing comments from male cyclists, especially from the "Lycra-bro" subculture.⁸ Many women, especially those who are racialized, young, and fat*, experience harassment from men because of their visible identities, and are unable to 'escape' harassment despite their mobility.⁶



Safety and Infrastructure

Yet, the body of research does show a diversity of experiences: some women report being perceived and harassed more by men while cycling than walking; others report feeling safer on a bicycle than on foot, as they can cycle away quickly if harassment occurs.⁶ Many women experience a "visibility paradox": they are constantly navigating how to be visible and safe as cyclists, while not drawing too much attention to themselves (e.g. dressing more conservatively) for fear of harassment or unwanted comments from men.⁶

The built environment influences women's likelihood of cycling more strongly than it does for men; more women bike if safe bicycle infrastructure, such as protected bike lanes, exists.^{9;10} Notably, cycling tends to be viewed as risky amongst women in countries with poor cycling infrastructure, but not so in those with good cycling infrastructure, such as the Netherlands and Germany.⁷ Research shows that women are less likely than men to take risks while cycling¹⁰ and women's participation in commuter cycling decreases in areas with speed limits of over 60 kilometres per hour.⁹

Safety and infrastructure may especially be an issue for parents, with mothers commonly reporting not feeling confident enough to navigate unprotected bicycle lanes next to motorized traffic.¹¹ A fear of collisions with motor vehicles has relegated many mothers to solely cycling with their children in carfree areas, such as nature trails or parks.¹¹

"Cycling safety as mobility justice requires thinking through how automobility, patriarchy, racism, and other axes of power influence cycling safety, as well as how these dynamics are shaped by, and shape, place across these scales" ¹⁷

*Note: The term 'fat' is used in a neutral way as a descriptor. Our decision to use the word derives from a desire to normalize the term without perpetuating negative connotations.

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Gendered Responsibilities & Realities

Many women experience the a disproportionate burden of the "mobility of care" (the responsibility to transport children and other dependents) as a result of gender norms driven by patriarchal systems.^{12;13} Taking the time to bicycle, for utilitarian or leisure purposes, may be more than some mothers are able to balance alongside work, childcare, and household duties.¹¹ Further, bicycles and related equipment can be costly, which may dissuade cycling with their children.¹¹



Additionally, women can face the expectation to look conventionally feminine and 'attractive', which can be in conflict with cycling (e.g., wearing a helmet messes up one's hair).⁷ Girls may also be discouraged from cycling by family members as it is not seen as a 'feminine' activity.⁵ Additionally, women are more likely to view themselves as having poor cycling abilities and consider the importance of personal factors while cycling, such as socializing with others, than men.^{5;7}

Gender as a Bodily Performance

Like cycling, gender is performed and practiced. Some have written that patriarchy influences mobility, causing women to take up less space when they move around compared to men.⁵ The concepts of "gender performativity" and the "theory of embodiment" are at play in cycling⁵. For example, women often experience their bodies - and mobility - as burdensome due to realities such as street harassment.¹⁰ Expected gendered body performance is evident in how women walk, talk, and generally move around.¹⁰ Although historically bicycles have "acted as a disruptive force, "threatening" the normative framing of gender identities and roles"⁵, contemporary cycling culture is heavily masculinized. Public space involves constantly shifting dynamics of power, and thus cycling culture and communities often perpetuate sexist (and racist) norms.⁶

Intersectionality

Most research about women and cycling fails to consider how intersecting identities (like race, class, age, and education level) influence women's interactions with cycling.⁵ Often, people who rely most on affordable modes of transportation, like cycling, are marginalized within cycling spaces, such as women, people of colour, and those who are low-income.¹⁴ Lack of economic and social equity with white men in cycling and transportation spaces discourages these groups from participating, thus perpetuating health inequities (e.g., lack of exercise and emotional wellbeing).¹⁴ Immigrants and people of colour may also be ostracized within cycling spaces due to racism and xenophobia, and highly racialized neighbourhoods receive the worst forms of bicycle infrastructure which lead to higher rates of injury.¹⁴ As well, immigrant women are more likely to report low-cycling skills and confidence than men, with many being discouraged as children from learning how to ride a bike.¹⁵

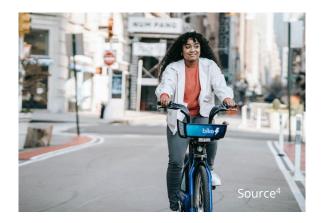
"Intersectionality is a lens through which you can see where power comes and collides, where it interlocks and intersects. It's not simply that there's a race problem here, a gender problem here, and a class or LGBTQ problem there."¹⁹



How to Improve Gender Equity in Cycling

All women deserve to be safe, comfortable, and accepted while cycling in cities. Municipalities play a large role in creating more cycle-friendly cities for women. Building protected cycling infrastructure can enable women to feel safer while cycling⁹. Thus, cities can move toward gender equity in cycling by ensuring there are networks of protected bicycle facilities that will connect people to the places they need to go including shopping, childcare, and recreation opportunities associated with mobility of care.

"Failure to establish road rules that protect cyclists, to enforce the limited rules that do exist, and to impose appropriate penalties for traffic violations that threaten or injure cyclists also contributes to hostile cycling conditions that constrain female cycling"¹⁶



Additionally, women and their myriad of lived experiences must be included in technology, program, and infrastructure design. Diverse bicycle design for women and mothers with children is necessary for creating more equitable cities, alongside the promotion and accessibility of e-bikes and traditional bicycles with carrying

capacity for children and groceries.¹⁶ Cycling culture should be assessed by local governments, including social norms and rhetoric around cycling, types of bicycles and clothing being used, distance and speed of cycling trips, and locations and purposes of trips.¹⁶

It is important to note that the promotion of cycling can be contentious. There is a risk that cities focused on sustainability and urban development may simultaneously exacerbate gentrification and displacement of low-income and racialized communities.¹⁴ City planners and policymakers must consider the social, economic, and historical implications of cycling design and provide time and resources for ample community feedback on cycling infrastructure & its equity considerations.¹⁴

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