**Introduction**

Investment in cycling infrastructure and promotion may be a potentially beneficial intervention for Māori. Previous research on Māori transport priorities has identified increasing active transport use, amongst tamariki (children) in particular, as a potentially important contribution to improving hauora Māori. Active transport projects are likely to be most valuable to Māori where they are designed in ways that enable Māori to maintain a cultural and spiritual connection to the urban physical environment.

In general, adults and children who can use active transport tend to have better physical and mental health because walking and cycling provide gentle exercise, increase neighbourhood social connection, and create cleaner, quieter, and more “restorative” local environments.

**Benefiting Māori**

As well as these benefits, increasing access to cycling may also help to reduce some of the disproportionate transport-related harms currently experienced by Māori. Due to a greater likelihood of experiencing transport poverty, higher prevalence of chronic disease and obesity, and greater vulnerability to road traffic injury, Māori currently bear a disproportionate health burden associated with the current car-dominated transport system. Māori are also more likely than non-Māori to experience the stress and social exclusion associated with transport poverty.

Māori can potentially benefit disproportionally from investments that increase access to low-cost, low-carbon, health-enhancing transport options, including cycling. However, despite these potential benefits, there is limited research evidence about Māori cycling patterns and priorities or the role of cycling in Māori communities.

**Aims**

This research had four aims: (a) to describe Māori cycling patterns; (b) to explore enablers and barriers for cycling amongst Māori; (c) to identify key themes within literature on Māori and transport and explore how they may relate to Māori cycling patterns, and (d) to examine important features of kaupapa Māori cycling interventions.
The research used a kaupapa Māori aligned approach. Its primary aim was to improve outcomes for Māori, with the analysis centring Māori realities and priorities. It was underpinned by critical, decolonial research methodology, which explicitly rejects cultural deficit analyses and privileges Indigenous values, experiences, and understandings.

Travel data from the 2013 New Zealand Census was used to examine cycling patterns amongst Māori. To identify enablers and barriers we also analysed data of Māori from the 2006 Taupō Cycling Study. A narrative literature review was undertaken to explore the current state of knowledge about cycling amongst Māori and to identify relevant case studies of Māori cycling initiatives.

Findings
In general, Māori cycle to work at similar rates to Pākehā New Zealanders, and more frequently than Pacific or Asian New Zealanders.

1. Use of a bicycle to travel to work was closely related to vehicle ownership, with the proportion cycling to work highest in households with no motor vehicles. For Māori, cycling to work was twice as common amongst those in manual occupations than those in managerial and professional occupations, a pattern which differed sharply from that for Pākehā.

2. The factors identified as most likely to encourage more cycling, ranked in order of importance, were: more bicycle lanes and bicycle paths, and better bicycle security, followed by reduced vehicle speed, and lastly, bike-friendly public transport. There were no statistically significant differences between Māori and non-Māori in rating the importance of these factors. In relation to factors that would encourage more cycling to work, access to shower facilities at work was rated highest.

3. A narrative review of the literature identified three key themes: (a) cycling as an expression of kaitiakitanga (guardianship); (b) barriers to cycling uptake; and (c) whanaungatanga (relationship through shared experiences and working together which provides people with a sense of belonging) in personal transport decisions.

4. Three important examples of Māori-centred initiatives that involve cycling are the Iron Māori event, the Atua Matua programme developed by Toi Tangata, and the Hapori Paihikara programme. Connecting with others through riding, and taking advantage of the open-air nature of cycling to observe and learn about environments, are important common themes.

Key Policy Implications:
Barriers to Māori cycling reflect systemic social, economic, & transport-related inequities that have become entrenched in Aotearoa as a result of colonisation & structural racism. Interventions must focus on addressing the conditions for cycling, rather than putting the onus on individuals to change behaviour, such as:

- **Addressing socio-economic inequities** that lead Māori to experience less flexible employment and unsafe transport environments, both of which act as barriers to cycling
- Designing cycling infrastructure that enables social cycling—in pairs, groups, and with whānau— thereby providing opportunities for whanaungatanga and social connection
- Building opportunities for kaitiakitanga into cycling promotion and infrastructure design. The desire for opportunities to “cycle together,” is actually a common preference amongst cyclists more generally. Thus, a Māori-centred approach to cycling planning could be beneficial in improving the rates of cycling across many groups.

To find out more about this research, please visit: [https://doi-org.ezproxy.auckland.ac.nz/10.1111/nzg.12280](https://doi-org.ezproxy.auckland.ac.nz/10.1111/nzg.12280) and/or contact: Rhys Jones (rg.jones@auckland.ac.nz)

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