



Changing travel patterns in Post-COVID India

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Cover image: Shashi Ghosh/Indian Express

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Image Source: Moneycontrol

Introduction

The COVID-19 pandemic has reset daily life across the world since early 2020. As global and individual health takes precedence and physical distancing becomes the norm, the COVID-19 outbreak has had a significant impact on our behaviour and lifestyle—the way we work, consume and, most significantly, the way we travel.

Since March 2020, 1.3 billion people in Indian cities have witnessed several consecutive lockdowns to contain the spread of the virus. Movement on the streets was restricted, and the initial months saw a sharp decline in both public and private motor vehicle use. This temporary change in travel behavior prompted us to find out how the citizens would travel after the lockdown is lifted and non-essential services are resumed.

The ITDP India Programme conducted an online survey in multiple languages to find out potential changes in travel behaviour—changes in mode of travel and frequency of travel—depending on gender and age. This document presents the results of the survey.



Methodology

The survey was targeted at India's urban population. Due to the nature of the pandemic, physically conducting the survey was not feasible. We found online data collection to be the most appropriate, despite its shortcomings.

The survey was multilingual, with a choice of six languages: English, Hindi, Kannada, Marathi, Tamil, and Telugu. However, the reach of the survey was limited to those with internet access, leading to a sampling bias; there was little to no representation from the lower-income groups, who depend largely on walking, cycling, and public transport.

To understand the travel behaviour before the lockdown was imposed, and the predicted travel behaviour after the lockdown is lifted, the survey posed questions about the frequency of their commute for job, education, and other trips, and their preferred modes of transport for these trips.

Apart from questions seeking demographic details such as city of residence, gender, age, and disability, we also asked respondents if they had a vehicle, whether they knew how to ride a cycle, whether they were planning to buy a vehicle, and whether they were considering a shift in their job or city because of COVID-19.

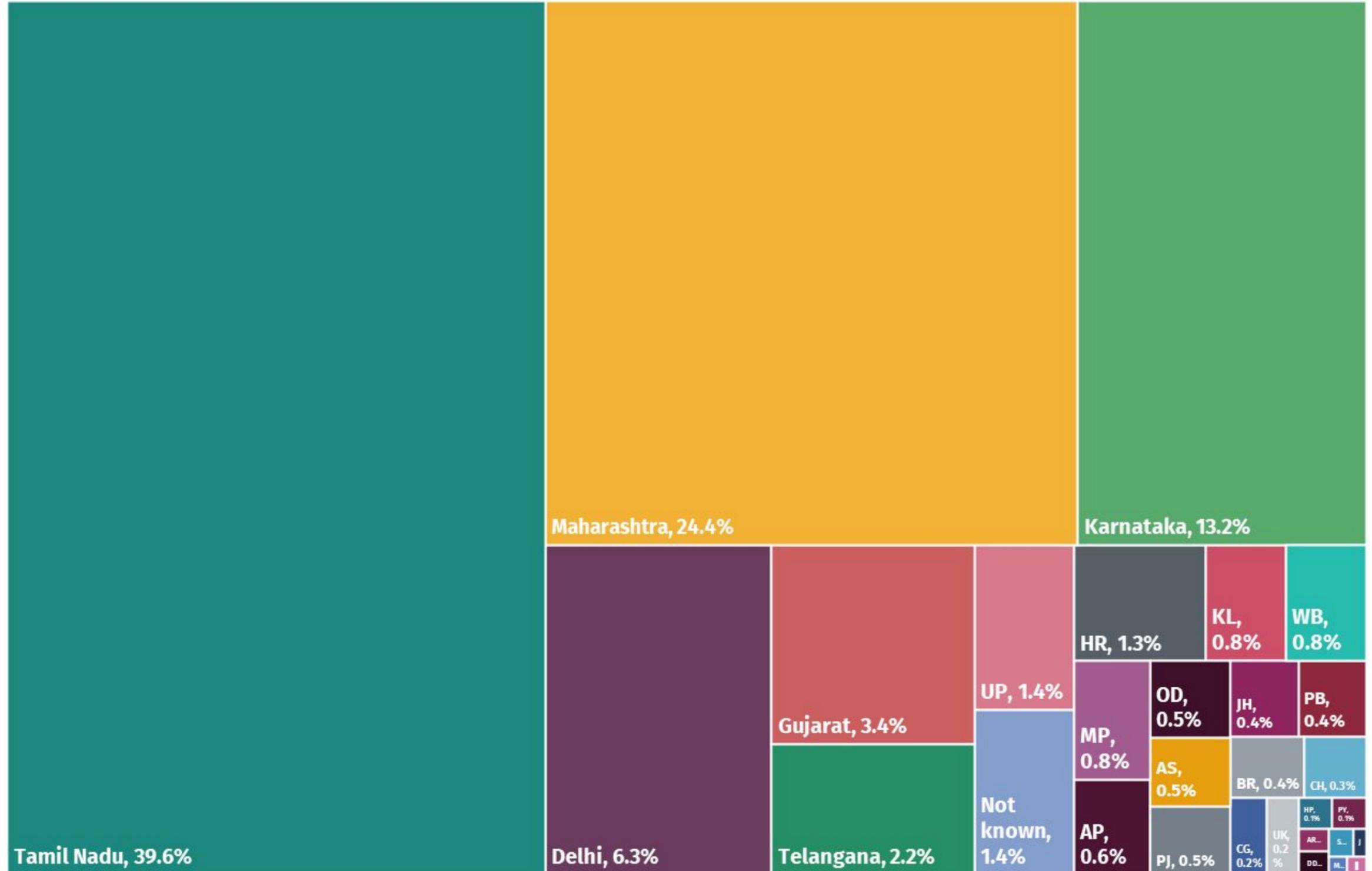
India imposed a nationwide lockdown on 23rd March 2020 and the responses were collected between 15th May to 8th June 2020. States began to lift their lockdowns phase-wise from June 2020 onwards.



State-wise split for responses

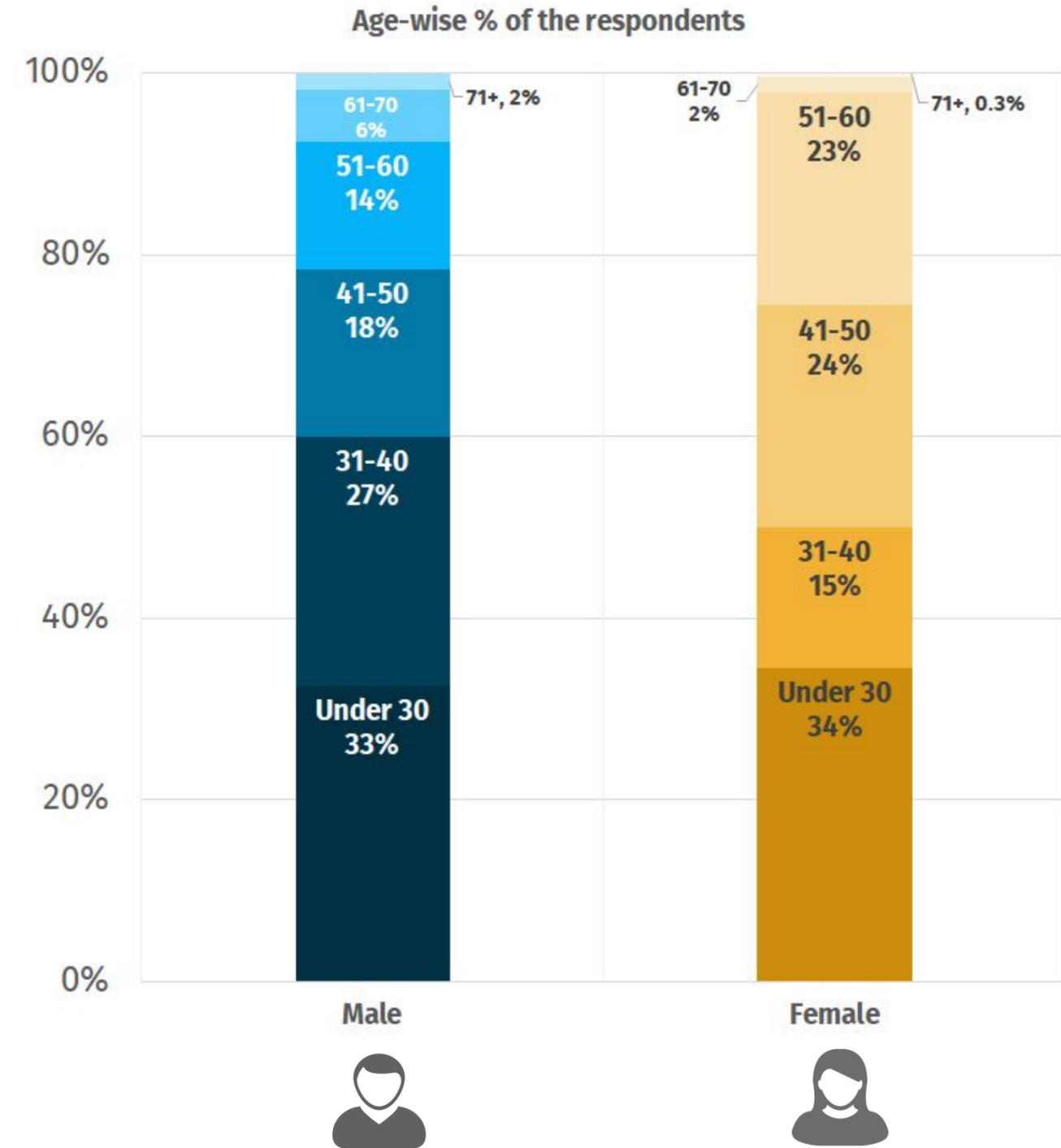
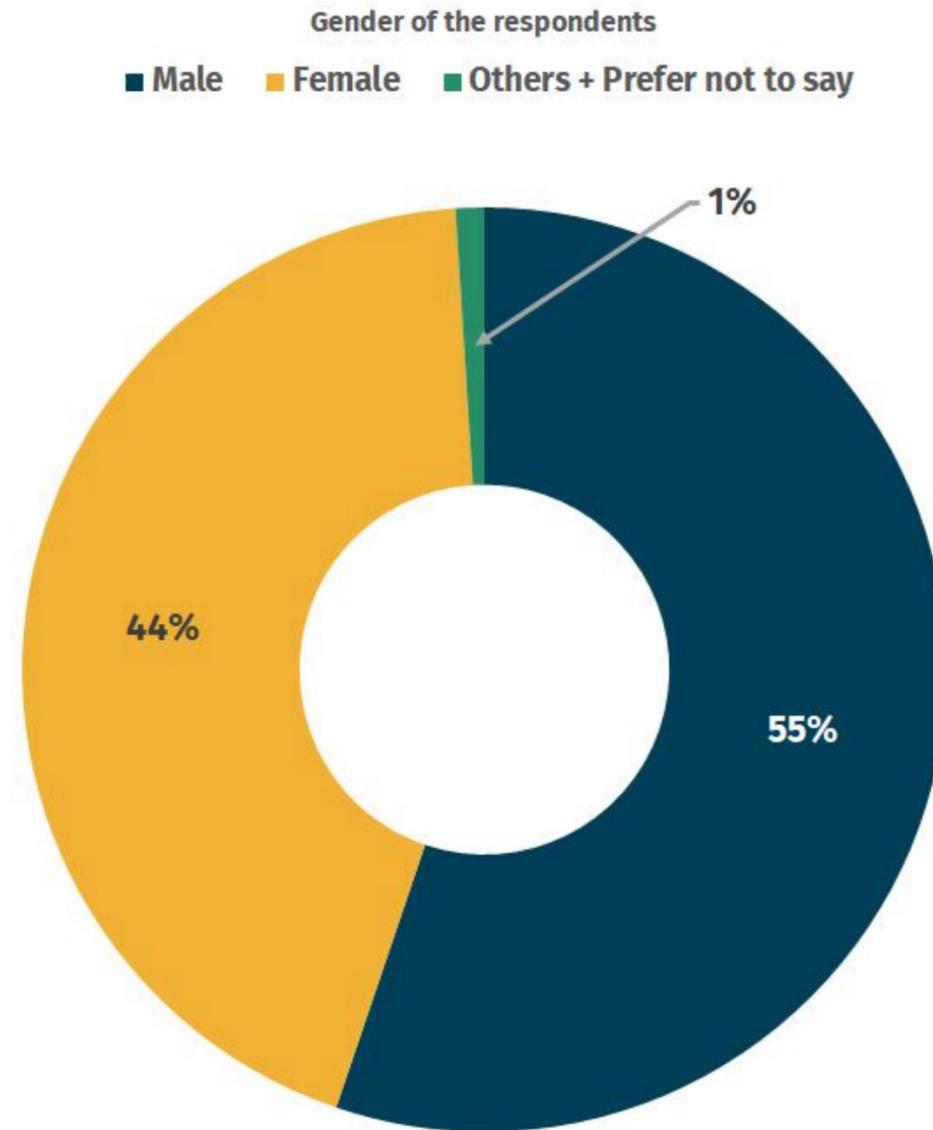
We received 3454 responses in English, Hindi, Marathi, Gujarati, Tamil, Telugu, Kannada

State-wise split of responses (3454 responses)



Who were the respondents: By gender and age

The survey respondents represented a wide spectrum of citizens, male and female, and of different ages.



Note: "Prefer not to say" responses were eliminated for the visualisation

Know how to cycle, but do not have cycles

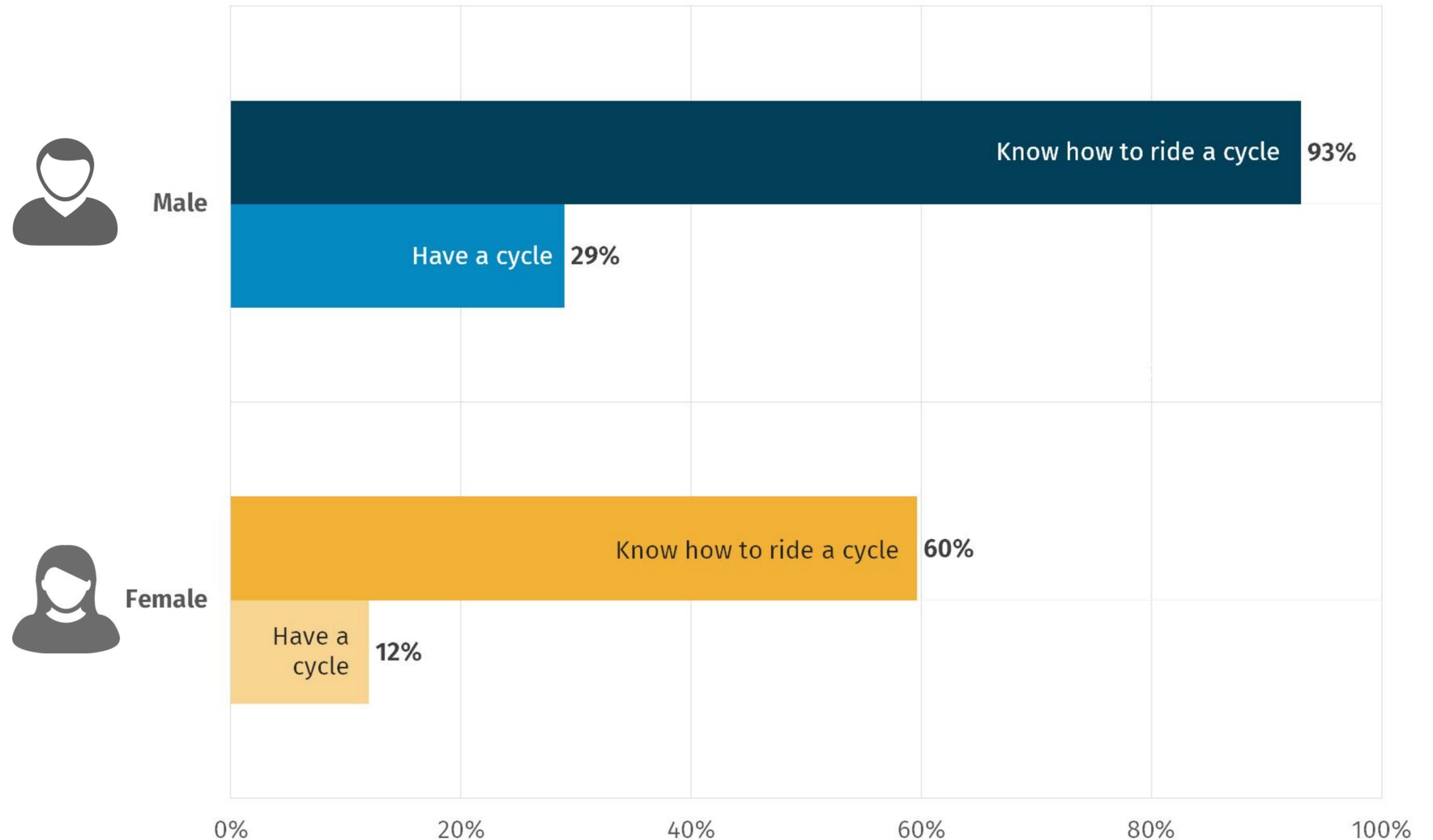
9 out of 10 men said they knew how to ride a cycle, but only **3** of them had a cycle.

6 out of 10 women said they knew how to ride, but only **1** had a cycle.

Increased affordability of motorized vehicles (especially two-wheelers), rising income levels, and absence of safe cycling infrastructure are the major factors that have led to a decline in the share of bicycles. ^[1]

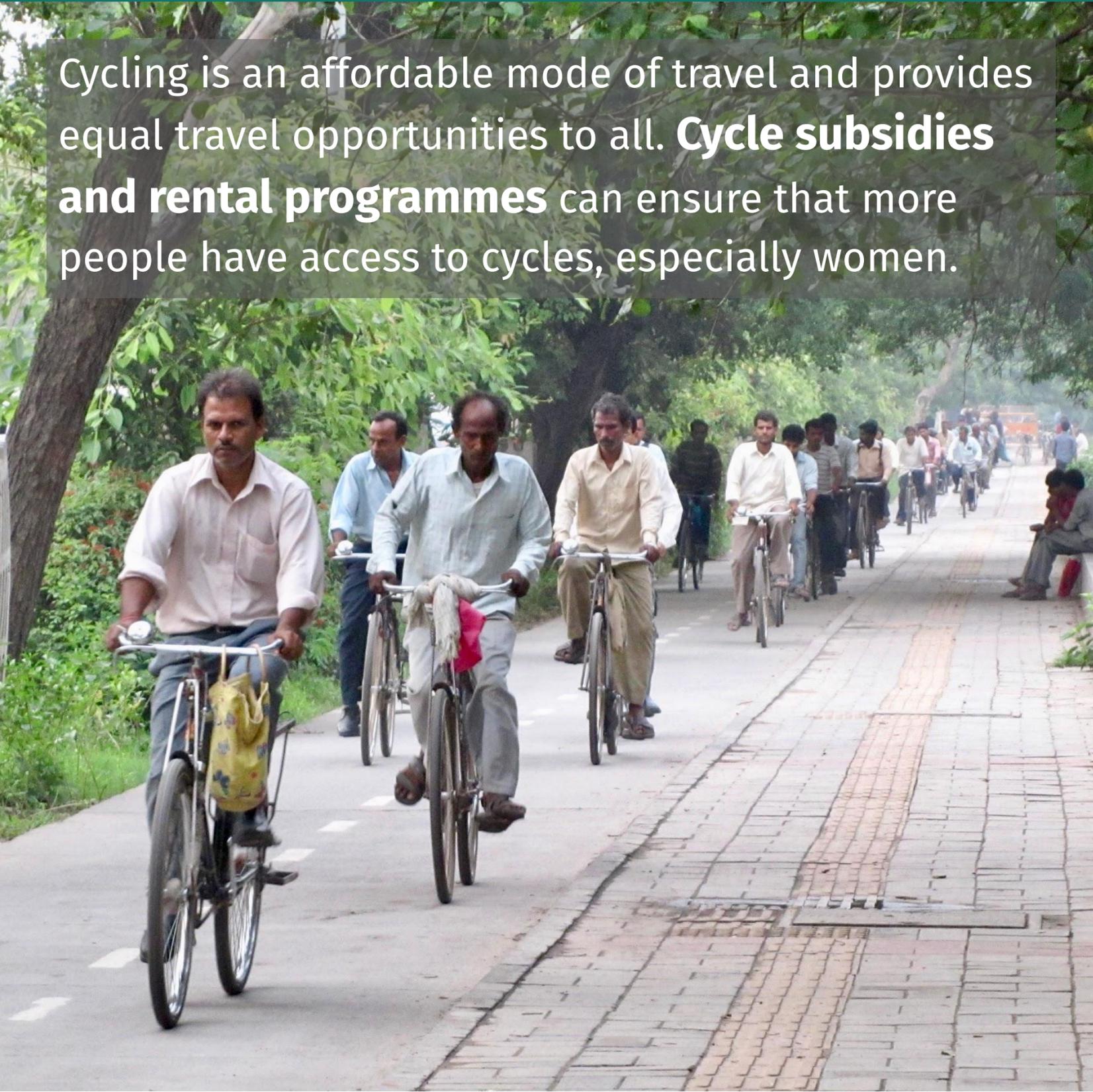
[1] Pg.9- [Benefits of cycling in India- An Economic, Environmental, and Social Assessment](#)

% of respondents who know how to ride a cycle vs % of respondents who have a cycle



Everyone needs more access to cycles

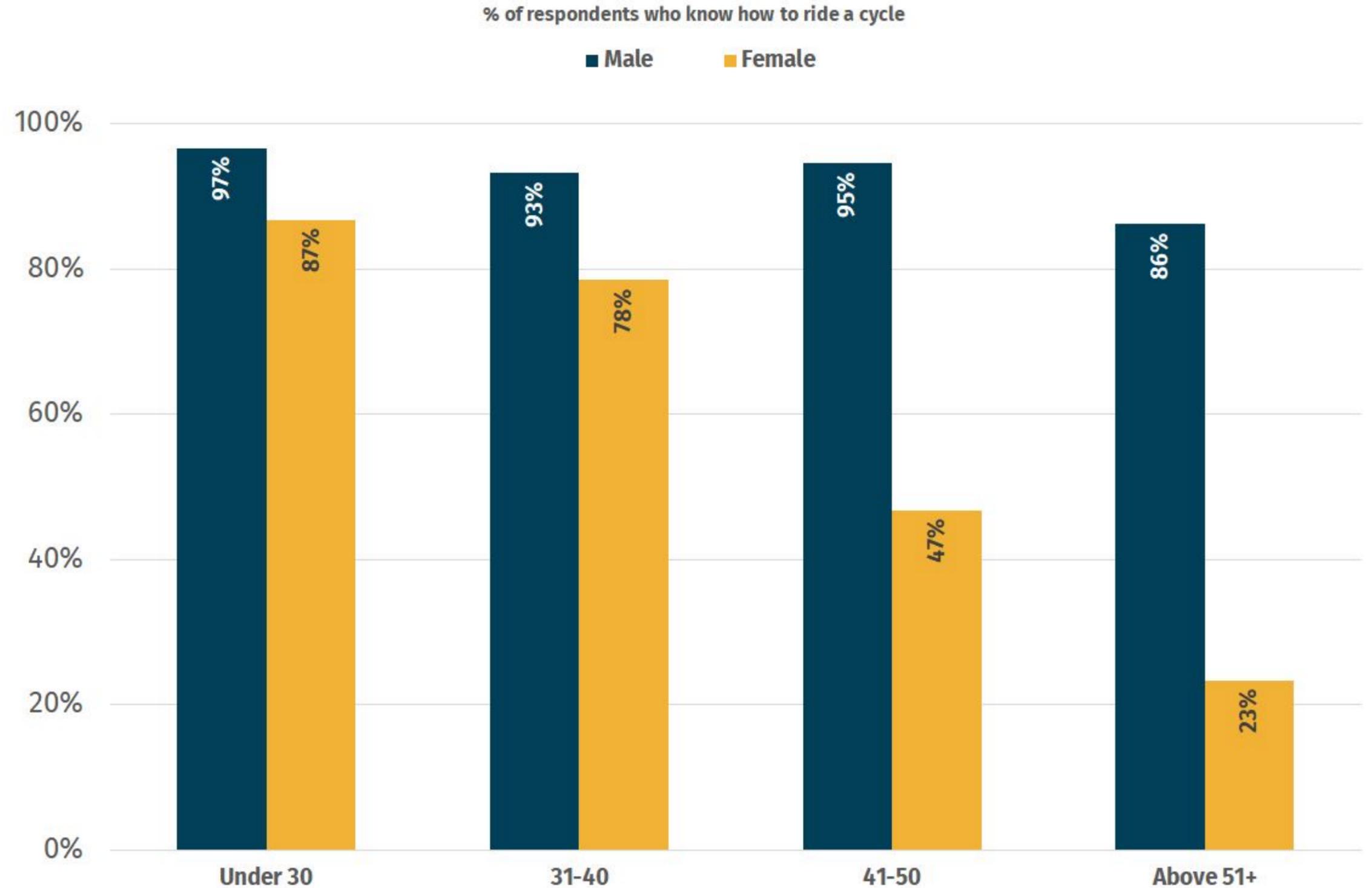
Cycling is an affordable mode of travel and provides equal travel opportunities to all. **Cycle subsidies and rental programmes** can ensure that more people have access to cycles, especially women.



Fewer older women know how to cycle

Amongst female respondents, only 60% said that they know how to ride a cycle, (compared to 93% of male respondents).

Initiate cycling training programmes for women- to empower them to ride. This can enable them to cover short to medium-length trips on cycles. Combined with a safe cycling environment, women would become more confident to cycle.

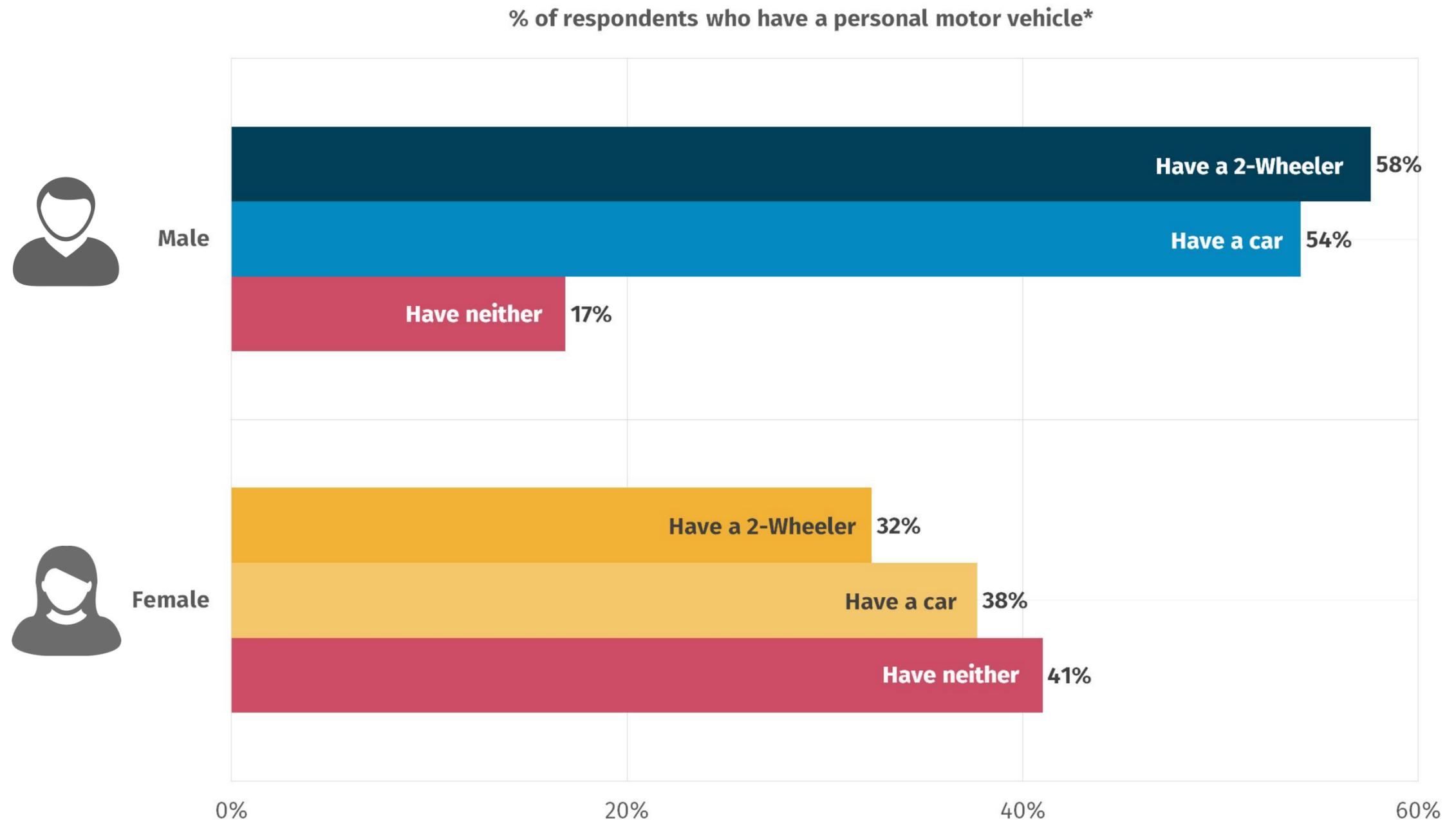


Men have greater access to personal vehicles than women

41% of women said they did not have a vehicle, compared to only **17% of men**.

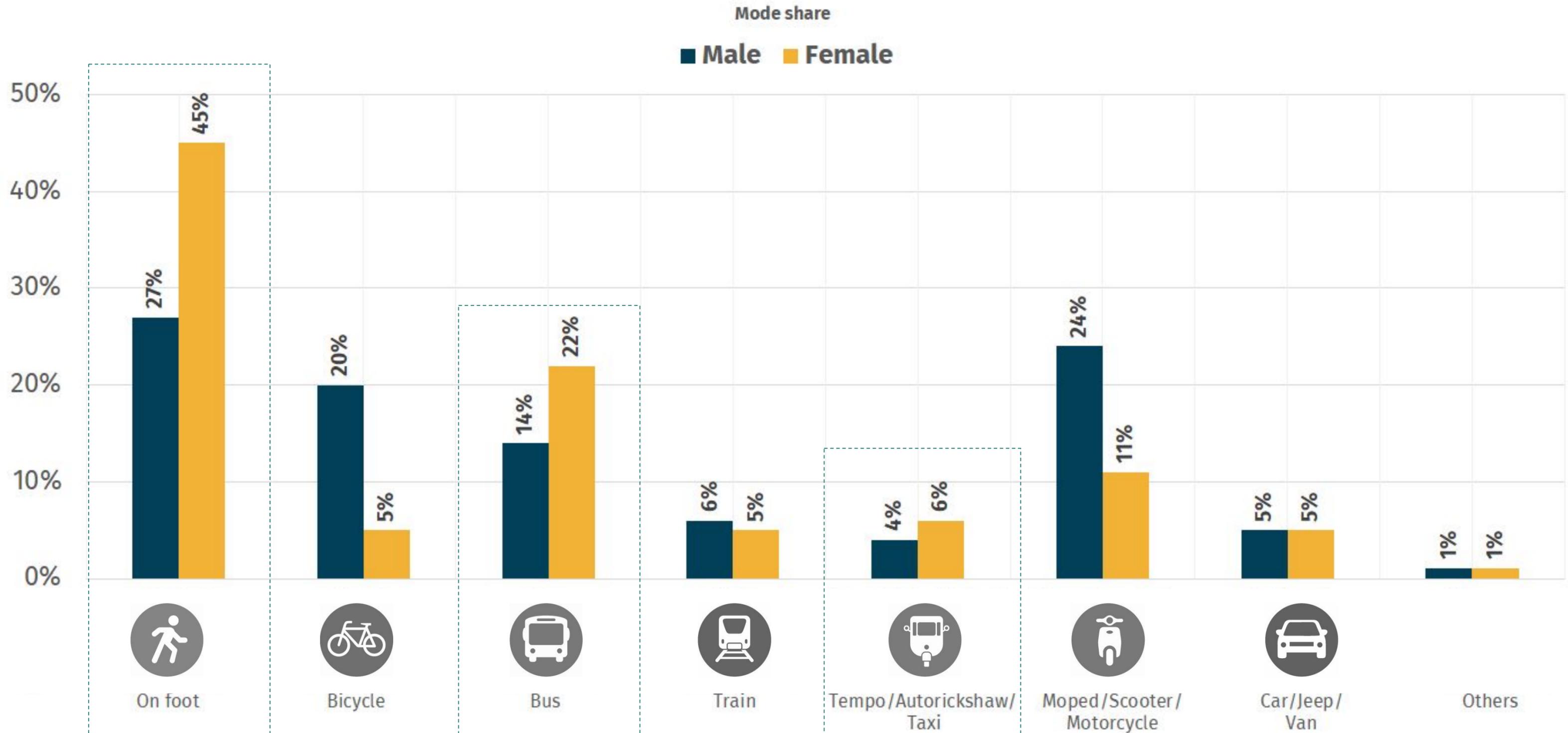
Many women make trips on foot and using public transport. ^[1] Cities must ensure that public transport is made safe, reliable, and affordable for women, to increase their mobility, and thus, their access to opportunities.

[1] Pg.16-17- [Women and Transport in Indian Cities: A Policy Brief](#)



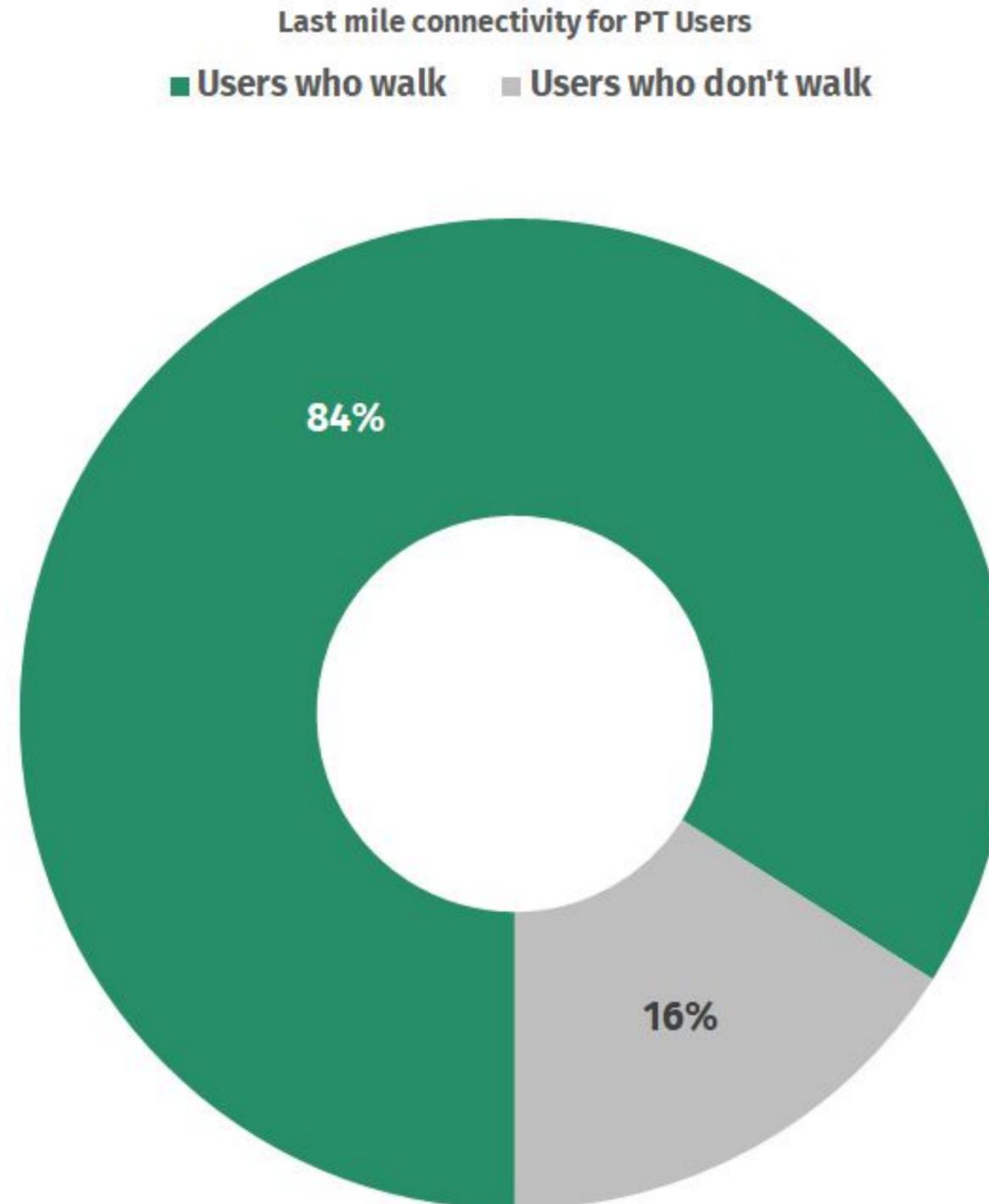
*Includes both individual and family ownership

Women travel more on foot and by public transport



84% of the respondents who use public transport said that they walk to or from the stop/station. Public transport includes city buses, local trains, metro, and shared autos (including e-rickshaw).

Cities should create walking-friendly, well-lit, and shaded streets for all users—especially vulnerable groups, such as women, children, elderly, and marginalized.



People plan to travel less for work and education...

BEFORE COVID-19

AFTER COVID-19

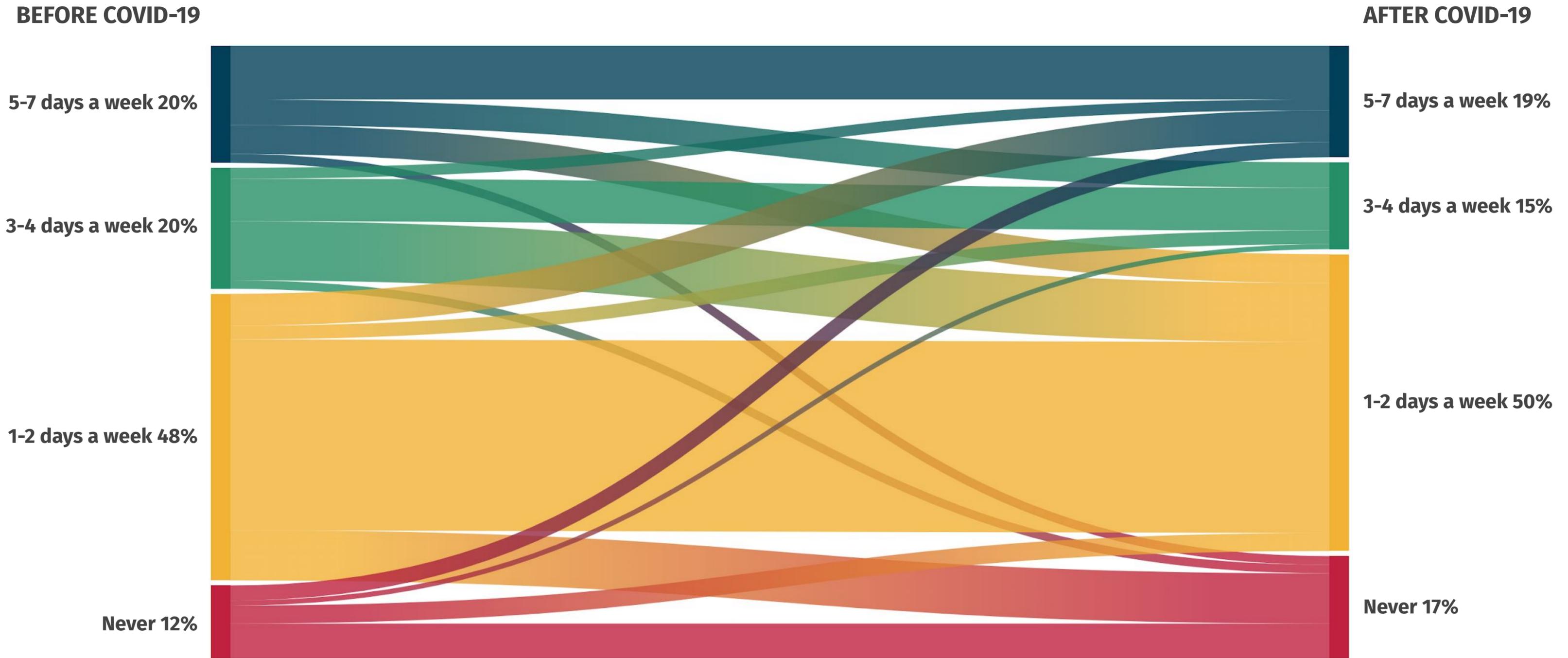
5-7 days a week 78%

5-7 days a week 53%



32% of respondents said they will travel less than before (for job/education trips)

... but other trips are less affected



30% of respondents said they will travel less than before (for other trips)

A boom in cycling ...



During the lockdown, walking and cycling activity increased globally. As cities reopen, they must redesign their streets to become **walking- and cycling-friendly**.



Job/education trips
up by **49%**
Other trips up by **66%**



Job/education trips
up by **8%**
Other trips up by **7%**

... but public transport takes a hit

Image Source: ETGovernment



As the lockdown eases, cities have a social responsibility to run **safe and sanitised public transport services** that are affordable and reliable. Physical distancing would reduce the capacity; to meet the demand **public transport capacity must be augmented.**

↓
Public transport



Job/education trips down by **19%**
Other trips down by **14%**

↓

Auto-rickshaw



Job/education trips down by **15%**
Other trips down by **20%**

↓

Taxis



Job/education trips down by **23%**
Other trips down by **26%**

Car and 2-Wheeler use may shoot UP

A fear of travelling in public transport could lead to a surge in private motor vehicle usage, choking the streets and the air of Indian cities. Studies suggest that cities with higher PM levels are at a greater risk of becoming COVID-19 hotspots.

Cities must employ **effective travel demand measures** to mitigate congestion.



Image Source: Twitter



Car



Job/education trips up by **16%**

Other trips up by **9%**



2-Wheeler



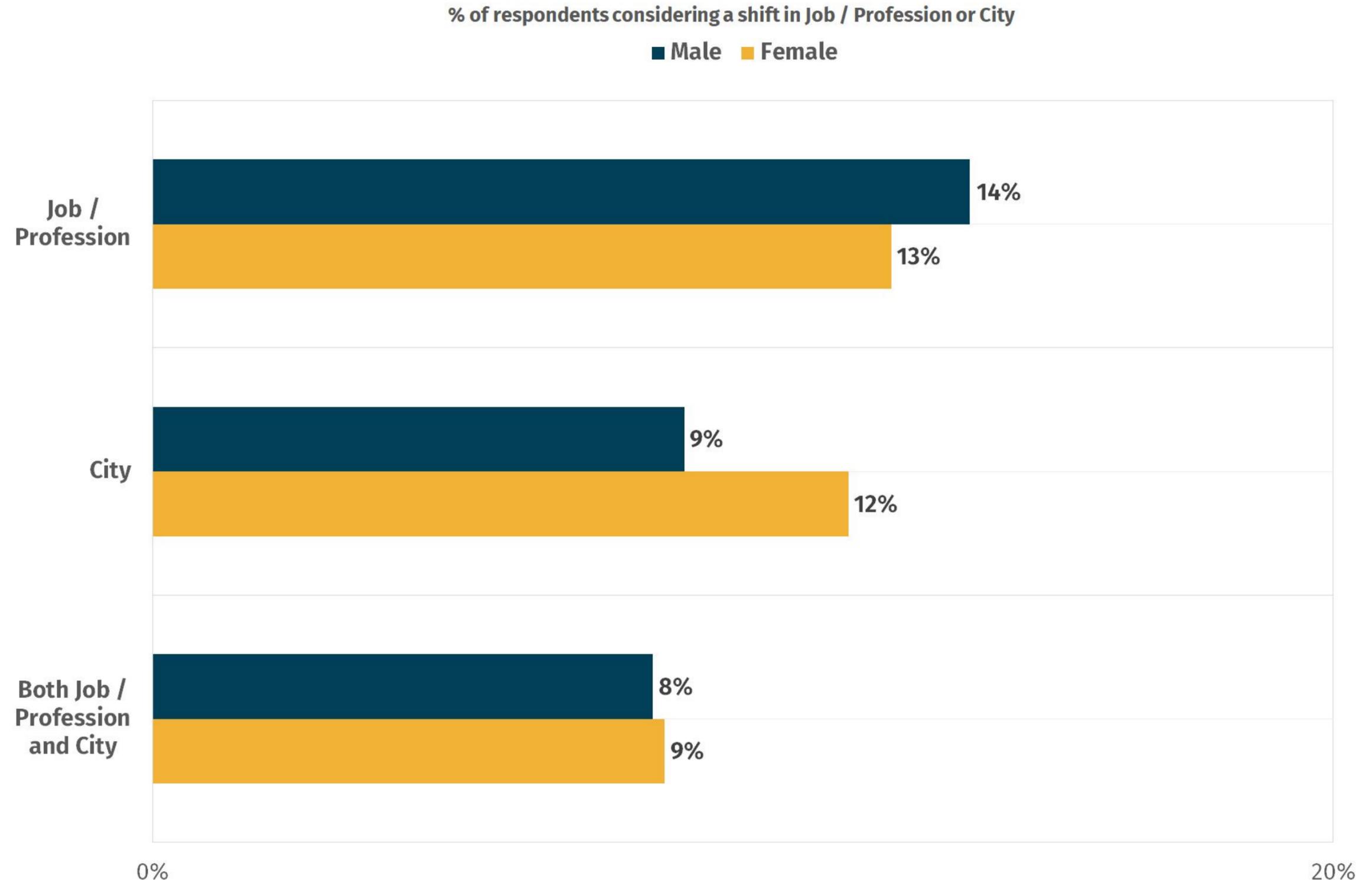
Job/education trips up by **8%**

Other trips up by **6%**

People may change their job or city due to COVID-19

32% of respondents said they are considering a change in job/profession or city because of COVID-19.

The shift can be attributed to reasons as work-from-home flexibility, job losses, risk of exposure, moving back with family, access to health, among many others. Travel needs within cities may change, and cities must adapt accordingly.



Conclusion

The threat of contracting the virus in public transport, while unfounded, has led to an increased preference for personal motor vehicles. Some respondents also desire to buy a motor vehicle because of COVID-19.

Several studies point to evidence that the virus is airborne^{[1][2]}. Studies globally that have investigated clusters of COVID-19 infections have found no link to public transport. All these point to the need to relax social distancing requirements on public transport while maintaining key health safety measures; principally the use of masks. It is important that public transport operators must gain the trust of citizens through active communication and bring them back onto public transport.

With movement restricted due to the lockdown, many had taken to travelling on foot and by cycle. This is likely to continue even after the lockdown is lifted. The findings also suggest that there is a rising interest in cycling, with cycling trips expected to go up by 50-65%. This is corroborated by the actual response on the ground with a sudden spike in the use of cycles.

The survey also revealed that 40% of women did not know how to ride a cycle (compared to just 7% of men). Training these women to cycle, providing them access to cycles, and creating cycling-safe streets, can empower women to access greater opportunities.

Cities must adapt to the changing needs of their citizens to ensure that people move in a safe and healthy manner, and not contribute to the ever-growing menace of traffic and congestion.

[1] [It Is Time To Address Airborne Transmission Of Covid-19](#)

[2] [239 Experts With One Big Claim: The Coronavirus Is Airborne](#)

The path ahead

With a gradual reopening of Indian cities after multiple nationwide and local lockdowns, the need for green, equitable, and inclusive recovery is paramount. Such a green recovery for the transport sector must focus on accelerating the shift from polluting and inequitable modes of transport to active, sustainable, efficient, and inclusive modes.

The national government has taken steps to ensure a focus on sustainable transport. The Smart Cities Mission of the Ministry of Housing and Urban Affairs (MoHUA) has launched two national programmes—the [India Cycles4Change Challenge](#) and the [Streets for People Challenge](#)—to improve cycling and walking. The Transport4All Digital Innovation Challenge, that aims to make public transport safe, reliable, and desirable for all, is proposed to be launched shortly.

The ITDP India Programme is the knowledge partner of the Smart Cities Mission to conduct these Challenges and build the capacity of cities in developing and implementing their plans to make walking, cycling, and public transport safe and desirable. COVID-19 is an excellent opportunity for a turnaround in urban mobility towards a greener future in India.

Thank you

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