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A Sense of Freedom



EXPLORING EVERYDAY EXPERIENCES
OF CYCLING IN AN
IRISH REGIONAL CITY

A Sense of Freedom: Exploring everyday experiences of cycling in an Irish regional city

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Eileen and Becci

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Executive summary

In current policy and planning discourse, there is great interest in reimagining and redesigning cities as more cycling-friendly spaces. Research shows that good cycling infrastructure is the first step to increasing cycling rates. However, social and cultural factors are also important for understanding the attractions of cycling and barriers to cycling but these tend to be under-explored in transport policy and research. In partnership with the Cork Environmental Forum and the Cork Cycling Campaign, this study set out to develop social scientific knowledge about cycling as a social practice, focusing on Cork as a case study of an Irish regional city, with a view to informing pro-cycling policy.

Its objectives are:

- to develop an insight into people's perspectives on cycling in Cork city, including people who currently cycle and people who do not currently cycle;
- to examine people's thoughts about Cork city as a cycling environment;
- to explore the social status of cycling in the city;
- to develop an understanding of cycling identities, including how cyclists perceive themselves, how they feel other road users perceive them, and how others (non-cyclists and potential cyclists) perceive cyclists;
- to develop an understanding of how cycling practices are shaped by social differences such as age, gender, ethnicity, class/social location, family status, and (dis)ability; and
- to consider the implications of the social scientific knowledge generated through the research findings for understanding – and enhancing – the impact of pro-cycling policy and planning in Cork and other Irish regional cities.

The research used a mixed methods approach which included an online survey, in-depth interviews with people who cycle in Cork city, and narrated journeys with cycling participants.

Survey responses show that Cork has strong potential as a cycling city and respondents are generally well-disposed towards cycling. Findings generated from the interview data present cycling experiences in oftentimes positive terms; cycling is associated with freedom and independence and is generally valued for enhancing people's physical and mental well-being, place attachment, social interactions, and quality of life. However, the survey and interview data show that Cork is not yet a city in which people feel wholly safe and comfortable cycling. In our study, recent infrastructural investments are roundly celebrated, but the quality of cycling lanes and cycling facilities in the local environment is perceived to be variable.

Recommendations arising from the research centre on several themes:

1. Fostering cycling culture in starter cycling cities demands **strong political leadership**.
2. **Cycling infrastructure** is vital for people to feel safe and confident.
3. In advancing pro-cycling policy, **the rights of all public space users** must be recognised and protected.
4. In advanced cycling cities, being on a bike is a normal, everyday activity for all kinds of people and cycling has extraordinary potential to provide mobility for all. In order to diversify cycling, **social inclusion goals** must be considered in future pro-cycling policy and practice development.
5. **Communicating the benefits of cycling** in a more holistic way is valuable for showing the numerous advantages of the bicycle as a sustainable mobility (beyond being 'merely' a mode of transport. In particular, fun events can change perceptions of cycling in the city and expand the image of cycling in positive ways.
6. **Pro-cycling advocacy** groups do extraordinary work for developing and disseminating knowledge about cycling experiences and the potential of cycling in Ireland; resourcing these groups and including them in policy-making forums is vital.
7. Continuing **research** into cycling experiences from a range of perspective is valuable for understanding barriers to cycling and the meaning of cycling in everyday life.

These recommendations are outlined in further detail in the final pages of the report that follows.

1. Introduction

Background to the research

In current policy and planning discourse, there is great interest in reimagining and redesigning cities as more cycling-friendly spaces. In Ireland, the Government has recently announced significant investment in sustainable travel infrastructure. Cities in Ireland currently show low cycling levels in comparison to other European countries, such as the Netherlands, Denmark and Germany, and many cities in France. In fact, all Irish cities can be identified as ‘starter cycling cities’, that is, cities where cycling for transport is residual, with a cycling modal share below 10% (Silva et al., 2019). Recent data from the National Household Travel Survey indicates that cycling accounts for 3% of all trips taken by those living in Irish regional cities (compared with 5% in Dublin city and suburbs)(National Transport Authority, 2023).

The most cited barrier to cycling in Ireland is low levels of perceived road safety and therefore improved cycling infrastructure appears key to promoting bike use. However, research also indicates that investments in the built environment are not alone enough to increase cycling rates. Research highlights, for example, the importance of local cultural identity for how cycling is perceived – as ‘cool’ or ‘mundane’ (Aldred and Jungnickel, 2014); the significance of contextual/life events in influencing travel behaviour (Chatterjee et al, 2013); the perceived (in)compatibility of cycling with care-related travel needs (Ravensbergen, Buliung, and Sersli, 2020); and the symbolic capital of the bicycle as an expression of lifestyle and status, which influences cycling’s popularity positively and negatively (Hoor, 2022). Social and cultural factors therefore also play a significant role in determining the strength of a city’s cycling culture but remain complex, poorly understood, and inadequately researched in policy-making contexts (Willis et al, 2015; Sottile et al, 2021).

The Socio-Cycle study seeks to examine the social and cultural dimensions of cycling in an Irish regional city, focusing on Cork city as a case study. Exploring cycling from a social scientific perspective, it pays attention to the ‘sensory, embodied, and social nature of its performance’ (Brown and Spinney, 2010: p131). Whereas policy studies have tended to be concerned with more rational conceptualisations of cycling as (merely) transport – that is, as a method of getting from A to B – this research focuses its lens instead on the social, cultural, and affective dimensions of utility and leisure cycling in an urban context.

Aims and objectives of the research

This project’s aim is to contribute social scientific knowledge about cycling as a social practice, focusing on Cork as a case study of an Irish regional city, with a view to informing pro-cycling policy.

Its objectives are:

- to develop an insight into people’s perspectives on cycling in Cork city, including people who currently cycle and people who do not currently cycle;
- to examine people’s thoughts about Cork city as a cycling environment;
- to explore the social status of cycling;

- to develop an understanding of cycling identities, including how cyclists perceive themselves, how they feel other road users perceive them, and how others (non-cyclists and potential cyclists) perceive cyclists;
- to develop an understanding of how cycling practices are shaped by social differences such as age, gender, ethnicity, class/social location, family status, and (dis)ability; and
- to consider the implications of the social scientific knowledge generated through the research findings for understanding – and enhancing – the impact of pro-cycling policy and planning in Cork and other Irish regional cities.

Study area and context

The research took place in the context of Cork city, which is situated in the south of Ireland. Cork is the second largest city in the Republic of Ireland, with a population of 222,526 (Central Statistics Office, 2022). The city boundaries, which were extended in 2019, cover an area of 187 km². The *Project Ireland 2040 National Planning Framework (NPF)* (Government of Ireland, 2018) envisages that Cork will become the fastest-growing city region in Ireland with a projected 50% to 60% increase of its population in the period up to 2040. The necessity to plan for an associated increasing demand for travel is recognised, along with an acknowledgement of limited capacity for additional motor traffic (National Transport Authority, 2020).



Figure 1.1: Cork's location in Ireland

Image made using OpenStreetMap at <https://www.openstreetmap.org/>

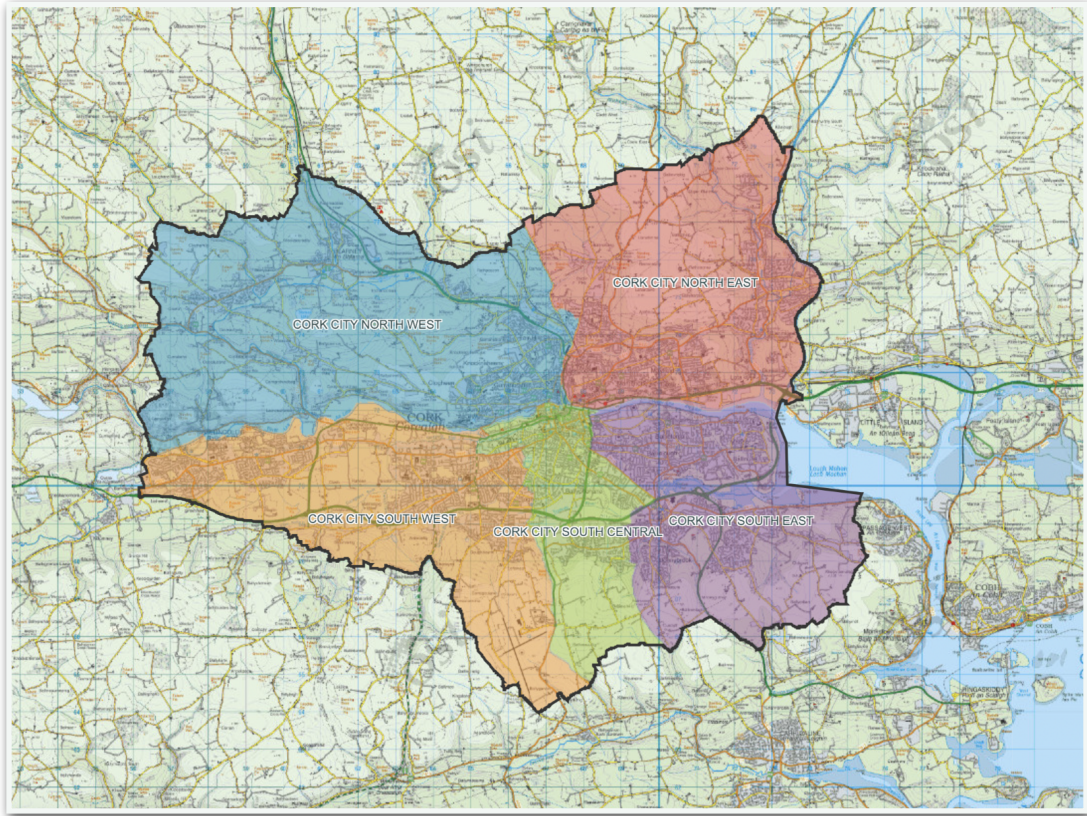


Figure 1.2: Cork city administration areas
 Image made using Cork City Boundary Mapviewer
 Available at <https://corkcity.maps.arcgis.com/home/index.html>

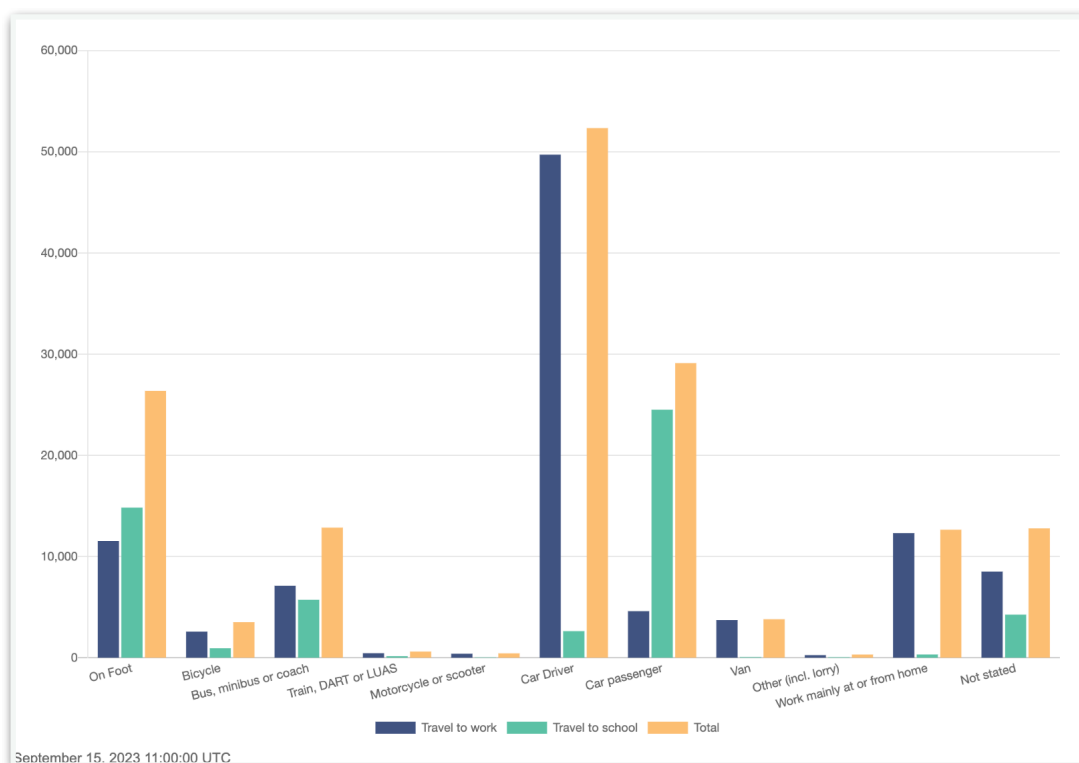


Figure 1.3: Population aged 5 years and over by means of travel to work, school or college, Cork city and suburbs, Census 2022
 Image Source: Central Statistics Office, Ireland, <https://data.cso.ie/table/SAP2022T11T1TOWN22>

Cork has a rich cycling history, but the bicycle's popularity waned from the 1980s as car ownership and traffic increased.¹ According to the most recent census, of the 154,830 total commuters to work, school, education or childcare, 3,525 travelled by bicycle, which amounts to 2.3%.² A recent study into behaviours and attitudes, which will inform the Cork City Climate Action Plan 2024–2029, found that in terms of travel patterns, 12% of residents cycle weekly and 26% of people had cycled in the past 12 months. Interestingly, when asked “Which of the following best describes how often you have typically travelled in the following ways in the past 12 months?”, the response rate for cycling was 20% male, compared to only 4% female. Younger adults (16-34) were much more likely to walk (96%), travel by car as a driver (52%) or passenger (64%), or by public transport (55%) than to cycle (19%). When asked about perceived barriers to cycling, safety and the lack of segregated cycle lanes were the primary issues (Cork City Council, 2023).

In recent years, cycling is gaining increasing attention in policy and planning and is described as a ‘growing mode of transport in the Cork Metropolitan Area’.³ Along with other active and sustainable mobilities, cycling is prominent in contemporary local strategies, including the Cork Metropolitan Area Transport Strategy 2040 (CMATS) and the Cork Air Quality strategy (Cork City Council, 2021). The Cork Cycling Network Plan (AECOM, 2017) sets out some key development priorities aimed at increasing cycling’s modal share, including: a coherent network of cycle routes; the development of cycle trails, quiet ways and greenways; segregation; and traffic calming measures. Further commitments to supporting infrastructure measures include expanding the bike share schemes, provision of shower and changing facilities, and cycle parking facilities. These commitments are reiterated in the Cork City Development Plan 2022-2028 (<https://www.corkcity.ie/en/cork-city-development-plan/>).

In terms of cycling advocacy activities, the Cork Cycling Campaign is a significant civic, grassroots initiative in the city for representing cycling interests (see Delaney, 2022). The Cork Transport and Mobility Forum (TMF) is also an important representative group of organisations that share an interest in sustainable and active travel (<https://transportandmobilityforum.com/>). Also relevant is Cork Environmental Forum, which aims to foster, promote and implement sustainable development in the region, and supports pro-cycling advocacy as part of this broader remit.

Research methodology

The research design was based on a mixed methods approach. Data was collected using three methods:

- An online survey examining attitudes towards and experiences of cycling in the Cork metropolitan area;
- In-depth interviews with people who have experience of cycling in the city;

¹ See <https://www.cyclingcities.info/your-city-next/cycling-cities-cork-experience/>

² It should be noted that the Census only captures people’s main mode of commuting to work, education, school or childcare. It does not include people who mainly use other modes of transport and cycle occasionally, and it also does not enumerate non-commuting trips, including for shopping or leisure. Furthermore, the Census was taken in April 2021, when many people were working from home due to the Covid-19 pandemic.

³ <https://www.nationaltransport.ie/cork/cycling/>

- In-depth interviews as narrated journeys with cycling participants, who were invited to record a particular journey of their choosing using a video camera attached to their bicycle. After the journey, the participants were invited to narrate their experience of the journey as they watched the video with the interviewer. The aim was to capture the cycling experience using a storytelling, autobiographical approach.

Survey

The online, fixed-response, questionnaire-based survey was designed using the Qualtrics Survey Platform and was used to gather information about people's attitudes towards and experiences of cycling. It also explores some questions about the impact of specific types of cycling infrastructural investment on potential cycling practices. These are hypothetical scenarios and so they cannot predict how infrastructural investment will actually impact on cycling practices, but they do offer a useful barometer of people's preferences regarding infrastructural investment and design.

Respondents were recruited using convenience and snowball sampling methods. The survey was disseminated through online social networks, including Twitter and Facebook, and was promoted by the research partners, Cork Environmental Forum and the Cork Cycling Campaign. It was also disseminated through the University College Cork staff email list, and recipients were encouraged to share it within their networks. This method of recruiting participants produces a non-probability sample. Although we did stress that we wanted participation from people who currently cycle and people who do not currently cycle, a high number of respondents do cycle, with 77% of respondents indicated that they currently cycle in the Cork city area. This compares with 26% of respondents saying that they have cycled in the last 12 months according to a recent survey by (Cork City Council, 2023).

Respondents to the online questionnaire were self-selecting and were fully informed about the project using a study information sheet embedded into the introduction to the survey. For ethical reasons, people were asked to complete the survey only if they were over 18 years old. 443 people responded to the survey. All responses were anonymous and no personal details were recorded. Incomplete surveys were filtered out of the dataset and 365 responses were ultimately deemed eligible for use in the analysis.

Questionnaire respondents were invited to participate further in the research at the end of the questionnaire and were invited to include their email address to enable us to contact them in the future should they be interested in participating in interviews or to contact the Principal Investigator directly in order to arrange an interview.

In-Depth Interviews and Narrated Journeys

Interviews were conducted with 15 participants, which included in-depth interviews (n=12) and narrated journeys (n=3). All participants had recent experience of cycling within the Cork Metropolitan Area. The qualitative data, then, are accounts about cycling experiences by people who cycle regularly as part of their everyday lives, though some do so more frequently than others. The interview guides

for the in-depth interviews and the narrated journeys had much in common and were designed to elicit people's perspectives on the socio-cultural dimensions of cycling, their feelings about cycling, how they cycle and their cycling behaviours, social interactions while cycling, engagements with the built and natural environment, and how cycling generally impacts on their everyday lives (see Appendix A, B). Interviews typically lasted 40-60 minutes.

It was intended to include a greater number of narrated journeys in the dataset. However, this method proved difficult to arrange and ultimately, we ran out of time. Participants who offered to engage in an interview were invited to choose either an in-depth interview or the narrated journey style, with most opting for the former. The narrated journey as a less familiar method of data collection was perceived to be daunting or potentially time-consuming and therefore was less popular. Organising the narrated journey demanded additional time, as the process involved loaning videocamera equipment to participants. The necessity to meet participants to deliver and collect equipment was tricky; we were several times thwarted due to bad weather conditions, defective equipment, and mismatched schedules. Nonetheless, these narrated journeys were worth doing as data collection methods, since they give an intimate insight into how and where people cycle in the city and what the different routes look like. As Brown and Spinney (2010) note,

By allowing riders to talk about their practices in relation to the contexts of their performance, we suggest that video can enable participants to provide more nuanced, situated and richer linguistic accounts of their embodied mobile practices than would otherwise be possible. In doing so detail, habits, sensory and emotional aspects and meanings are highlighted that might otherwise remain 'unspeakable'. (p.131)

In recognition of these benefits of using video methods in cycling research, the researchers hope to use this approach again in future studies.

Data analysis

With respect to the survey results, analysis is presented using data visualisation methods offered through Qualtrics Software.

With reference to the qualitative data generated through the in-depth interviews and narrated journeys, the transcribed data was imported in NVivo qualitative data analysis software. A thematic analysis was conducted, whereby open coding of the scripts enabled the researchers to identify common themes, which were then used to structure presentation and analysis of the research findings.

Ethical considerations

Ethical approval for this research was obtained through UCC's Social Research Ethics Committee. Participants were fully informed about the project using a study information sheet that was made available through the UCC Qualtrics Survey Platform or emailed to prospective interviewees. The information sheet detailed the project's aims and objectives, the methods used in the study,

anticipated outputs of the study, any risks relevant to the study, and the participants' right to withdraw at any time. Written consent to participate was obtained from interviewees taking part in the in-depth interviews and the narrated journeys. All participants were also advised of their right to withdraw from the study up to two weeks after their participation however, none chose to do so. Interviews were held online through Microsoft Teams software. Interview text was generated using the Microsoft Teams live transcription service and was subsequently edited for improved accuracy by the interviewers. In the transcription, any details that would identify a participant were removed. Each participant was given a pseudonym, as used in this report.

Limitations of the research

This is a small-scale exploratory study that is designed to gain an understanding of people's experiences of cycling in Cork city. The size of the dataset is necessarily limited by time constraints. Nonetheless, the high number of responses generated through the online survey and the richness of the data garnered through qualitative interviews offers a valuable insight into common experiences of cycling in Cork city and indication of its rich potential as a cycling city.

The survey is explicitly focused on cycling and there is a clear bias in terms of the number of responses from people who cycle compared with the number of responses from people who do not currently cycle. Also, in-depth interviews were conducted only with people who currently cycle and excluded other road users who do not currently cycle. As one might anticipate, those who took the time to make contact about the research and subsequently committed to participating in interviews demonstrated a high degree of interest in cycling.

The interesting survey data generated by people who do not currently cycle indicates that further research on attitudes towards cycling and the experiences of road users who do not currently cycle would be enlightening, particularly in this study context, where automobility is dominant.

We did not gather information on the ethnicity of survey respondents, but we can state that the ethnicity of the interview participants is limited to white Europeans. Engagement with a more diverse cohort would be a valuable, more inclusive approach, and this will direct future research.

Structure of the report

Section 2 of this report presents a brief overview of key policies that are relevant to pro-cycling policy. Section 3 presents an insight into academic literature relevant to changing transport and mobility practices and the place of cycling. Section 4 presents findings from the online survey in relation to several themes, namely: transport behaviours; cycling promotion; attitudes of people who do not cycle; cycling and children; and, examples of cycling infrastructures and facilities. Section 5 presents the findings from our in-depth interviews and narrated journey interviews, organised into several key themes, namely: cycling and well-being; cycling and the environment; the practicality of cycling; the cycling environment; cultures of cycling; and, cycling and childhood. The report ends with a concluding statement and some recommendations arising from the research.

2. Cycling matters: Understanding the policy context

Introduction

Recognition of the vital role of cycling with regard to climate goals and liveability is steadily increasing. Policies relevant to cycling matters are situated at an intersection of several domains, including national planning and development strategies, climate action planning, sustainability mobility, and transport planning. National-level priorities are informed and shaped by broader European and international frameworks. This section briefly outlines select key international and national policies as a method of contextualising the study.

International

UN Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development, adopted by UN Members States in 2030, sets out 17 Sustainable Development Goals and 169 sub-targets. The goal of increasing the modal share of cycling aligns with several SDGs including:

- Goal 1: No Poverty – Cycling as an affordable means of transport facilitates access to education, employment, and social and community participation.
- Goal 3: Good Health and Well-Being – Improving health and well-being outcomes can be achieved through increased cycling rates.
- Goal 7: Affordable and Clean Energy – Increased numbers of people cycling using renewable human power reduces individuals' energy dependencies and consumption.
- SDG 9: Industry, Innovation and Infrastructure – Increased number of people cycling – with increased frequency – encourages governments to develop active travel infrastructure that is affordable and accessible.
- Goal 11: Sustainable Cities and Communities – Increased cycling rates makes cities more inclusive, safer, healthier, and more sustainable.
- Goal 12: Responsible consumption and production – Bicycles' use of human power, bike reuse and repair practices, bikeshare systems, and e-cycling each promote ethical and sustainable consumption.
- Goal 13: Climate Action – Increasing cycling rates is a clear way to reduce carbon emissions.⁴

In its recent Voluntary National Report (Government of Ireland, 2023), the Irish government claims strong progress in meeting SDG targets. Its analysis shows that:

- 81% of the Targets (136) are being fully achieved
- 11% of the Targets (19) are being partly achieved – showing concern
- 5% of the Targets (9) are not being achieved
- There is no data available for 3% of the Targets (5).

⁴ See <https://unric.org/en/sustainable-development-goals-cycling/> for further information on how cycling can deliver on the UN SDGs.

Cycling is given limited attention in the report and is explicitly mentioned only five times with respect to:

- The *Safe Routes to School Programme* (launched in May 2021), which is co-ordinated by An Taisce's Green Schools team, is identified twice as an important initiative that aims to improve cycling infrastructure on key access routes to schools and bike parking facilities in schools (p105, p265);
- Tensions between promoting sustainable travel and car use for people with disabilities (p235);
- The *Global Citizenship School* initiative which promotes the SDGs by cycling to different schools in Ireland;
- Poor access to public transport and walking and cycling infrastructures for people living in Traveller-specific accommodation;
- The potential of cycling buses to promote children's school travel by bike.

OECD Redesigning Ireland's Transport for Net Zero 2022

In this critical evaluation of the Irish transport system and decarbonisation policies, the OECD highlighted the urgent need to prioritise policies that move Irish transport systems away from car dependency (OECD, 2022). The report calls for policies with transformative potential based on a redefined goal of the transport system as 'sustainable accessibility' – a concept that values proximity, densification, slowness, and local living over urban sprawl, high mobility, distance, and speed. This report states that this demands a radical shift from the current car-centric mindset. It also requires the Government and local authorities to design and promote creative, imaginative policies that make large-scale behavioural change possible.

National

Project Ireland 2040

Project Ireland 2040 – incorporating the National Development Plan and the National Planning Framework – is described as 'the government's long-term overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future' (Government of Ireland, 2018). The plan aims to direct planning and infrastructural investment to meet the needs of a projected additional one million people living in Ireland by 2040. Transport is a key pillar of the strategy.

Nested into ideas of sustainable mobility more broadly, references to cycling are scattered throughout the National Planning Framework. The framework prioritises 'compact and sustainable growth' (p28), which is described as having 'the potential to make a transformational difference' which, amongst other advantages, can enable more people... 'to walk or cycle more and use the car less'. Section 3, entitled 'Effective Regional Development', identifies the development of 'strategic cycleway networks' as growth enablers in the regional cities of Galway, Limerick, and Waterford (p43, p51, p53). In the section on Cork, an 'enhanced urban environment' – including 'pleasant options for walking and cycling' (p48) – is identified as crucial for attracting innovators, entrepreneurs, and investors. It is

interesting that the development of a strategic cycleway network is not explicitly identified as a growth enabler for Cork, unlike the other regional cities.

Section 4, 'Making Stronger Urban Places', includes another cycling-related objective, namely, 'enhancing public health by encouraging and facilitating more active lifestyles by creating a more walkable and cycling friendly urban environment' (p57). Section 6, focusing on 'People, Homes and Communities' contains the strongest statements on the benefits of cycling, including a recognition of increased car dependence and the importance of cycle infrastructure for achieving higher levels of cycling and lower rates of obesity (p82). However, the report again emphasises the value of health in economic terms: 'healthy places in turn create economic value by appealing to a skilled workforce and attracting innovative companies' (ibid). Ultimately, economic values dominate narratives of sustainability, well-being, and quality of life.

In the National Development Plan (NDP) 2021-2030 (Government of Ireland, 2021), one National Strategic Objective is devoted to 'sustainable mobility', which it defines as:

- comfortable and affordable journeys to and from work, home, school, college, shops and leisure;
- travelling by cleaner and greener transport; and
- a shift away from the private car to greater use of active travel (walking and cycling) and public transport. (p38)

The NDP references a new National Active Travel Programme that aims to deliver 'significant walking and cycling infrastructures around the country by 2025' (p61). In 2023, €290 million was allocated by the National Transport Authority to support the delivery of hundreds of projects nationally, including a new cycle and pedestrian bridge over the N40 in Cork, connecting to Tramore Valley Park. It also references a National Cycling Network Strategy. Plans for this 3,500-kilometre National Cycle Network were launched in May 2022 by Transport Infrastructure Ireland (TII). The final plan is currently under development, following a public consultation phase. The network has potential for advancing cycling uptake, though there are some questions that need to be addressed, including its attentiveness to mapping intra-urban connectivity (alongside its current emphasis on inter-urban connectivity) and its relationship to other cycling-related strategies, such as BusConnects (which includes segregated cycling facilities).

The *Safe Routes to School* Programme is mentioned several times in the NDP and is identified under 'Active Travel' as a strategic investment priority (p87). It is a spotlight feature under NSO 4: Sustainable Mobility (p88). Interestingly, it notes that '932 expressions of interest were received from school in every county in Ireland', which evidences a very high level of demand (170 schools were selected for inclusion in the first round).

National Sustainable Mobility Policy

The National Sustainable Mobility Policy defines as its purpose 'to set out a strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade' (Government of Ireland, 2022a: p5). The National Sustainable Mobility Policy reiterates previously-mentioned commitments and some new initiatives including an annual National Household Travel Survey and the establishment of a National

Sustainable Mobility Forum that includes stakeholders and representatives from public, private, voluntary and industry sectors. Interestingly, cycling modal share targets (10%) that were included in previous policies have been removed from this policy.

Climate Action Plan

The Government's *Climate Action Plan* was published in June 2019. It focuses on the need for Ireland to achieve its 2030 targets for carbon emissions and net zero emissions by 2050 (Government of Ireland, 2019). *Climate Action Plan 2023 (CAP23)* (Government of Ireland, 2022b) is the second annual update to Ireland's *Climate Action Plan 2019*. Transport is a priority of the plan and some of the key objectives relevant to pro-cycling policies include:

- A focus on reducing the use of private passenger cars, and a modal shift to transport modes with lower energy consumption. (e.g., public transport, walking and cycling)(p54);
- An implementation plan for the 'regeneration, repurposing and sustainable development of walking and cycling tracks and trails, and waterways' (p89);
- Expansion of the National Transport Authority's *Smarter Travel Workplaces Programme*, which promotes sustainable travel to and from work through behavioural change interventions that encourage non-private car usage and alternative commutes to work (e.g., public transport, cycling, or walking).
- Expansion of the Safe Routes to School programme and rollout of 1,000 kilometres of active travel infrastructure (p189)
- Commitment to raising public awareness about 'systemic changes in public and active travel' and 'encouraging behavioural change where possible' through communicating 'the climate, well-being, and the other benefits of a widespread shift from private car dependency to sustainable mobility' (p194).

Specific actions include the review of road traffic policy and legislation to prioritise the safety of people walking and cycling (p206) and advancing the *Active Travel Infrastructure Programme* (p207).

In his review, O'Tuama (2022) acknowledges that although CAP23 reiterates previously announced policy commitments, it is more ambitious than the previous update in 2021. Furthermore, CAP23 recognises critical evaluation by the OECD that the Irish transport system embeds car dependency by design. Commitments in CAP23 signal a shift towards the principle of 'sustainable accessibility' outlined in the OECD (2022) report and recognition that radical change is necessary.

3. Making change: A brief review of the literature on changing transport practices and the place of cycling

Introduction

Across the world, there is widespread recognition that we need to shift from an over-reliance on private motor vehicles to more sustainable modes of transport. Increasing cycling rates is expected to play an important role in that change. Yet in many countries, cycling – alongside other active and sustainable mobilities – continues to be marginalised by the dominance of automobility, despite the well-documented costs of car dependency, including urban congestion, environmental degradation, and negative health effects. This begs the question: how can a mass modal shift that prioritises cycling become possible?

There is no shortage of research evidence on the factors conducive to cycling, which are essentially, better cycling infrastructures, traffic calming measures, and urban densification (see Nello-Deakin, 2019: p2). The previous chapter identified current priorities in international and national-level policies that inform cycling promotion, which typically focus on infrastructural investment. This chapter focuses instead on academic literature that is particularly relevant to changing transport practices in favour of cycling. It problematises traditional approaches to change-making and considers potentially fruitful alternatives that make cycling attractive and imaginable. This discussion frames the research findings that are presented in subsequent chapters and the conclusions and recommendations of the study.

Cities making changes

Despite broad consensus on cycling's potential for advancing sustainable urban living and the increasing implementation of pro-cycling measures worldwide, Silva et al (2019) observe that many cities and, in particular, starter cycling cities 'are still struggling with finding the right approach to bring about change and even with finding the right political and social commitment to a real change' (p638). They find that these cities typically have a limited cycling culture and although there may be a strong rhetorical commitment to increasing cycling rates, there often exists political and technical scepticism towards making the necessary changes that favour a modal shift towards cycling (Silva et al, 2019: 638). Starter cycling cities may be poorly perceived in terms of their potential 'cyclability' and changing the attitudes of important stakeholders (planners and politicians, for example) towards seeing their city as having potential for cycling is an important consideration (see Bicalho and Silva, 2019).

On the one hand, then, making change should be simple. We know, for example, from decades of research that basic cycling infrastructure provision is a *necessary* condition for making urban cycling more popular and attractive (Piras et al, 2023; Nello-Deakin, 2020: p2). Improving a city's cycling infrastructure is therefore an obvious place to focus attention. Extant research provides sufficient insight about what needs to happen and as Nello-Deakin comments, 'in the vast majority of cases, making cities more cycling-friendly does not require any more theoretical planning knowledge, but merely the political will to do so' (ibid). This observation is helpful in one respect for its directness, but

it perhaps oversimplifies processes of social change. By contrast, te Brömmelstroet et al (2022: p2) acknowledge that 'the promotion of sustainability transitions in the transport sector [is] an intrinsically complex decision area for both policymakers and citizens', since it is bound up in fundamental questions about risks and rights, equity and justice, and how societies function.⁵

Transport behaviours and behavioural change

Changing transport behaviours – and, specifically, shifting people away from car dependence – is challenging. Interventions that encourage behavioural change are usually premised on assumptions underpinned by utility theory. From this perspective, the promotion of cycling 'is essentially the outcome of a combination of "carrot" and stick" policies which encourage cycling and disincentivize car driving', within which policies the provision of segregated cycling facilities and traffic calming measures are predominant (Nello-Deakin, 2020: p2). These are undoubtedly important as a *starting point* for increasing cycling's modal share. However, large scale behavioural change is tricky, and we therefore need to think about various factors, beyond infrastructure, that shape perspectives on cycling and potential cycling rates.

Policy on behavioural change recognises that travel behaviour is informed by structural, attitudinal and habitual factors (Spinney, 2022: p233) and interventions that aim to change behaviours are typically based on 'soft' measures (e.g. persuasion through marketing, awareness-raising) and 'hard' measures (e.g. infrastructural change). In the past, there has been a tendency in transport policy to focus on 'soft' interventions and on effecting change in personal behaviours; this approach tends to 'target individual decision making as the point of change' (Spotswood et al, 2015: p23). Devolving responsibility for behavioural change to the individual has been politically convenient since it is cheaper and it avoids making commitments on infrastructure investment; essentially, in making individuals responsible for change-making, it absolves governments for lack of intervention (Spinney, 2022; Spotswood, 2015). Ideologically, behavioural interventions fit well with a neoliberal preference for personal responsibility and individual effort rather than forcing change through regulation (ibid).

Furthermore, this approach can be criticised for resting on problematic assumptions about utility and disutility and the extent to which these govern transport behaviours and preferences. 'Utility' (i.e. usefulness) in transport connotes positive variables, such as convenience and efficiency. Its converse – 'disutility' – is therefore understood to be a negative variable. With reference to neoliberal thinking, disutility is something to be avoided 'in the individualistic mind of the rational, egoistic, and utility-maximising Homo economicus' (te Brömmelstroet et al, 2022: p5). With respect to travel behaviours, it is assumed that avoidance of disutility – that is, the cost of going from A to B in terms of time, money, or effort – drives decision-making about transport options. Based on these assumptions, change in mindset is often presumed to happen when rational individuals are well-informed about the benefits of different options (Buck and Nurse, 2023; Kent, 2022). It is assumed that people travelling make objective decisions based on how they can optimise resources to achieve the best possible outcome, balancing various factors, such as speed, efficiency, economic cost, environmental impact, health, etc.

⁵ In the Irish context, Robert Egan's academic work is particularly notable for expanding knowledge about people's cycling experiences. His work is also important for challenging discourses that focus on 'risk' and 'safety' in cycling policy and shifting towards a more rights-based approach that fundamentally alters how cycling is conceived and designed for (see Egan, 2021; Egan, 2022; Egan and Philbin, 2021; Egan and Philbin, 2023).

Interventions that seek to promote behavioural change therefore often focus on convincing individuals to make ‘good’ choices (Buck and Nurse, 2023: p2). Pro-cycling behavioural change policies that are underpinned by utility theory may therefore want to emphasise cycling as a faster, more efficient, cheaper, and easier alternative to driving. A key limitation of utility theory, however, is that it fails to account for how our travel choices are informed by elements other than a preoccupation with disutility; they are also shaped by symbolic and emotional factors and habits or routine practices (Kent, 2022: p223). Furthermore, the focus on *utility* cycling – i.e. cycling with efficiency and with a purpose – shifts attention away from cycling as a fun, frivolous and pleasurable activity (Aldred, 2015; Wild and Woodward, 2019).

In the current policy context, cycling infrastructure investment is ramping up in line with international and national decarbonisation priorities, thus positioning society at a critical juncture with respect to changing transport behaviours and increasing the modal share of cycling. The promise of extensive cycle networks within and between cities, towns and villages across Ireland is encouraging. However, if we are to maximise the impact of this infrastructural investment for changing travel behaviours, then we also must learn about ‘the needs, desires, understandings and appreciations of the travelling individual’ (Kent 2022: p224). Exploring the cycling experiences of real, ordinary people gives us a valuable insight, then, into how the benefits of pro-cycling policy and investment can be maximised.

Changing mobilities thinking

In policy discourse, there is increasing recognition of the need to radically change thinking in transport policy, as seen for example in both the OECD (2022) report and the Climate Action Plan 2023 (Government of Ireland, 2022), which is challenging given the ‘motonormative’ assumptions underpinning transport practices in Ireland.⁶ In their recent study, *Exploring Public Opposition to Active Travel Planning in Dún Laoghaire-Rathdown*, Egan and Caulfield (2023) examined ‘how a dominant car system is politically sustained’ through a Critical Discourse Analysis of 150 public consultation submissions opposing redistributive active travel measures proposed locally in the major *Active School Travel* scheme.⁷ This study illuminates how car-centrism is discursively maintained through the identification of two prominent and mutually reinforcing discourses identified in their analysis of public submissions, namely:

- ‘Technical discourse of transport planning’, which legitimises planning practices that sustain automobility and undermine planning practices that favour other modes of transport (p2)
- ‘Discourse of everyday mobility’, which favours driving and drivers over cycling and cyclists in terms of societal importance (p3).

Based on their findings, Egan and Caulfield propose several recommendations for communicating redistributive active travel measures, which are valuable for changing thinking about cycling mobilities, with particular attention to: (1) how language legitimises or delegitimises different modal

⁶ Walker, Tapp and Davis (2022) use the term ‘motonormativity’ to describe the ‘shared, largely unconscious assumptions about how travel is, and must continue to be, primarily a car-based activity’ (p3).

⁷ Proposed measures included segregated cycle infrastructures to replace mixed-traffic road spaces, lowered speed limits, and car access restrictions (Egan and Caulfield, 2022: p2).

practices and the rights of different road users and (2) initiatives that aim to decentre cars/driving as the primary and most desirable mode of transport.

This focus on how we talk and think about cycling and driving mobilities connects well with recent work by te Brömmelstroet et al (2022: p2), who also elaborate on the challenge – and necessity – of changing thinking about mobilities. They argue for a shift from conceptualising mobility as disutility in narrow economic terms (that is, the expense of time, money, effort). Instead, they propose reconceptualisation of mobility by nurturing four ‘seeds’ of alternative narratives, namely: mobility as individual play; mobility as social interaction; mobility as a commons (a collective right); and mobility as unnecessary (valuing proximity, slowness/stillness). Spinney (2021, 2022) also advocates for a shift in thinking about cycling, which he argues has been weaponised as a ‘mobility fix’ that is dominated by economic concerns and a drive towards economic growth. He cautions about the co-optation of cycling into a growth agenda that is incompatible with sustainability (2022: p238). Instead of promoting cycling in terms of its economic benefits, he calls for the promotion of cycling practices that foreground other aspects of human well-being and human flourishing, namely, cycling that fosters ‘social connection, diversity, place attachment, enjoyment, [and] playfulness’ (Spinney, 2021: p13).

4: Survey findings

In this section, we present our findings from the online survey. The section opens with a description of the respondents with respect to sex, age range, educational attainment, and geographic distribution. We then present findings in relation to transport behaviours, namely: cycling rates; access to a bike; cycling frequency; walking frequency; public transport usage; access to a car; driving licence status; and driving frequency. The third part explores how people responded to various ideas about how to promote cycling in the city. The next part examines attitudes towards cycling of people who do not currently cycle as a method of gaining insight into cycling potential and barriers to cycling in the city. The next part explores attitudes towards children's cycling. Finally, the last section explores how people responded to several case study images, showing examples of cycling infrastructure and facilities from across Europe.

About the respondents

The sample comprised a male majority (58.8%) and most respondents were between 30 and 60 years of age. A high proportion of respondents reported higher-level education (undergraduate degree or higher)(83.3%). Respondents lived across the city, but only 25% lived on the north of the city, by comparison with 61% living on the south side of the city.

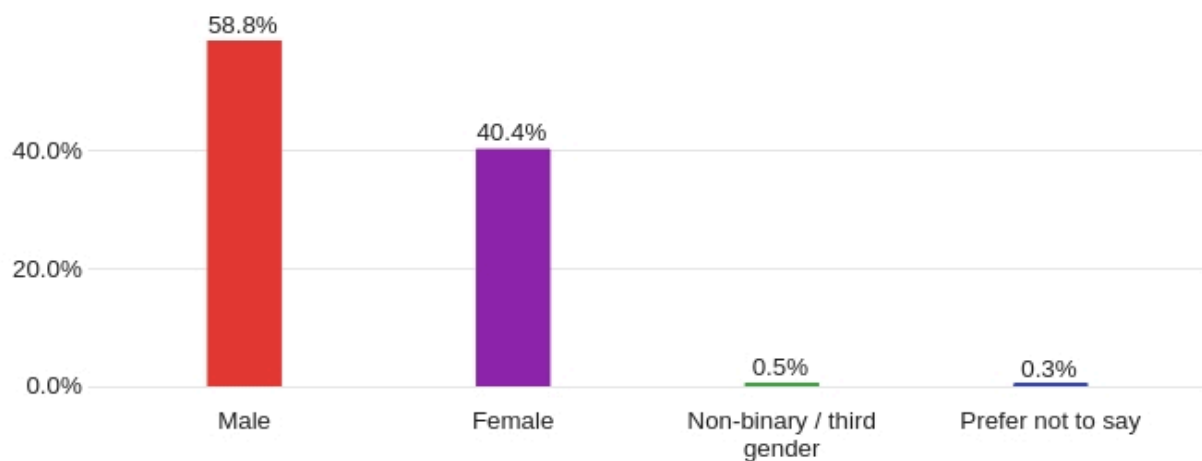


Figure 4.1: Sex

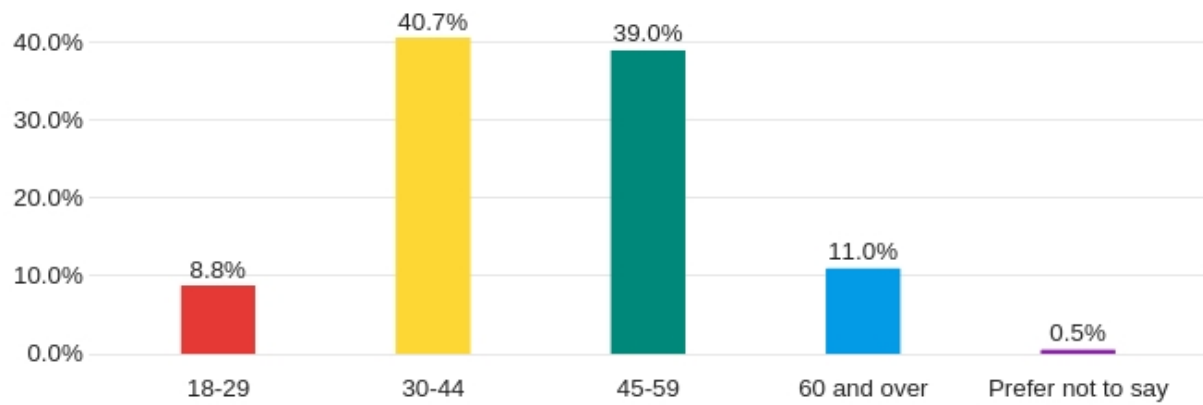


Figure 4.2: Age range

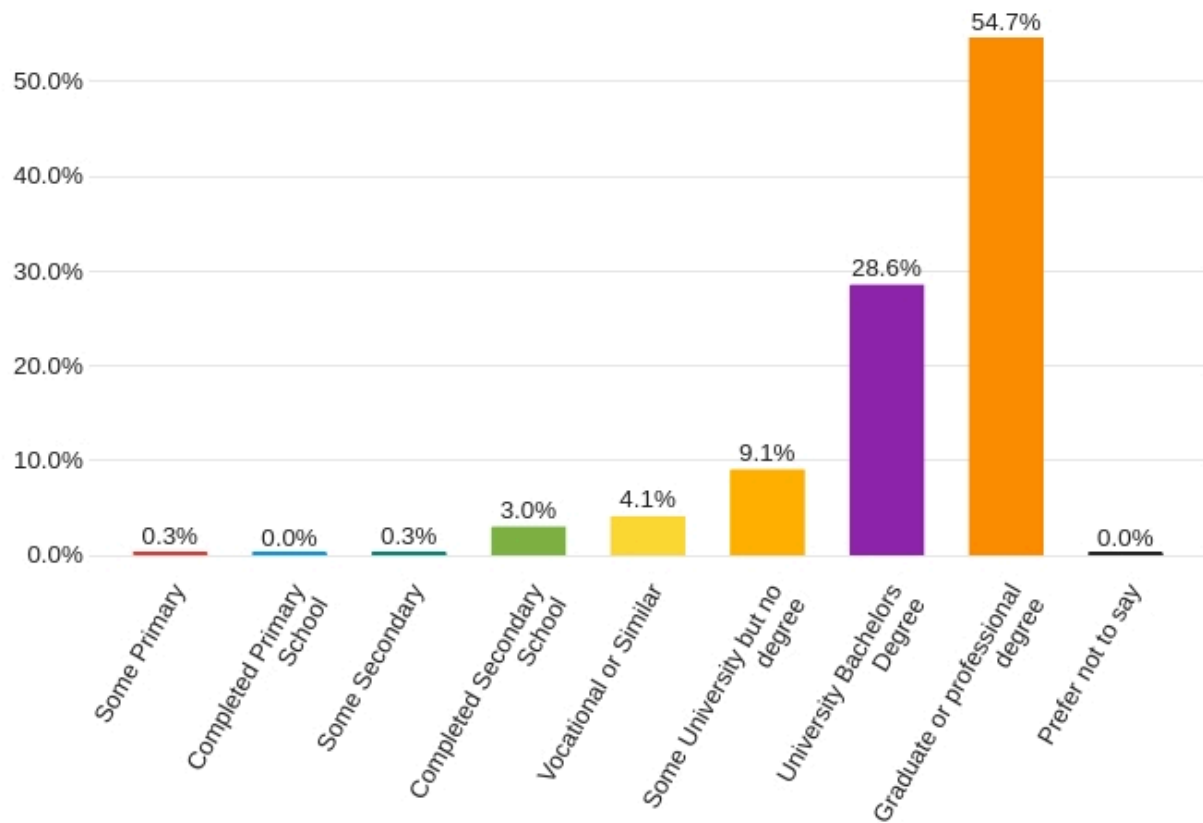


Figure 4.3: Educational attainment

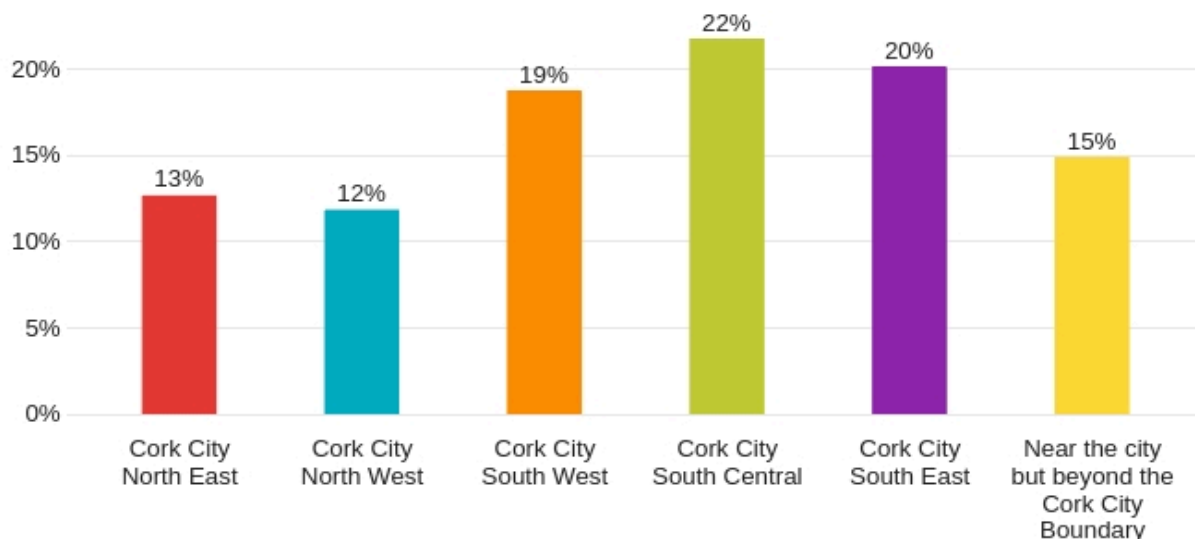


Figure 4.4: Where do you live in Cork?

Transport behaviours

Of the respondents, a significant number (77%) reported that they currently cycle in Cork city. There is a high level of bike ownership amongst the total respondents (86%). They also report a high cycling frequency, with 82% reporting that they cycle more than once month. Respondents also report a high level of car ownership (79%) or access to a car (9%), with 88% having a full driving licence. 82% report driving more than once a month, which is the same number as those cycling more than once a month. Public transport usage shows few people travelling daily (2%), but 17% travelling weekly. The last part in this section refers to personal efforts to promote cycling and the findings indicate that people who cycle do try to positively influence cycling culture and to positively impact on the cycling environment.

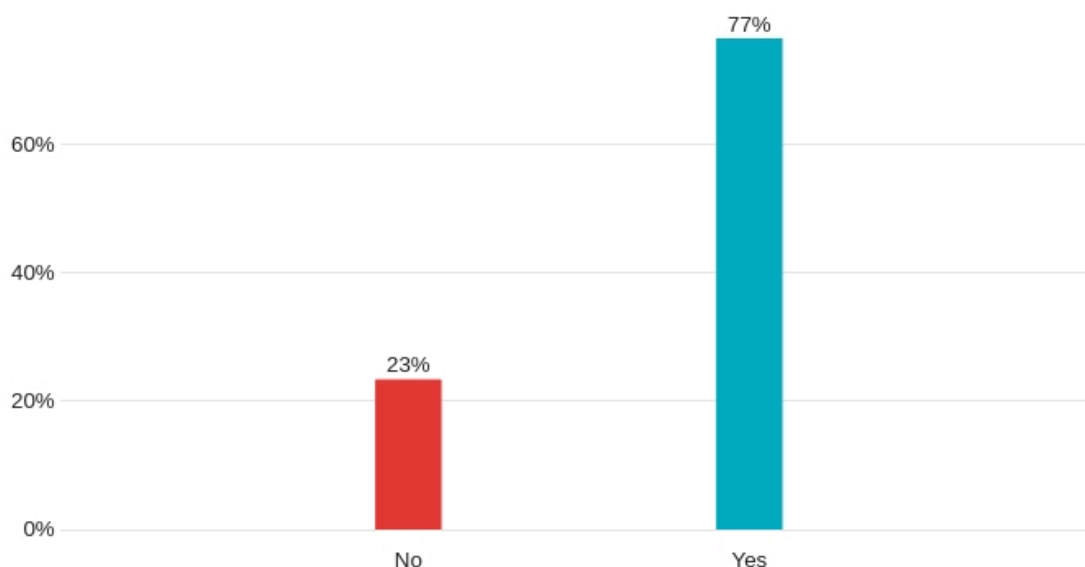


Figure 4.5: Do you currently cycle in the Cork area?

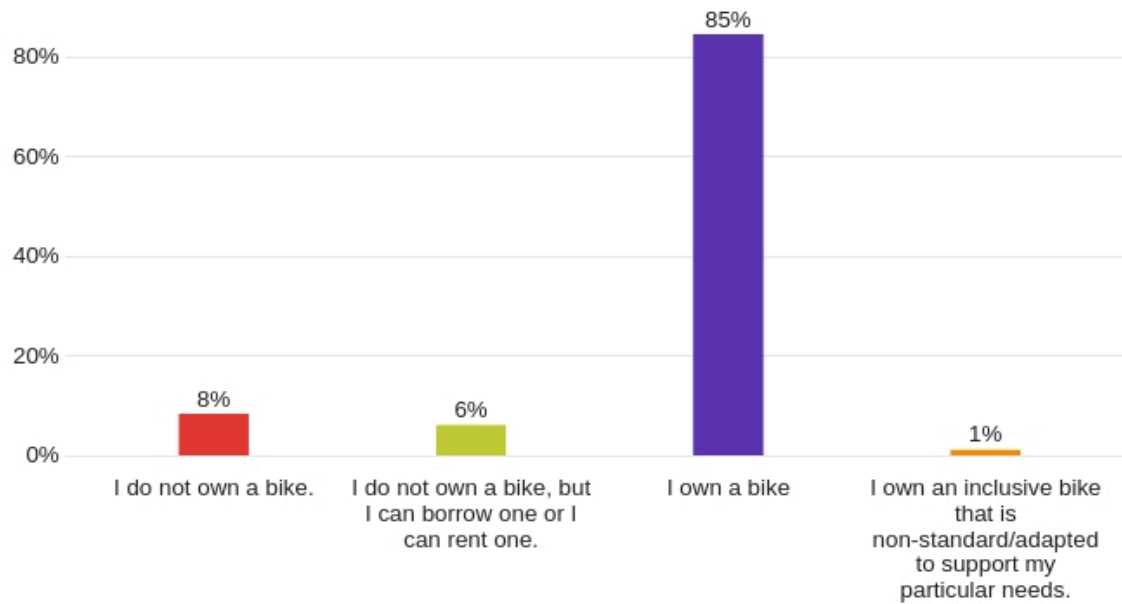


Figure 4.6: Access to a bike

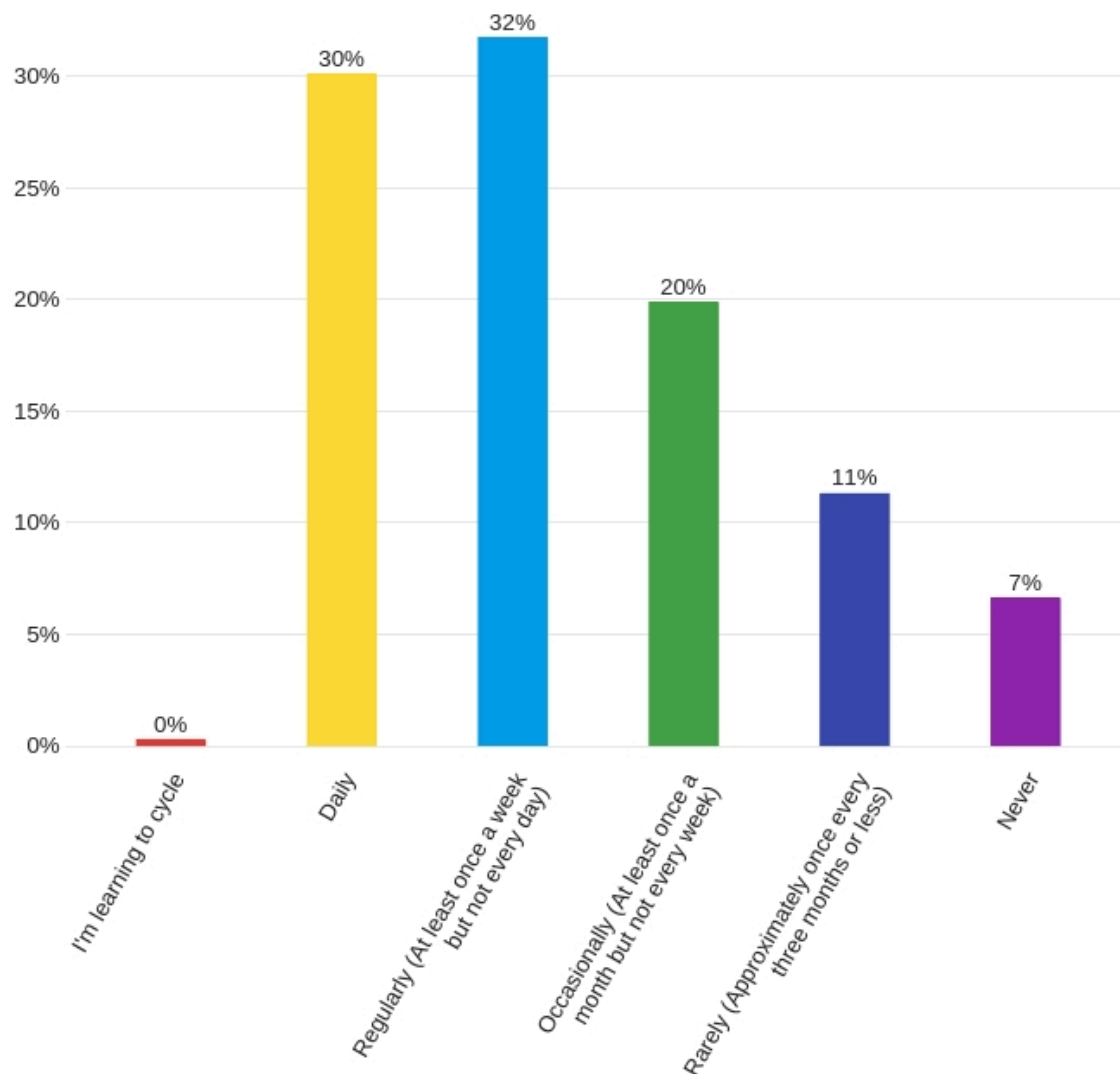


Figure 4.7: Cycling frequency

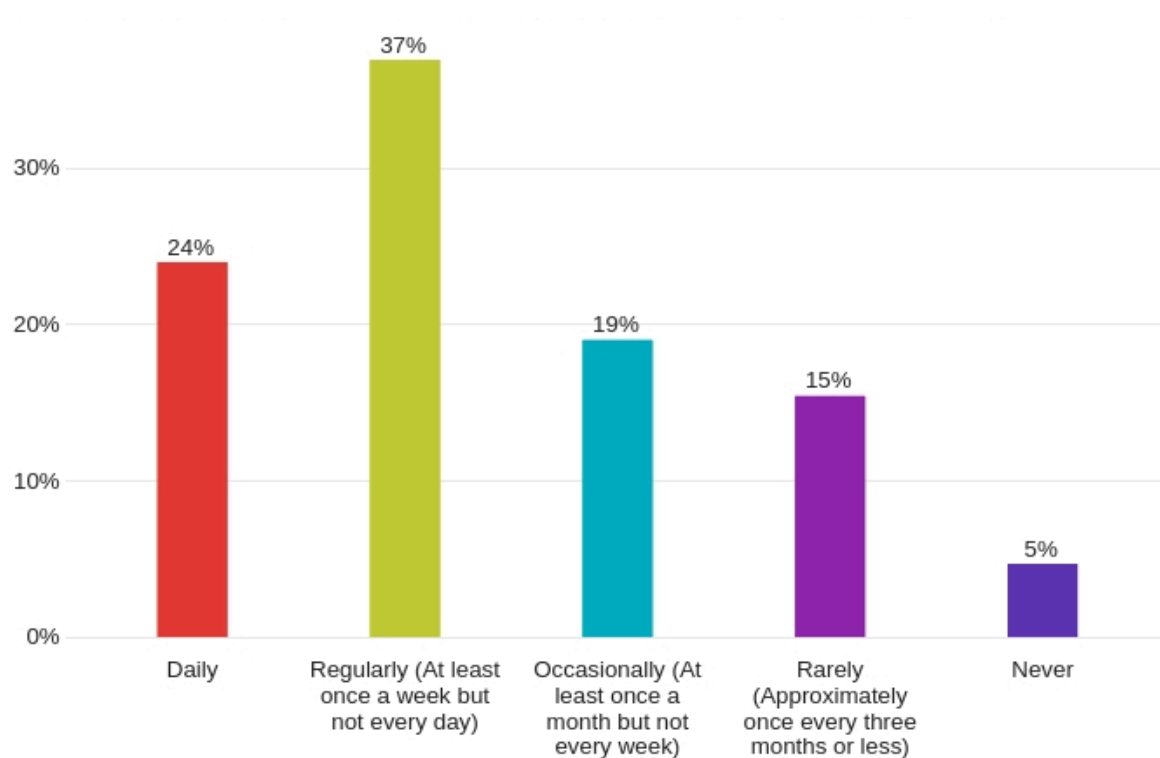


Figure 4.8: Walking frequency
(How often do you walk more than 1km to commute, visit family/friends, or run errands?)

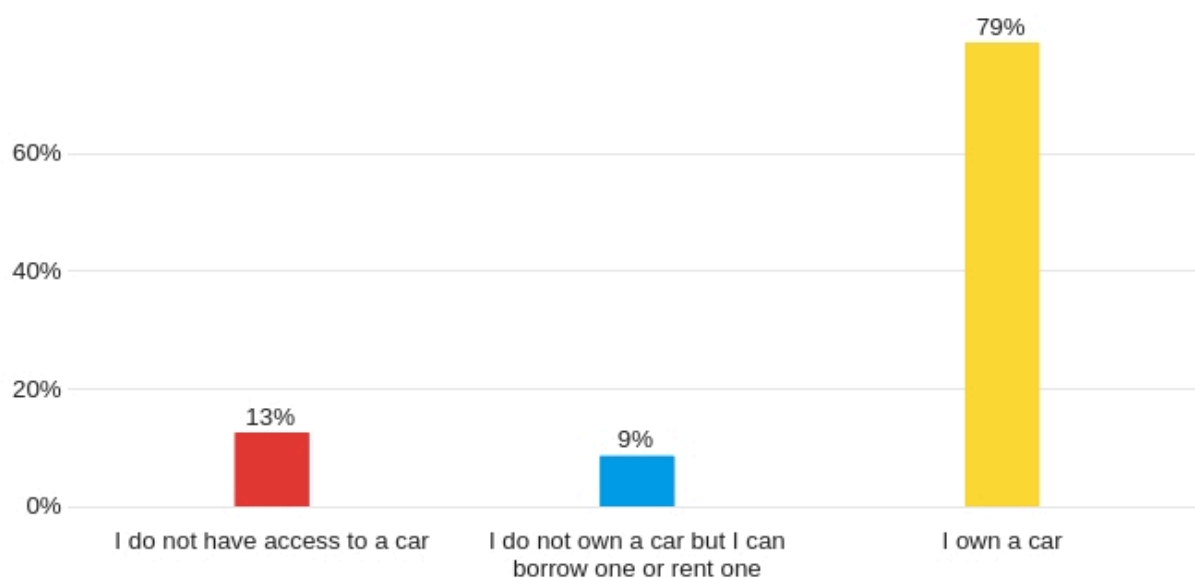


Figure 4.9: Access to a car

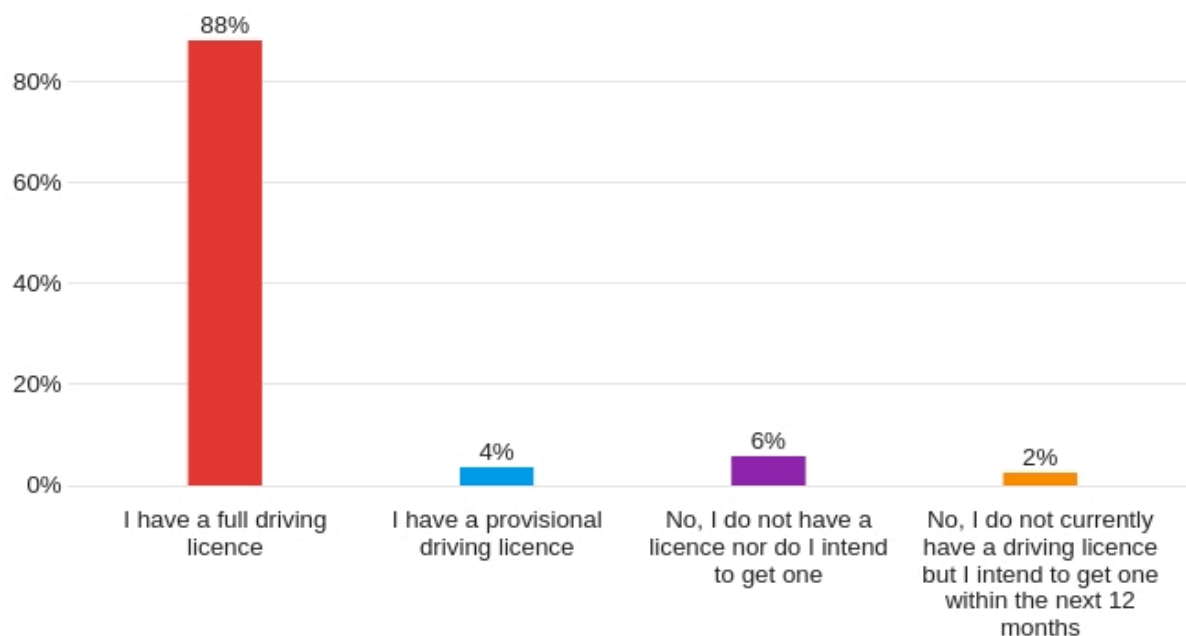


Figure 4.10: Driving licence

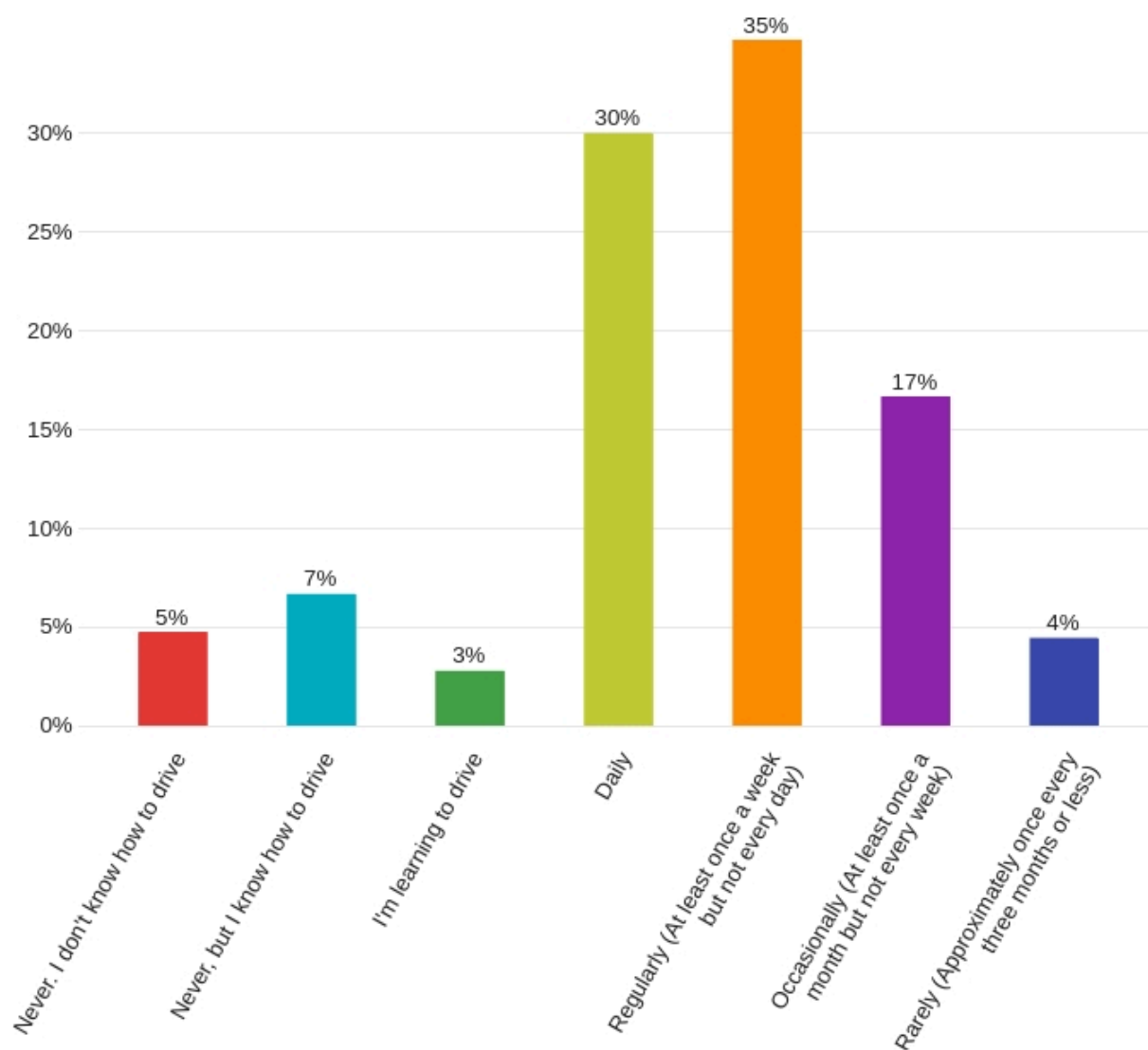


Figure 4.11: Driving frequency

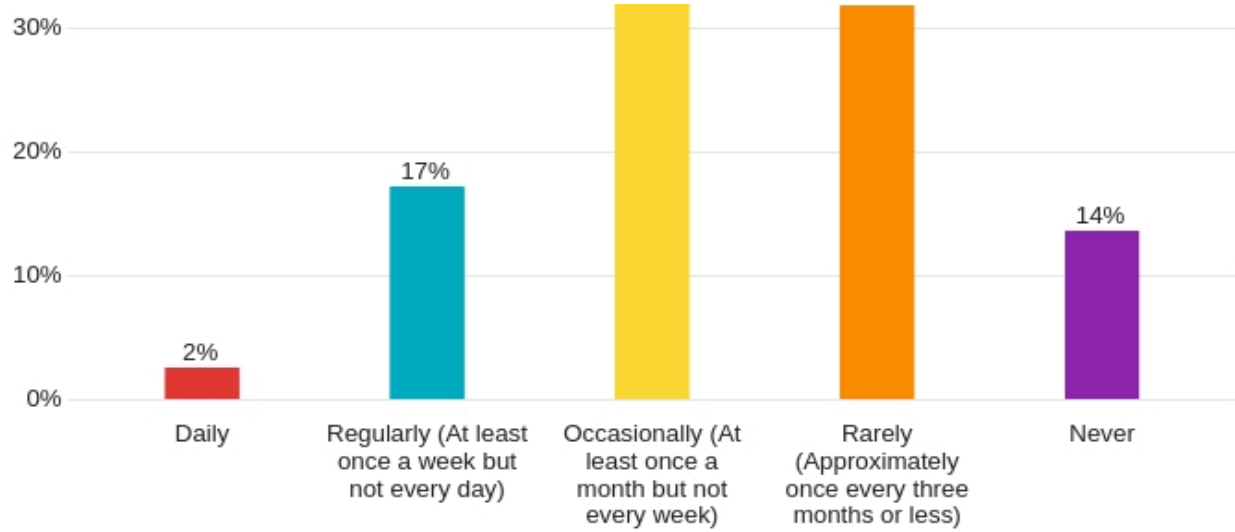


Figure 4.12: Frequency of use of public transport

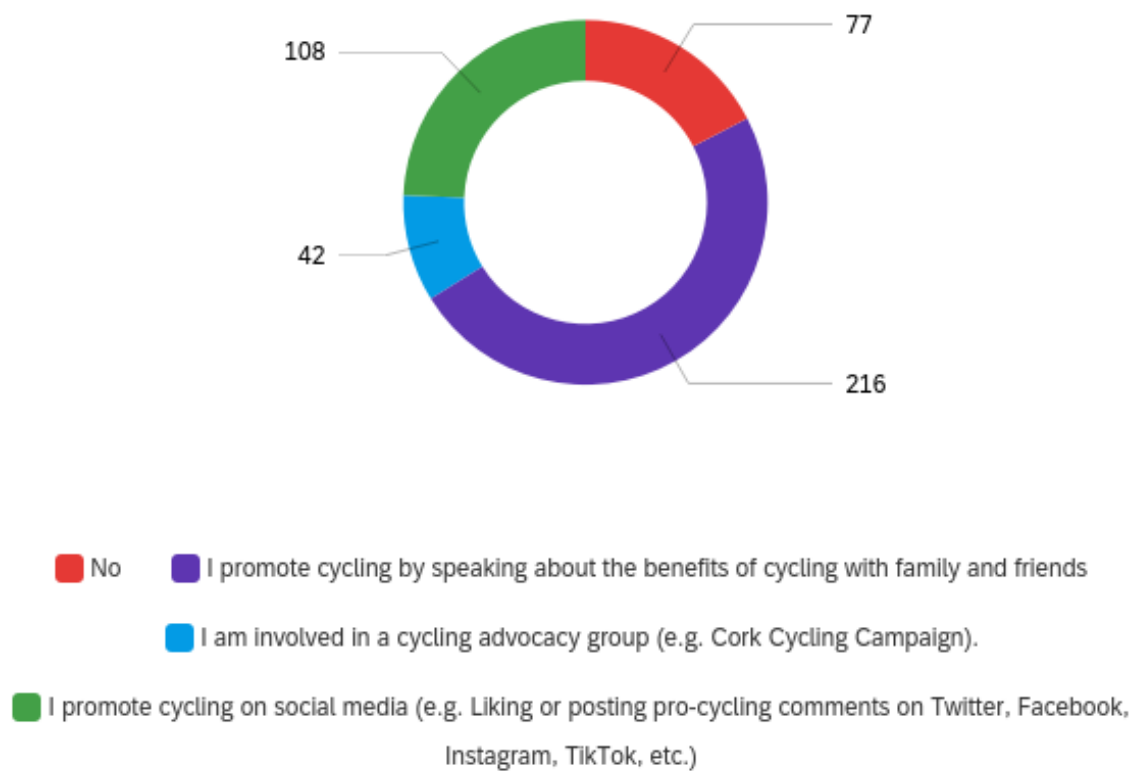


Figure 4.13: Cycling advocacy
(Tick all that apply)

Cycling promotion

All participants were invited to comment on various measures that might promote cycling and to evaluate these on a scale from poor (1) to excellent (5).

Echoing existing research findings, the data show that 'hard' measures that promote safety are prioritised and investment in 'protected cycle routes that start and end at big trip destinations' attracted the highest rating. The next most popular measures were:

- Enforcement of illegal parking and road traffic laws;
- Safe and reliable public transport system to complement cycling facilities or be an alternative way to travel if cycling was not possible or convenient;
- More car free streets or zones; and
- Junctions that provide people cycling with a dedicated place to wait and travel.

There is generally good support for all common pro-cycling initiatives identified in the survey question, including secure bike parking, lower speed limits, low traffic neighbourhoods, promotional campaigns, and leadership from public representatives. Interestingly, wayfinding signs - though valued to a degree - attracted less priority than other interventions.

Field	Mean
Protected cycle routes that start and end at big trip destinations	4.53
Enforcement of illegal parking and road traffic laws	4.36
Safe and reliable public transport system to complement cycling facilities or be an alternative way to travel if cycling was not possible or convenient	4.30
Junctions that provide people cycling with a dedicated place to wait and travel	4.26
More car free streets or zones	4.23
Safe and secure bike parking	4.18
Slow speed limits across the city	4.09
Low traffic neighbourhoods	4.03
Traffic light sequences that give priority to people cycling to reduce waiting times	3.95
Leadership from public representatives on cycling and the benefits of cycling	3.92
Regular sweeping of bike lanes	3.89
Gritting of routes during winter time when there's a risk of frost	3.84
Promotional campaigns that normalise cycling as an everyday way to travel	3.83
Indoor or covered bike parking to keep my bike out of the elements	3.78
Wayfinding signs to direct people in areas they are unfamiliar with	3.17

Table 4.1: Cycling promotion

Attitudes of people who do not currently cycle in the Cork city area

Data on attitudes towards cycling were gathered from people who responded 'No' to the question, 'Do you currently cycle in the Cork city area?'. This was valuable for gaining an insight into attitudes towards cycling, perceived barriers to taking up cycling, and perceptions of Cork as a potential cycling environment.

The findings show that respondents have largely positive memories of cycling as a child (only 4% disagreed with the statement 'I enjoyed cycling as a child'). The data also show that respondents have strong cycling potential, with strong estimations of cycling's attractiveness as a pleasurable, convenient, and low-cost or cost-effective mode of travel with good health benefits. People also are motivated to cycling for environmental reasons. Mixed mode commuting also appears attractive, with 56% of respondents agreeing that they would cycle if they could bring their bike part of the way with them. Expanding cycling facilities would seem to be attractive to potential cyclists, with 44% favouring the availability of showering facilities at work. Respondents had mixed feelings about disincentives to driving such as congestion or higher parking charges. Only 7% of respondents stated that they would never want to cycle (with another 7% being neutral).

The key barrier to cycling as identified by people who do not currently cycle is safety. 79% of respondents state that they are interested in cycling but it is currently too dangerous (12% were neutral, 9% disagreed). 39% of respondents stated that they do not feel confident enough to cycle, which may be relevant to safety concerns and/or to personal skill levels. Meeting childcare needs is a further consideration; escorting children to school is identified as a barrier, with 19% of people stating that cycling is not an option for that reason (26% of respondents were neutral, 56% disagreed, but both categories may include responses from those who do not have such responsibilities). Some people responded that they had too much to carry for cycling to be feasible.

31% of people did not know many people cycling, which is relevant to the normalisation of cycling and cycling culture. With respect to cycling behaviours, a substantial number of respondents perceived people cycling as a danger to people driving (22% agreed, 61% disagreed). 26% of respondents also perceived people cycling as a greater threat to people walking than other modes of transport (e.g. cars, buses, trains, etc)(65% disagreed with the statement). 20% of respondents agreed (and 62% disagreed) that they felt nervous when meeting a large number of young people on bicycles, which is relevant to the symbolic status of the bike.

Field	Agree	Neutral	Disagree
I enjoyed cycling as a child	88%	9%	4%
Cycling is potentially a pleasurable way for me to travel	77%	17%	6%
Cycling is potentially a convenient way for me to travel	68%	13%	18%
I would never choose or want to cycle, no matter how safe it might be	7%	7%	85%
I'm interested in cycling in my area but I feel it is currently too dangerous	79%	12%	9%
People cycling represent a danger to people driving	22%	17%	61%
I'm interested in cycling but it is too expensive for me to consider it seriously	3%	11%	86%
Cycling is cost-effective	83%	15%	2%
I am attracted to taking up cycling for environmental reasons	70%	20%	11%
I would cycle as part of my commute if it were possible to take my bike with me	56%	29%	15%
I would cycle as part of my commute if I had access to showering facilities at work	44%	41%	15%
I don't feel confident enough to cycle	39%	16%	45%
I am attracted to taking up cycling for financial reasons	37%	37%	26%
I get nervous when I encounter a group of young people on bikes	20%	18%	62%
I have too much to carry to consider cycling to work	25%	25%	51%
I have to drop children to school/childcare so cycling is not an option for me	19%	26%	56%
I do not know many people who cycle regularly	31%	19%	51%
If a congestion charge were introduced, I would be more likely to cycle	25%	26%	49%
If higher parking charges were introduced I would be more likely to cycle	24%	24%	51%
I disagree with congestion charges	32%	24%	44%
People cycling represent a greater threat to people walking than other modes of transport (e.g. cars, buses, trains, etc)	26%	10%	65%
I am attracted to cycling for health reasons	83%	11%	6%

Table 4.2: Attitudes towards cycling of people who do not currently cycle

Cycling and children

Respondents were asked, if they were a parent or guardian to one or more children, to respond to several statements about children and cycling. The data show that respondents place a high value on cycling in children's lives in terms of play, health benefits, and fostering independence. However, respondents indicate high levels of concern about children's safety when cycling and do not believe that there are safe routes for children in their local areas. Interestingly, there is little difference in responses if that data are separated out into two cohorts – people who do currently cycle and people who do not currently cycle. There is a high degree of agreement across both groups, which indicates the people who do cycle are as positive about the benefits of cycling, and as concerned about the dangers of cycling, as those who do not currently cycle (Appendix C).

Field	Agree	Neutral	Disagree
Cycling is a healthy activity for children	95.07%	4.23%	0.70%
Cycling with children is an enjoyable experience	57.64%	25.69%	16.67%
Cycling is a fun activity for children	93.06%	6.94%	0.00%
It is important for children to learn how to cycle as soon as they are ready	94.33%	4.96%	0.71%
I feel confident enough to teach a child how to cycle	84.86%	10.92%	4.23%
Being able to cycle supports children's independence in a positive way	95.42%	4.58%	0.00%
Children in my house travel to school and on errands mostly by car	38.13%	40.29%	21.58%
In my community, there are safe routes for children to cycle to school, parks or shops with minimal adult supervision	6.53%	17.53%	75.95%
I worry about my children's safety when they cycle alone or with their friends	81.49%	16.37%	2.14%

Table 4.3: Cycling and children

Examples of cycling infrastructures and facilities

In the final section of the survey, respondents were presented with five case study images, showing examples of cycling infrastructure and facilities from across Europe.⁸ These exercises were designed to elicit views on how various pro-cycling designs and initiatives might impact cycling rates in the Cork city area. It is worth noting that respondents were forced to choose from limited options, even though some may not have fully agreed with any of the options available to them.

Responses to the first case study indicate very strong support for a 'cycle freeway', which is an extended protected, segregated cycle route allowing travel from a suburb to an urban centre, with only 3% stating that they would be unlikely to cycle such a route.

The second case study presents an example of a CYCLOPS model, which is an intersection design that allocates priority to people walk and cycling. Responses to this image indicate that a majority believe that people cycling and walking should be given higher priority (83%) or at least equal time and space (13%) during high traffic and poor weather conditions as people in cars, with a small number (4%) believing that people walking and cycling should never be given priority.

With regard to the third case study, respondents were largely in favour of reporting people who park on cycle lanes. Only 6% are against this idea, stating that this would negatively impact pro-cycling attitudes by humiliating drivers, and a further 2% believe that it is sometimes necessary to park on cycle lanes.

The fourth case study invited respondents to compare images of two residential streets, one in Amsterdam and the other in Cork city, with respect to their various criteria. Most respondents voted in favour of the Dutch street design with respect to traffic control, spaciousness, and visual attractiveness, as well as how parking-, child-, and environmentally-friendly it appears. The Cork street was perceived to be more motor-dominated.

The fifth and final case study explores attitudes to bike parking, which indicates evidence of strong support for good parking facilities.

⁸ These five questions were designed by Ross Madden (with advice from the Cork Cycling Campaign), who worked with us on the project through the UCC CARL initiative as part of his final year studies in Government and Political Science in UCC (Madden, 2022).

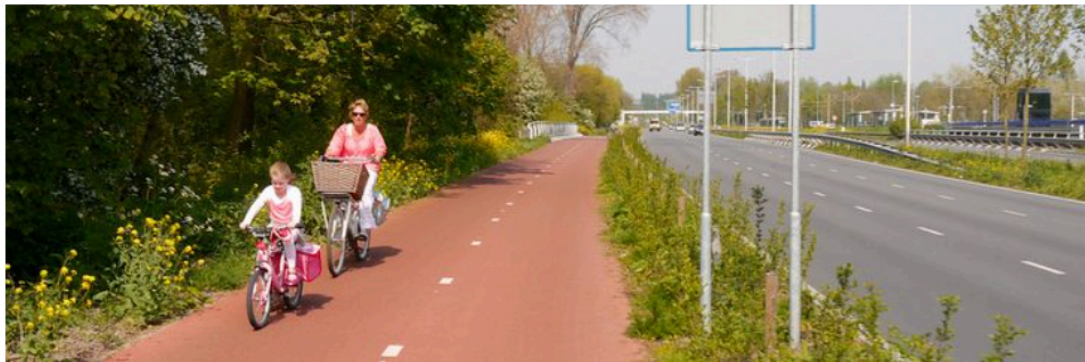


Image source: Steven Vance/Pixabay

Pictured is the *snelle fietsroutes*, a cycle freeway network that facilitates a 7-kilometre distance (approx. 30 minutes at a steady pace) from Breda to Etten-Leur, two municipalities in the Dutch province of North Brabant. If the City Council planned to implement a 'cycle freeway' that would allow long-distance travel from the suburbs to the city centre, would you be more likely to cycle this route?

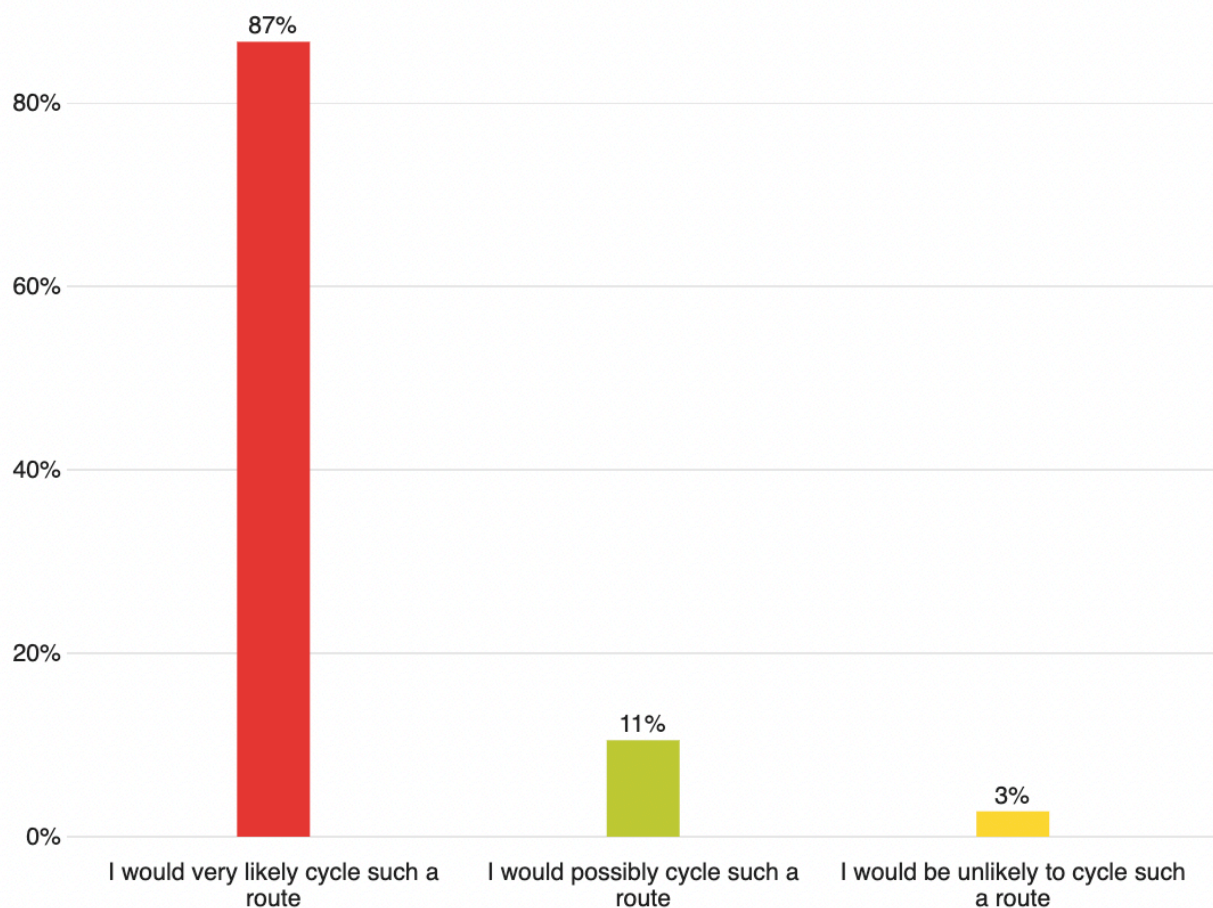


Figure 4.14: Cycle freeway



Image source: Smart Cities World

The protection of people cycling and people walking through intersection junctions is an important road safety issue. The CYCLOPS model (pictured, in Manchester), encourages people driving to give people cycling and people walking priority at junctions at certain times, for example when there are high volumes of traffic or in poor weather conditions. Please study the image for a moment and then respond to the statements below.

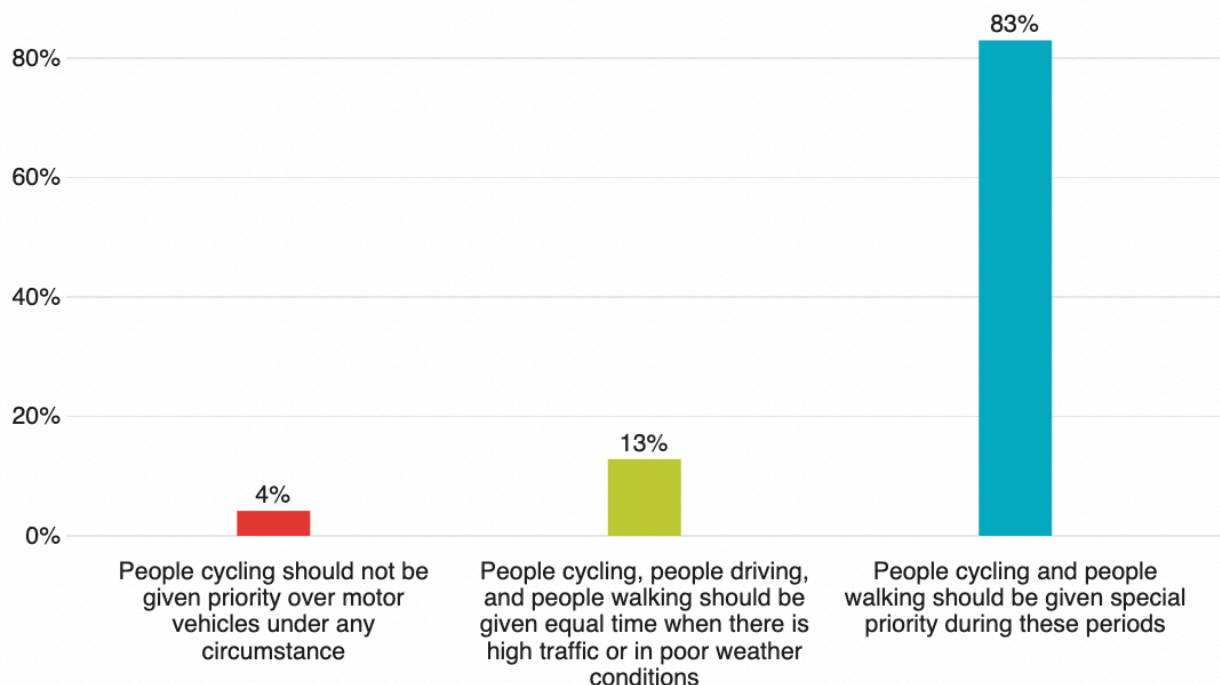


Figure 4.15: CYCLOPS model



Image Source: Sam Saunders/Flickr.

Illegal parking on cycle paths endangers people cycling. In the picture above, for example, the person on the bicycle must move suddenly into a lane of moving motor vehicle traffic. Recently in Germany, a free app called Wegeheld ('Road Hero') enables people to take pictures of motor vehicles parked on prohibited areas (e.g. cycling paths, disabled parking, on footpaths). These pictures are uploaded onto the internet where local authorities are notified about these incidents and the offending motorist can be fined. Is this a good method of stopping illegal parking on cyclist routes? (Tick all that apply)

357 Responses

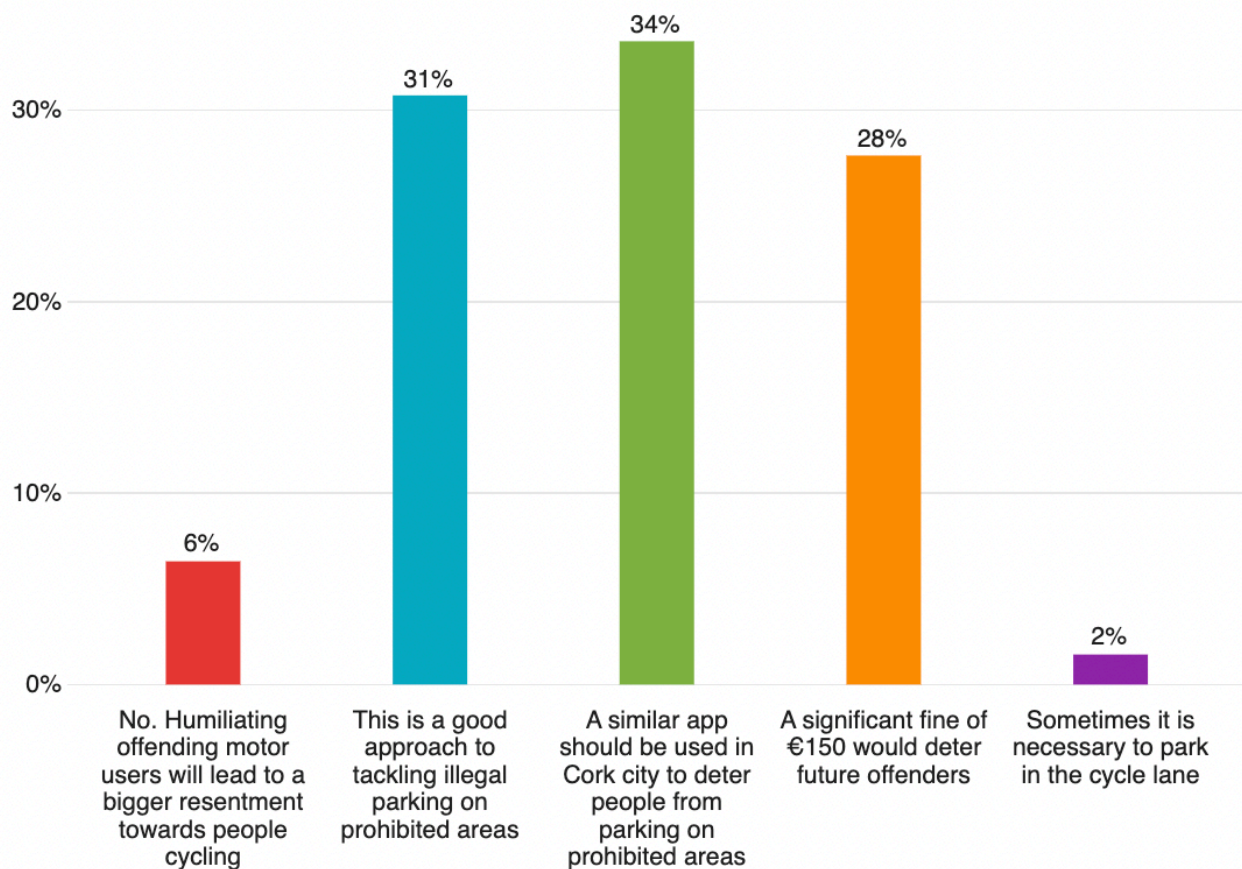


Figure 4.16: Cycle lanes



Image source: This work is attributed to Greg Raisman.

In Utrecht Centraal (in The Netherlands), bike parking spaces store tens of thousands of bikes each day such (pictured above). If the rail or bus stations in Cork expanded their bike storage, how would this impact on your decision whether to cycle?

Tick all statements that apply.

Field	Agree	Neither agree nor disagree	Disagree
It would be easier for me to commute, knowing that my bike is safely secured from theft and bad weather conditions	74.86%	22.86%	2.29%
It would provide a bigger incentive for me to cycle as part of my commute or longer journey, along with public transport (e.g. getting the train to Dublin)	75.07%	20.58%	4.35%
It would be extremely helpful to have access to repair services from bicycle experts and mechanics in the station	71.22%	25.58%	3.20%
It would have no impact on my current cycling practices	23.14%	26.86%	50.00%
This would not incentivise me to cycle	12.35%	25.88%	61.76%
This would encourage me to cycle with my family for leisure purposes	59.59%	31.86%	8.55%

Figure 4.17: Street comparison



Image source: This work is attributed to Save Cork City.



Image Source: This image is attributed to Deavmi.

In the images above, you will see a typical urban residential street in Ireland and The Netherlands.

Please compare and contrast the images in response to the prompts below.

Field	Image A	Image B
Most spacious for people who cycle and people who walk	25.95%	74.05%
The traffic is most controlled	16.92%	83.08%
Most parking-friendly	8.77%	91.23%
Most motor-dominated	70.06%	29.94%
Greener and most environmentally-friendly	12.57%	87.43%
Most children-friendly environment	12.99%	87.01%
Most visually attractive	13.41%	86.59%

Figure 4.18: Bike parking facilities

5. Interview findings

The interview findings were coded and organised into several themes, which are presented in this section. These themes include: cycling and well-being; cycling and the environment; the practicality of cycling; the cycling environment; cultures of cycling, and; cycling and childhood.

About the participants

The table below presents information about each of the fifteen interview participants, for whom pseudonyms are used. Basic information about the sex, age range, and country of origin are included, since this is pertinent to a study that considers how social factors influence cycling practices. Of the interviewees, nine are male and six are female. The mix of participants is limited in terms of ethnicity, each being white European.

Name	Sex	Age range	Country of origin	Interview type
<i>Niall</i>	Male	40s	Ireland	Narrated journey
<i>Richie</i>	Male	40s	Ireland	In-depth interview
<i>Luke</i>	Male	40s	Ireland	In-depth interview
<i>Elaine</i>	Female	40s	Ireland	In-depth interview
<i>Casper</i>	Male	30s	The Netherlands	In-depth interview
<i>Matthew</i>	Male	50s	Ireland	Narrated journey
<i>Darren</i>	Male	20s	Ireland	In-depth interview
<i>Mark</i>	Male	50s	England	In-depth interview
<i>Evelyn</i>	Female	20s	Ireland	In-depth interview
<i>Marjorie</i>	Female	30s	Ireland	In-depth interview
<i>Ava</i>	Female	40s	Italy	Narrated journey
<i>Nora</i>	Female	60s	Ireland	In-depth interview
<i>Jack</i>	Male	50s	Ireland	In-depth interview
<i>Johanna</i>	Female	60s	Belgium	In-depth interview
<i>Séamus</i>	Male	20s	Ireland	In-depth interview

Table 5.1: About the participants

Cycling and Well-being

Interestingly, each of the interview participants describe the sense of freedom they experience when cycling, hence the title of this report. The term 'freedom' was coupled with terms such as 'hope', 'potential', 'independence' and 'liberation', which reinforce cycling as a very positive experience. The physical and emotional sensations associated with cycling are described in great detail. Many participants refer to a sense of exhilaration and aliveness they experience when cycling. The kinaesthetic pleasures of cycling are foregrounded, connected to the physical gratification one gets from cycling that comes from the effort of pedalling and self-propelling, particularly when travelling at speed, which gives a feeling of strength and power and a sense of achievement. One participant described a feeling of power and weightlessness when cycling, akin to 'floating'. Others associated this sense of aliveness with a connection to nature and the environment.

The interviews are replete with references to the mental health benefits of cycling; the joy of cycling is associated with fun and fresh air and cycling in pleasant and safe environments (particularly on greenways) is appreciated as a mood-enhancing activity. Cycling through nature and conquering hills lifts people's spirits.

The act of cycling can have a therapeutic effect; the physical effort and focus required helps people to forget about any negative emotions and maintain a positive mood. This further highlights the relaxing and freeing nature of cycling compared to other modes of transportation. As Ava described it:

I might start the journey, I don't know, being angry, anxious, upset – whatever it is that I'm bringing to the day. But then I think... the movements that you do and also you start paying [attention], you're more aware of the situation the here and now, and you tend to forget what is happening elsewhere. So [with] the physical effort and paying attention, all of a sudden I find I'm chatting to myself or singing a song and so the mood [becomes] positive, certainly towards the end of the trip.

Others commented on the pleasure that comes from the sense of social connectedness and the social interactions one may enjoy while cycling. As Richie described it,

I like cycling into the city for the human interaction, for just looking at people and getting a sense of humanness. Again, you know, just being around the busyness of it. Because I live in the country [and] I will not meet someone for the whole week if choose to, you know? I love the quietness of home, but I like to dip into that busyness of the city every night and there's always, there's a nod or a kind of, uh, you do look out for each other. I find like if I was to see a cyclist coming and I knew there was something up ahead, I'd warn them, you know? [...] Yeah, there is definitely a subculture in in the city and even on the country roads, you know? Everyone looks out for everyone else. Yeah, it's, it's. It's a nice little kind of feeling, yeah.

This sense of social connection came through in the narrated journeys, as participants spoke warmly of their interactions with others. For example, Ava stated that:

I now tend to have regular encounters with people walking or cycling so it feels like when I get to this park I'm home, I'm safe, I'm breathing nice air and I see people I know. I'm in a place that I like.

Commenting on why she had chosen to video-record this particular route, she explained that:

It feels like my space, it's like a community space. It's a nice way of going to work and on the way to work first of all, you want a familiar space, but you also meet people... [Sometimes] I have no idea what their name is, I don't know where they live, but I know that that 8:45 I will meet them at that point of the road and we will smile at each other and we are happy. So it feels like a homey route to cycle. So it might not be the safest but it's a positive social experience and [...] you pass through the park, which is amazing. It's a beautiful place to be.

Niall, sharing a video-recording of his route, also conveyed this strong sense of social connection, both to his children with whom he was cycling to school, and to other public space users on the route:

The [kids] are just very kind of interactive with their environment. We meet a guy who we've [often] stopped and chatted with who walks two German shepherds. So we know the names of the dogs and we get a good wave and have a chat and... [commenting on the recording] Oh, there's a friend of theirs, [name of girl] from Spain, going to school ahead of us, waving out the window... So there's a lot of, you know, interacting with your surroundings that you wouldn't get when you're in a car.

The positive impacts on well-being are therefore very apparent from the data. However, it is important to note that traffic and road conditions can have a negative effect on mood, making individuals feel 'grumpy' or 'cynical'. The participants note that busy roads with parked cars and aggressive drivers can induce stress, anxiety, and anger. Cycling in the city or on busy roads can be stressful, especially when encountering impatient drivers. Therefore it was emphasised that many factors can impact on the enjoyment of cycling. As Evelyn explained,

the environment, the time of day, and the people you encounter are big factors in the enjoyment of cycling and the kind of mood you kind of come back with, you know?

Overall then, in the right conditions, in which people feel safe, cycling is seen as a more enjoyable and mood-boosting activity compared to other modes of transport. It provides a sense of freedom and the ability to set one's own pace. The benefits of fresh air and sunlight, as well as the opportunity for social interaction and exercise, make cycling the preferred modal choice for the research participants.

Cycling and the Environment

Several key themes within the research data related to the environment. The first theme that emerges is the connection between individuals and nature. Participants express a deep appreciation for the natural environment, emphasising the beauty of green spaces and biodiversity they encounter when cycling. The relatively slow pace of cycling heightens their awareness of and connection to their natural surroundings because they notice more of the flora and fauna on their routes. There is a strong relationship between the participants' connection to nature and their recognition of the importance of cycling in enhancing their well-being. Alan narrated the journey he takes bringing his children to school on a cargo bike, recounting a pleasurable atmosphere:

So along this way we get a chance to look at a bit of nature and spot nests and chat about the birds that we hear and see, and what not. I love traveling with the kids on the bike because we're just more connected together and to our environment.

Several participants demonstrate a heightened awareness of their environmental impact and discuss the negative consequences of using cars, such as traffic congestion, stress, and pollution. One participant mentions the environmental impact of petrol and diesel cars and this awareness motivates them to adopt more sustainable modes of transportation, such as cycling, to reduce their carbon footprint.

Participants' spoke about a heightened environmental consciousness, particularly in the aftermath of the Covid-19 pandemic. For some, the pandemic was the catalyst for more frequent cycling. As Ava described it,

Before the pandemic, I was using the car to go to [work], so I didn't have parking at [work]. So, I would be dropping the little one in preschool and then I'd go to the park and ride and in Pouladuff and then take the bus, 1st to avoid driving into the city and also because I didn't have parking but it was taking me like one hour and a half. It was ridiculous the amount of time [it took]. It was like circumnavigating the Americas! And so you start considering that. You start considering how much you're idling in traffic because you are traveling anyway at peak times to go to work and take [the child] to school. And also how you feel... I was getting to work already so tired and stressed. All those things together really motivated me to change completely.

However, although it was recognised that interest in cycling and in environmental conservation increased during the pandemic, participants wondered if people had already forgotten some of the lessons of the pandemic. As Richie put it,

In the first lockdown it was like the entire globe just took a breath. You know, the rivers started to get better and lakes started to regenerate and you could hear the birds, you know... It was amazing. I think the first lockdown proved to me that we can change how we live. It's just we don't want to, you know? People are used to convenience, you know?

Another theme that emerges is the participants' appreciation of the urban environments they currently encounter and their desire for a balance between infrastructural development and the preservation of green spaces. Although participants articulated a desire for more cycle lanes, they did not want this to come at the cost of loss in biodiversity. Several participants reported making submissions in relation to the Bus Connects strategy as part of the public consultation process, arguing for the protection of green spaces. As Elaine observed:

One of the nice things about this city is all the trees, you know? It is a green city. If you look at aerial imagery of Cork, it's actually amazing. Um, where was I yesterday and I was looking across towards the northside of Cork and you'd hardly know it was a city [because there are] so many trees? And they're going to get rid of all that to make the roads wider so that we can have more buses and cars?

Two of the participants (Ava, Matthew) who videorecorded their journeys were keen to emphasise the importance of protecting a green space near their homes, locally called the 'Mangala' (Ballybrack Woods near Douglas). This area was almost rezoned recently to build a flyover, but due to a public outcry the plan was abandoned. As Matthew described it:

[This path] follows the stream which runs down through that valley and goes the whole way down into Douglas, you know? And so yeah, ... it's always lovely to just take a walk along a sunny quiet path and hear the water, you know? [You] don't see them so much during the day,

but I know there are still quite a lot of rabbits and foxes and badgers and hedgehogs who are obviously still able to live in the woods down there. You know, I mean, anytime I'm coming home on the bike... late at night [there would] nearly always be a bunch of rabbits hanging out just on the grassy area at the edge of the woods. And I've often seen foxes. There was a fox even used to come into our garden for a while and [...] stray hedgehogs have wandered up into the park here that had to be, you know, picked up and brought back down into the woods and stuff like that. So, there is still quite a lot of wildlife, obviously, which is still able to exist in that space.

One participant was wary of being associated with a green political agenda, which he said stemmed from his upbringing in a very rural area where the drive towards more sustainable practices may not be well-received, particularly amongst the farming community.

Air quality was addressed by several participants as an environmental concern that negatively impacts on their enjoyment of cycling in the city. For example, Evelyn explained that:

the biggest issue for me is that air quality is very poor in the city. I think everyone's experiencing that. It's not much better in a car but when [you're] climbing those hills, you can actually smell and taste the deterioration in the air quality as you're going up, and so many people are burning fuels at the moment you get home and there's smoke everywhere. It's kind of unpleasant.⁹

Ava also explained that she chooses her travel time to avoid being in idling traffic because of the health effects:

In the beginning when I started with the bike on this route, you know, I think I picked all the worst times possible. It was terrible to travel, was terrible to breathe. It was completely unsafe... [I cycle at this time] for the quality of the air because as I decide to stand in the queue, I'm basically taking in whatever the car in front of me is releasing and sometimes it really feels unhealthy.

Overall, the thematic analysis reveals a strong connection between individuals' enjoyment of cycling and the environment, with participants valuing nature, adopting sustainable practices, and appreciating cycling as outdoor activity. The participants' appreciation for nature, their recognition of the need for environmental change, their efforts to adopt sustainable transportation, and their concern for the preservation of green spaces underscore the significance of values associated with environmental sustainability for many of the participants.

⁹ This interview took place in December.

The Practicality of Cycling

Aside from the health and well-being and environmental benefits of cycling, participants identified the convenience and practicality of cycling as a positive dimension. Sometimes this was expressed in terms of disutility. For all participants, the speed at which cyclists can navigate the city is seen as a distinct benefit. People described the frustration of using other modes of transport: walking is too slow and being stuck in traffic in a car is dull. Not having to deal with stress associated with car parking is also identified as an advantage. Buses are described as unreliable, and avoidance of anxiety and uncertainty associated with bus schedules reinforces the preference for cycling, which enables a greater level of independence. As Evelyn explained,

I'm not adhering to anyone's timeline, so I can kind of set off when and where I want to. It's a lot different than you know adhering to a bus timetable or depending on somebody else.

Where possible, then, the participants choose cycling as the most convenient mode of transport, as long as they perceive it is safe to do so (more on this below).

Cycling is also a cost-effective mode of transport. As Luke put it, "I have to get the bike serviced every year and that would cost the same as filling the tank of the car once".

In terms of the material costs of cycling, the bikeshare scheme is praised highly – Jack stating that the scheme offers 'the best bike in the country for a tenner'. On the other hand, there was much criticism of the maintenance of the bikes and docking stations, which participants believed were not prioritised sufficiently. Despite these criticisms, for people living in the city centre without storage space for a bike, the bikeshare scheme was deemed an ideal transport option and several participants recommended that it be extended more widely across the city.

The Cycle to Work ('Bike to Work') Scheme – a tax incentive scheme that encourages employees to cycle to work – was also roundly praised. Almost all of the participants had bought a bike through this scheme. However, people argued that four-year span between purchases should be reduced to enable people to buy more bicycles and different kinds of bicycles for different kinds of journeys (electric bikes or electric cargo bikes, for example). The expansion of e-bike purchase on the Cycle to Work Scheme is also valued.

There is evidence of increasing demand for e-bikes, particularly for travelling hilly areas in Cork. One participant borrowed an electric bike through a scheme in her workplace, and subsequently bought one, so this seems a helpful way to promote cycling uptake. Some suggested that an e-bikeshare scheme would be a very valuable method of widening access to bikes and e-bikes, thereby promoting cycling uptake.

On the flip side, some suggestions were made about how to disincentivise driving. For example, one participant proposed that taxation measures, such as applying much higher levels of car tax particularly for second cars in a household, could force change. Other suggestions were to give a grant to every parent to buy their child a bicycle.

One might anticipate in a country with inclement weather, that this would feature prominently as a factor that makes cycling impractical. Interestingly, although rainy conditions were mentioned as

inconvenient to cycling – and people generally would not choose to cycle in very bad weather conditions – this was not identified as something that would strongly deter people from cycling.

The Cycling Environment

Analysis of the interview transcripts generated several common themes that shed light on the challenges and opportunities related to the cycling environment of Cork city.

Attention to cycling infrastructures was a very prominent topic within the research. Participants noted that there had been a significant improvement in cycle lane infrastructure in some parts of the city in recent years. However, they also expressed frustration with the allocation of resources and priorities related to cycling infrastructure and a perceived lack of prioritisation of cycle lanes by comparison with driving infrastructures.

All participants indicated strong support for cycle lanes and for further development of cycle lanes. People stated that they felt safer when there were dedicated cycle lanes and conversely, the absence of cycle lanes made cyclists feel less safe. As Nora described it:

I really love the cycle lanes. I didn't realise until we had cycle lanes what a difference they make. They give you permission to be on the road, is one thing. You know because oftentimes you feel well, 'I shouldn't really be here. This is for cars'. And whereas with the cycling lanes [you think] 'You know, I am actually a legitimate road user'.

Many observed that people they know have recently taken up cycling because they feel safe enough to do so thanks to the recent investments in cycle lane infrastructure. Nora, again, who is in her 60s stated that:

Cycle lanes are key really for cycling infrastructure. [T]hey make all the difference, and particularly [for] people my age who haven't cycled before. If it's promoted or if it's easy, people will do it. But if it's dangerous, they won't bother doing it.

Several participants explained that the presence of cycle lanes influenced their route choices. As Séamus put it:

99% of my routes are determined by [whether] there [is] a segregated cycle lane. Even if it adds an extra 10 or 15 minutes to my getting to where I need to be, I would always err on the side of having the bit of cycle lane.

Darren also commented that:

I'd always stay on cycle paths and I even if the cycle path is on the other side of the road, I cross over, I'd stay the cycle path. I couldn't stand having a car behind me. Couldn't do it.

When cycling with children, people also stated a preference for using cycle paths where possible and traversed parks and estates to avoid the main roads.

With respect to the condition of cycle lanes, many participants criticised the quality and usability of cycle lanes. Richie, for instance, expressed dissatisfaction with cycle lanes in Ballincollig, citing issues such as debris.

All of the participants argued that that car owners practice poor adherence to cycling infrastructure and that cycle lanes are frequent obstructed by illegally parked cars, leading them to cycle on the road for practical and safety reasons. As Elaine explained:

[C]ertain bike lanes, I wish they just get rid of them. Because they're pointless. They're [just] parking for people. And people don't see anything wrong with it... And they're perfectly nice people, a lot of them... [But] it's just unawareness. Like, that coffee shop in George's Quay looks really nice and, sure, if people didn't park there then they'd maybe lose a lot of business. So just make it a loading bay or whatever so the drivers wouldn't expect you to be in there on the occasional day where there's no car there? Um, cause that's what really annoys me about George's Quay, is the drivers are mad that you aren't in the cycle lane, and you're kind of 'Well, I can't be in there. Otherwise I'm going to have to weave in and out'.

Some participants were particularly exercised about cars occupying cycle lanes near schools, which forced children cycling onto the road, potentially making it too dangerous for them to cycle to school at all. Participants also criticised perceived poor levels of parking enforcement by traffic Gardaí and parking wardens.

Opposition to cycle lane infrastructure is a significant source of contention. Several participants believed that the cultural dominance of cars meant that little cycling infrastructural development is slow. It was also argued that the review of infrastructural plans to appease residents produced illogical routes and cycle pathways. In addition, participants pointed out an uneven distribution of cycle lanes, with the north side of the city being particularly poorly serviced. This is perceived to diminish the attractiveness of cycling. As Evelyn explained:

There's a lot of inequity there. [T]here should be more infrastructure [on the northside of the city] and there seems to be a kind of a disconnect between [...] like not having enough cyclists on the road to justify the importance of spending on cycle infrastructure. [B]ut without cycling infrastructure people literally won't get out there.

All of the participants elaborated on their cycling behaviours and the strategies that they use to promote their own safety when navigating the city. One prominent tactic used by cyclists was to enhance their visibility, using front and rear lights and high visibility clothing and helmets. A common tactic is to cycle assertively and to take a more central or prime position on the road. Participants explained that sometimes cycling in the middle of the car lane is necessary because the sides of the road are in poor condition due to poor drainage or potholes. Another reason is to deter drivers from overtaking dangerously. For example, several participants explained that if there's oncoming traffic, they will cycle on the middle of the car lane so that drivers won't risk passing them. For example, Evelyn stated that

[cycling safely] sometimes involves having to do things like you know taking primary position when people are actively trying to overtake you or like maybe doing some like gesturing that's probably a little more forceful in order to kind of stay safe on the journey, you know?

Route choice is a method of minimising risk and routes tend to be determined by their perceived safety rather than the distance or time taken to travel. Some participants only take short trips to minimise their exposure to traffic. As mentioned above, safety concerns mean that some people will cycle mainly on cycle lanes and tend not to cycle in areas where cycle lanes are unavailable.

For some, the breadth of the road determines its safety or perceived safety, with a preference for either very wide or very narrow roads. Most participants avoid rush hour traffic where possible, particularly school traffic which is described as chaotic and dangerous. As Nora put it:

there tends to be a lot of pulling in and out of cars that are rushing and they might not always look [and lots of] cars opening doors.

Several participants described how they try to maximise their presence on the road (Egan, 2021: 26) describes this tactic as 'accentuating presence'). As Niall put it:

I try to behave as much as possible as a car. Even though I [might] have the physical space to pass, I'm still pretending that I'm bigger than I am and following the same rules that the car would follow. It just makes me feel safe when I don't have a cycle path.

Many participants spoke about their responsibility to be respectful towards other road users (see Egan 2021, who describes practices as 'displaying responsibility'). Participants described behaviours such as signalling to drivers when it is safe for them to pass or slowing down so that safe overtaking is possible. People recognised that poor cycling practices can trigger negative driver responses and stated that they tried to avoid provoking such conflict. Matthew spoke about teaching his children to cycle in a manner that prioritises positive interactions with people driving, both out of courtesy and for self-protection:

You're always just kind of teaching them to just be aware of what's going on all around you all the time and then [...] those simple things like, kind of, showing a little bit of respect [and not annoying them because] at the end of the day, you know, you're the one who's on the bike and they're the one who's in the car.

Several participants commented that they perceive drivers to be less tolerant of cyclists since the COVID-19 pandemic. As Richie put it:

I just think post COVID, I think people are... I can't explain [it]... It's intangible. I mean, I can't give you proof or facts or figures, but I just feel more people are more in a rush. People are busier. I don't know, there's just a social or collective psychological panic or something... which translates into driver behaviour... You know, I just sense something even when I'm driving the car, I can just feel, you know – and I'm not a slow driver – I just feel a sense that people are just busy, you know, all the time. So I'm less confident now...

Several participants described aggressive behaviour from people driving and most, though not all, participants spoke about experiencing some level of verbal abuse from people driving. Some participants stated that they assume an assertive or authoritative disposition when cycling. They also underscored the importance of being always vigilant, which one person described as an 'edginess' that they had to maintain. People's relaxed state of mind when cycling in protected areas contrasted with their defensive mindset when cycling in traffic. Niall for example stated that:

Like, I love going [to school with my children] by bike, but [...] it's not a relaxing period. Except for that bit on School Boy's Lane, where you can actually have be fairly relaxed. But when you were traffic, you're constantly being careful and being aware of your surroundings.¹⁰

¹⁰ School Boy's Lane is a beautiful greenway, upgraded in 2021, that connects Magazine Road and Glasheen Road.

Many participants described interacting with people driving through exaggerated gesturing, sometimes as a method of communicating one's intentions (signalling) and sometimes as a way to admonish what is perceived as a dangerous or hostile driving behaviours. Many participants described their avoidance of conflict, but some state that they have become increasingly confrontational as they gain more experience of cycling and as their confidence increases.

When asked whether they feel more or less confident cycling now than in the past (for example, a year ago), participants gave quite diverse responses. As mentioned above, some people find that cycling post-Covid has become more dangerous because road users are increasingly impatient and angry, and this has impacted negatively on their confidence when cycling. A couple of people reported that they had been involved in accidents and their cycling confidence was very negatively impacted. One participant in particular was haunted by the experience of being knocked off his bike in a hit-and-run incident and he hadn't cycled as much since that event.

Others report higher levels of confidence that corresponds with their increasing ability, skill, and experience as a cyclist. People who are accustomed to cycling in sites with a strong cycling culture describe low levels of confidence when cycling in Cork city. However, some reported increasing levels of confidence as they become accustomed to local attitudes and the behaviours of other road users and local infrastructures. Casper, for example, stated that:

Yeah, I'm definitely like getting more of a feel of what traffic is like here... I think I've got a better idea of what's Irish traffic and the drivers are like and also more have more of an attitude to kind of expect the unexpected especially if I'm going to places I haven't been yet, because the traffic situations can be kind of unclear at times.

Participants felt less confident about cycling with other people in the city because they found that the infrastructure can be challenging. For utility cycling, then, participants tended to cycle alone or with children to school if that was the purpose of the journey. However, some people did describe engaging in more social cycling with their partners, children, or friends at quieter times of the day or at the weekends. Cycling with family members on greenways was described as a particularly enjoyable experience.

Some of the participants engaged in cycling advocacy work for infrastructural improvements through reports and requests to Cork City Council. One person explained that he has submitted two requests and, although he never received a formal response, the infrastructural improvements he requested were both implemented (One was a request to smoothen a very uneven road surface and the other was to remove a boulder blocking a pathway). Another participant raised the issue of dangerous driver behaviour through emails to the Council. Subsequently he got involved with the Cork Cycling Campaign and now participates in more cycling advocacy work through the organisation.

Cultures of Cycling

Throughout the data, there is evidence that people regard Cork as having a low cycling culture. Many participants observed that we need to educate people about the benefits of cycling practices and that changing current attitudes towards cycling is a huge challenge. As Jack argued, the association between affluence and car ownership in the last few decades has undone the strong cycling culture that used to exist in Ireland. He observed that,

as Irish people [we] are not used to the culture of cycling, we've forgotten about [it]. I mean, 20 years ago everybody cycled. At 7 years of age you got it a bike, you know, and the world was your oyster at that stage.

Darren who is a secondary school teacher, observing very low cycling rates amongst the student body in his school, asked his students about their lack of motivation to cycle and they responded, 'We don't want to cycle. We're not old people'. This underlined to him that cycling is perceived as 'uncool' by young people.

Interestingly, several of the participants in the study had grown up in countries and cities with a strong cycling culture, including the Netherlands and Belgium. Those participants emphasised that cycling was a very routine activity for them throughout their lives. They acknowledged cycling as a 'normal' practice or a 'habit' that they engaged in rather unreflexively. As Ava described it,

[M]ost of my childhood we would use the bike a lot... Umm, for me it's more acceptable or normal that I use the bike, whereas maybe for people who have always been here [in Cork city] and always use the car here, it might be more difficult.

They also recognised that these prior experiences coloured their enjoyment of cycling in Cork city. Johanna, for example, explained that:

[I'm] coming from a very different, I would say, biking-wise, a different background and there's not a biking culture here [in Cork] because the car is the king of the roads. [A]ctually it's funny ...because you take things for granted after while...[Cycling], it's normal, you know? It's part of you. I also realised the habits you have from biking, and what you used to do is really influencing very much what you do nowadays.

Describing her realisation that she was in a city with low cycling rates, Johanna observed social differences in people's cycling practices between Cork and the city in which she grew up, including observations about social difference such as gender and age:

I started to look around me and I noticed they're not so many women biking here in Cork and that's weird for me, that's really weird... Also, not older people, and I really come from a culture where if you cannot bike anymore, this is huge for elderly people. Like my parents are 89 and 84 and they still bike almost every day, and it's biking 40 to 60 kilometres. And they also say 'the moment we can't bike anymore, [our lives are] over...'. Then, it's a very important skill to keep going as long as you can go, as long as possible.

She also commented that, although investment in cycle lanes is important for promoting cycling in the city, she sees attitudinal barriers as equally significant:

It's the attitude... People turn around on Saint Patrick Street! Sorry, I'm so flabbergasted! When I see this on the busiest street of the town or at the Grand Parade – they turn around their car? I

think what the heck are you doing? It's the private cars [that's] for me, a challenge and they are very annoyed when you bike that they give you ugly faces, and I think 'Ohh, they don't like it when I'm biking here!'.

Many of the Irish-born participants referenced very positive experiences they had of cycling in cities with a strong cycle culture. For example, Mark explained that his daughter, who is now in her twenties, had never cycled. However, she is currently a student in Utrecht, which is one of the foremost cycling cities in the world, and she now uses her bike regularly. He described the bicycle in Utrecht as a social necessity:

You *have* to have a bike in Utrecht, otherwise you're screwed. You use it for everything, you use it for shopping, she uses the bike to go to cycle into the city, to go studying, she uses it for socialising...

He describes his great pleasure at observing Utrecht's strong cycling culture:

I mean, seeing all these people that use it like for day-to-day everything... And seeing people of all ages on bikes, people in their 70s and 80s still riding bikes is phenomenal. I mean, the train station at Utrecht has got a multi-storey bike park, which holds 12 and a half thousand bikes. It, just, warms the heart, you know, it's just brilliant.

Jack, who had cycled in cities throughout Europe, suggested that:

every one of them that gives out about cycling should be caught and fired into Holland for a while... Give him two days of holiday in Holland and tell him to learn how cycle because it just changes your whole mindset.

Some of the participants reflected on their own successful efforts to influence people to take up cycling, which might be considered a kind of informal cycling advocacy. Sometimes, their influence is described as more subtle, for example, Nora observed that:

I think [...] you do influence other people. Because I cycled, my sons cycled and still cycle, and because I cycled my niece – who lives not too far away – she cycled to UCC. She would never have cycled to UCC except that her aunt was cycling to UCC and she couldn't say 'it's too far'. And I know some of my friends are kind of influenced by me as well in that a couple of them have bought bikes through the bike to work scheme. So I think you do influence people definitely, you know?

Other efforts are more intentional in promoting cycling. As Evelyn stated:

I've kind of made it my mission – and I've been fairly successful – to get more people out cycling. I've convinced a good few friends to take up cycling and my sister [and I] describe ourselves as like one-woman cycling experts, trying to get particularly other women [cycling] and [to get] other people from disadvantaged areas onto bikes.

Another participant reflected on the positive contributions of the Cork Cycling Campaign for changing mindsets, thereby contributing to the promotion of a Cork cycling culture. Nora commented that:

I think the cycling campaign and all those are doing great work because, you know, before I used to think, 'Oh, I'm a bit of a nuisance here on the road now' and then I've kind of read these [reports] and I think 'Ohh, I'm as entitled to actually to be ... maybe I'm *more* entitled to be on the road than the cars'. You know? So I think they do a lot of good.

The potential of e-bikes for promoting an uptake in cycling, and the radical possibilities of the e-bike for changing cycling cultures, was noted by several participants. Mark, for example, recounted that:

there's a few people that have actually started cycling that I never thought would ride a bike [...] My next door neighbour, for example, invested in an e-bike and it's brilliant. We did the Santa Cycle together there a couple of weeks ago. And my neighbour, it's changed her life, this e-bike. She uses it everywhere. You know, she uses it for cycling back into Blackrock to visit her mum and dad. You know, she uses it for the odd bit of shopping and the e-bike, it encourages people, doesn't it? To get out on the bike where they wouldn't normally have done that.

The pleasures of cycling on greenways was also noted as an enjoyable pursuit in itself, but also important as an opportunity for encouraging more people to take up cycling more frequently. Several participants commented that they themselves had taken up cycling in the city after first cycling on the Waterford Greenway and others knew of people who had been similarly motivated to (re)commence cycling.

Interesting, gender did not come through as a significant factor in how people spoke about their cycling experiences until they were prompted. Then, people did comment on the relatively lower rates of women cycling. Interestingly, these lower rates were often attributed to aggressive driving behaviours. Richie for example, comments that:

Sadly, to be honest with you, I don't see enough women cycling... And I don't blame women, really. If they, you know, if they you know the aggression they must [and] again, 99% of aggression on the road, I guess, is not from women drivers... I think if a woman is driving a car and witnesses another cyclist getting the abuse, I can understand why they would stay away from cycling, you know?

One of the male respondents, Luke, felt that it might be more difficult for women to assert themselves in order to claim their rights as a road user:

You know, it's a certain mentality – aggression, establishing yourself, showing dominance in your area for safety, you know, that's definitely an element of cycling [and] for people who are outside that [male] demographic [it] is a scarier experience.

Elaine also commented on how she experiences driver aggression, but she believed that drivers were more likely to be aggressive towards her because she is female and they didn't anticipate retaliation from her:

I suppose sometimes when you get a bit of aggression from a driver like I've... A couple of months ago, roaring beeping and roaring out his window at me to go to the left and he wanted me to cycle on George's Quay on the cycle lane, which had cars on it and I stayed in front of him and he roared at me out the window and I roared back to my kind of thought. Would you do that if I was 6 foot four guy? [...] Yeah, I would say definitely being female, probably people are more likely to challenge you. Until you roar back at them [Laughs]

Evelyn also commented that she perceives differential treatment when she is cycling in the city:

I've had experiences of drivers who have [been] a bit misogynistic. A person who was reversing without properly checking their mirrors and couldn't see me behind them, I, you know, called

them and they were like 'Ohh sweetheart I was just trying to curb her'... Like, 'Oh, honey, I know how to drive'. As though he wasn't about to hit me!

Similarly, I've had experiences where like people will kind of roll down the window and kind of shout as they're like driving past or whatever and I have no doubt that there is probably some element of like umm, some perception that perhaps I might be less capable. We know that they claim that women drivers are less capable and I've no doubt that that perception kind of plays out a little bit.

With respect to class differences, although this did not come through as a prominent theme in the findings, there were some notable observations. Evelyn, for example, believed that people typically perceive cycling as a middle class activity and this motivated her to promote cycling in so-called 'disadvantaged' areas, in part as an element of a project to bring back cycling culture:

I think it's kind of a reclamation in a sense. Because I do think that the idea of cycling belonging to the middle classes and road bikes and really expensive bikes is kind of... And there's a valid reason for it... But it kind of erases what we know is a very rich history of cycling. Like we used to have messenger boys and echo boys and loads of people used to get out and cycle all the time and it's not a reality any longer.

For Evelyn, the higher symbolic status of the car than the bike is a problem of a capitalist system than promotes spending and debt:

I'm going to slip into accidental Marxism now, but I think the way that the capitalist system is set up, and the way that the working classes are kind of set up at present, it's forcing people into cars who don't necessarily want to drive. And with that comes added burden of [...] debt and costs associated with it. And so you do have people, who are in very expensive cars, who really can't afford to, but have no choice.

A couple of participants commented on the perceived social, cultural and symbolic status of different types of bikes. As Ava observed, with respect to how people driving treat her on the road,

I wonder if part of it is the bike I use. Because I have two bikes, one is a normal mountain bike, a raggedy mountain bike. And then the electric bike is a cargo bike where it's clear that I carry somebody else, a smallie. And so with the electric bike I feel I get a lot more patience and respect because they're seeing me, like, as the mother taking the child to school, going to work, you know, very vulnerable in a sense, but also taking a lot of space.

With the mountain bike, I don't know, it's like almost my socioeconomic status changes. And so all of a sudden, I'm not the mother anymore because it's not visually evident that there is, you know, another helmet, that there is a space for a small one. Probably my position is different, it's [...] maybe a little bit more aggressive. And I have much more positive, many more positive experiences with the electric bike than with the mountain bike.

These kinds of observations are fascinating for giving an insight into the symbolic status of the bicycle locally, which would be interesting to further explore as a way of understanding local cycling cultures and environments (see Hoor, 2022).

Cycling and Childhood

A strong theme within the qualitative data was childhood and this encompassed three sub-themes, namely: cycling as a child, cycling with children, and cycling by children.

All participants had learned how to cycle as children. For most participants, this happened between the ages of 5 and 8. Interestingly, the participants from The Netherlands and Belgium learned at age 3 to 4 years. All participants spoke about their experiences of cycling as children with a strong sense of nostalgia. Cycling was remembered as an activity that all children engaged in and participants cherished the freedom and independence cycling allowed them as children to visit and hang out with friends and to explore their local areas. Several participants commented that the roads were much quieter and safer in their childhoods than they are now. For example, Richie commented that:

[I]t was a very much carefree experience. I'd get on my bike at the age of seven or eight, I'd cycle around the estate. I'd cycle from Ballincollig out to Ovens, and as I got older I went further and further afield. So it was very carefree. Yeah. I can't remember, to be honest with you, I don't recall any one instance of cycling a bike in the 80s or 90s where I feared for my life or got scared or was involved in an accident.

Four of the participants had continued cycling throughout their lives, from childhood through adolescence and into adulthood (The participants from Holland, Belgium, and Italy, and one Irish-born participant). Many participants stopped cycling as teenagers and experienced a long hiatus before taking up cycling again. Their motivations to recommence cycling were linked to various biographical events, including commuting to work or third level education, moving into a location where cycling was more convenient, or having children. Others started cycling for leisure, exercise or mental health benefits.

The common practice of stopping cycling as a teenager was connected to concerns about self-image and the perceived 'uncoolness' of cycling amongst peers. For example, Luke explained that:

I was living in Rochestown, so we'd walk into Douglas and then if you're meeting a girl like that was social suicide [to cycle to meet her], like, you know what I mean? You couldn't turn up sweaty. And then we started going to town [...] so cycling into town, that was like going to Beirut, I suppose, according to the parents.

Some comments indicate that low levels of cycling amongst teenagers continues to be apparent. For example, Richie explained that his son is the only person in his class of 120 pupils that cycles to school. Darren, the teacher, explained that he had done a quick 'show-of-hands' survey in his school, and found that no pupil cycled to school, although several travelled to school on scooters. He reasoned that scooters are 'culturally trendy' at the moment, but also that one can use the scooter on footpaths, but one must cycle on the road, which can be 'scary'. He also admitted that he would not encourage children to cycle:

[I]f I had a kid, I wouldn't get them cycling. I'd tell them, 'Stay off the roads. It's just too dangerous'. So I guess if no one starts off cycling, people aren't familiar with it [and] then it's hard to get people into it at a later age... And I guess then a culture forms where cycling isn't a part of it.

For those who choose to cycle with children, they value the opportunity to connect with them and report that the children enjoy the cycling experience and being together. For example, Niall recounts that:

It's something I was thinking about recently, that I could remember three of us being in the back of Dad's car and there being territorial squabbles and while these two [children] are now are fairly sandwiched into the one seat at the back of the cargo bike, they don't seem to squabble as much as we did in my memory anyway.

Elaine also mentioned the pleasure of cycling with her son in the child seat, and smiled at the memory of feeling her toddler son's head 'thump into [her] back', when he used to fall asleep as a bike passenger.

Matthew also spoke about the fun he had bringing his children (who are now grown up) to school in a cargo bike:

It was very unusual at the time. And I'm fairly sure a lot of people thought that I was completely insane, like, you know? ...Yeah, it was great. And just I have so many great memories of those times as well? And I'm pretty sure [my children] do too. And, you know, the fact that it was unusual as well [...] people would see and they be like [waving]. You know, they used to love that as well. Like, just that attention that they used to get, you know?

Discussion and Conclusions

Findings generated from the interview data present cycling experiences in oftentimes positive terms; cycling is associated with freedom and independence and is generally valued for enhancing people's physical and mental well-being and quality of life. Cycling is strongly associated with appreciation for the local environment and people show a motivation towards increasing cycling that is linked with concerns about climate change and a drive towards decarbonisation. Cycling is also presented as a practical, low cost, and convenient mode of transport. These findings resonate with research that identifies people cycling as the happiest commuters. Wild and Woodward (2019), for example, in their study with e-cyclists found very similar patterns as the ones identified above. They specify four reasons why cyclists commonly describe their commute in terms of enjoyment and pleasure, namely: a high degree of commuting control and the sense of freedom and independence this confers; positive sensory stimulation associated with slower commutes that enable interaction with the environment coupled with the kinaesthetic pleasures and exhilaration coming from self-generated speed; the 'feel better' effects of moderate intensity exercise; and greater opportunities for social interaction. There is striking similarity between their findings and our study.

However, Cork city is not yet a city in which people feel wholly safe and comfortable cycling. The data corroborates research showing that good cycling infrastructure is perceived essential for promoting cycling. In our study, recent infrastructural investments are roundly celebrated, but the quality of cycling lanes and cycling facilities in the local environment is perceived to be variable.

Given this sometime difficult cycling environment, the thematic analysis reveals a range of cycling behaviours and practices that people deploy in navigating the city. A key focus within participants' narratives is on the diverse strategies they employ to minimise risk and to enhance their safety while

cycling. Key themes include a focus on visibility and equipment, adaptation to local traffic culture, defensive cycling tactics, confidence and assertiveness as a road user, and considerations of route choice. These findings resonate with research conducted by Egan (2021), who explores how cyclists' negotiate their 'precarious entitlement' to public space through 'individual, everyday struggle for recognition as a legitimate public space user' (p23). This, he argues, manifests in cyclists' attempts at 'provoking responsibility' through various practices, namely: accentuating their presence (taking central space on the road, for example); asserting entitlements (through gestures or shouting, for example); indicating transgression (such as pointing out a road safety infraction); punishing transgression (such as cursing at someone or taking a photo and reporting to authorities); or displaying responsibility (performing 'responsible'/'good' cycling)(ibid). Cyclists engage in these practices in order to be respected as people who have entitlement to public space. They are socially and culturally significant practices in a country with low cycling rates, where car-dominance is assumed, and relations between people cycling and other users of public space are sometimes fractious.

Cork is generally perceived as having a low cycling culture, therefore pro-cycling policy needs to contribute to the (re)production of cycling as an ordinary, everyday activity and this is connected with recognising the perceived potential of Cork as a cycling city.

Cycling and childhood is an important theme in the data: positive experiences of cycling as a child and cycling with children contrast with concerns about children cycling alone in current environments, which are perceived as too unsafe. This has interesting implications for pro-cycling policy-making, which is explored in the next and final chapter.

6. Conclusions and Recommendations

This small-scale research study set out to develop social scientific knowledge about cycling as a social practice, focusing on Cork as a case study of an Irish regional city, with a view to informing pro-cycling policy.

The generally positive disposition towards cycling evidenced in the survey and interview data shows that Cork has excellent potential as a cyclable city. However, the research also indicates that Cork city is not yet a wholly positive cycling environment for people with lower levels of cycling skill, experience, or confidence. Making people feel safe while cycling is essential and the research findings corroborate results from past studies in starter cycling cities that good cycling infrastructure and accessible cycling facilities, such as secure bike parking, are necessary for making cycling a real alternative to car dependency.

Furthermore, the research shows that making a city bicycle-friendly means thinking beyond cycling infrastructure. Our focus on socio-cultural meanings and values in this study illuminates cycling pleasures, such as: the sense of freedom that people associate with cycling; the positive relationship between cycling and well-being; the sense of social connection that cycling makes possible; the sense of appreciation of the environment that cycling nurtures; the kinaesthetic gratifications that come from pedalling a bike; and, the joy of cycling as a child. Linked with ideas about place attachment, social integration, and quality of life, these positive dimensions of urban cycling encourage us to think more expansively about what cycling means *in* a city and *for* a city. They prompt us to think creatively about the kinds of cycling environments we might enjoy and to think imaginatively about the place of cycling in urban life in the future.

Drawing on the research presented in this report, recommendations for policy and practice are outlined below.

1. Fostering cycling culture in starter cycling cities demands **strong political leadership**.
 - Immersive study activities for policy-makers and planners could be influential for changing mobilities thinking in favour of cycling
 - Knowledge-sharing and mentoring opportunities with more advanced cycling cities are potentially valuable for learning about possible and proven cycling solutions (see <https://handshakecycling.eu/>, for example)
 - An integrated approach is necessary to shift Ireland away from car-centric thinking in policy-making and therefore the inclusion of stakeholders from academic, private, public and voluntary sectors at cycling planning conferences and events is necessary
 - The appointment of a bicycle mayor, who can represent cycling interests and collaborate with residents, activists, government and industry to advance pro-cycling policy, is a valuable model. Young bicycle mayors (under 18 years old) can also be appointed to better include the perspectives of children and young people (see <https://bycs.org/bicycle-mayor/>)
 - The recently-proposed European Declaration on Cycling may helpfully guide future policy-making.¹¹

¹¹ https://transport.ec.europa.eu/system/files/2023-10/European_Declaration_on_Cycling.pdf

2. **Cycling infrastructure** is vital for people to feel safe and confident.
- Continued investment in and development of cycling infrastructures is fundamental to the realisation of the city's cycling potential
 - Cycling infrastructures should be based upon five basic design principles: cohesion, directness, safety, comfort, and attractiveness¹²
 - Cycle lanes are highly valued and should be monitored for parking infringements and dangerous debris
 - In evaluating existing provision, the narrated journey method is valuable for 'ridealong' cycle audits of current infrastructure, since this enables an intimate insight into people's experiences of navigating the city by bike and their feelings of safety and comfort while cycling
 - Increasing cycling rates means a bigger demand for secure bike parking facilities, which should be integrated with other transport modes
 - Infrastructure must be conceptualised in a more holistic way that encourages inclusive access to mobility.
3. In advancing pro-cycling policy, **the rights of all public space users** must be recognised and protected.
- Urban planning and transport systems must – by design – be inclusive of people walking, wheeling, and cycling and should prioritise their needs
 - Cyclists have limited legal protection in Ireland by comparison with other jurisdictions. Improving the safety of cyclists means ensuring their protection through legislative changes. For example, the 'Hierarchy of Care for Road Users' gives more vulnerable road users additional legal protection on the roads, and this could be influential in shifting away from car-centric thinking
 - In order to shift from car-dominance, traffic calming and traffic evaporation measures would be effective. For example, Bordeaux is pursuing a traffic 'soothing' strategy, which includes the adoption and enforcement of 30 kph zones in urban areas; increasing pedestrian zones; closing streets near schools before and after the school day; and car-free Sundays (on the first Sunday of every month)¹³
 - Interventions relevant to problematic driver behaviours are necessary if more people are to feel safe and comfortable while cycling
 - This rights-based, hierarchical approach is also pertinent where problematic cycling behaviours are perceived to infringe on the sense of safety of other public space users.
4. In advanced cycling cities, being on a bike is a normal, everyday activity for all kinds of people and cycling has extraordinary potential to provide mobility for all. In order to diversify cycling, **social inclusion goals** must be considered in future pro-cycling policy and practice development.
- Cycling infrastructures and facilities must be developed in geographic areas thus far neglected, particularly in areas of socio-economic disadvantage. This is important in terms of

¹² These five principles are identified in the Dutch CROW Design Manual for Bicycle Traffic. See <https://dutchcycling.nl/expertises/cycling-infrastructure/>

¹³ See <https://handshakecycling.eu/news/bordeaux-its-way-becoming-soothed-city>

achieving equity, but it also valuable for countering narrow stereotypes of cycling as a middle-class pursuit

- A commitment to age-inclusive cycling (from '8 to 80') and gender inclusive cycling should inform policy and practice development
- The active mobility of older people can be advanced by drawing on examples of good practice such as Cycling without Age (see <https://cyclingwithoutage.org/> and the Irish chapter at <https://cyclingwithoutage.ie/>)
- Inclusive cycling campaigns can broaden perspectives on the potential of cycling. Storytelling methods may be effective, such as short cycling promotion advertisements on national TV, radio, print and social media, profiling different types of cycling by different types of people
- For children and young people, school runs are an obvious focus point for increasing modal share now and in the future. Serious efforts towards disincentivising car-based school runs should be made and traffic evaporation near schools should be prioritised. The *Safe Routes to Schools* initiative is particularly valuable and deserves increased investment
- Raising cycling's image amongst young people is important. For example, *An Taisce's Green Schools #andshcycles* initiative is hugely significant for challenging barriers to cycling for girls and for encouraging young women to cycle. Similar targeted approaches would be valuable for changing cycling's image for young people
- The student population is a promising target group; student cycling ambassadors and other student-centred initiatives could foster more positive attitudes towards cycling, but providing good cycling infrastructure near universities and colleges is a necessary first step (see Greene, 2023).
- Expanding opportunities for people to try different bikes (including e-bikes, cargo bikes and cargo e-bikes, and adapted bikes) through workplace and community initiatives would be valuable for showing the potential of cycling to people who might not otherwise see cycling as feasible, convenient or practical
- Measures that improve the affordability of different bikes – including their purchase, repair, and rental – are necessary to increase cycling uptake for all social groups. This may include already successful methods, including workplace schemes (including the Cycle to Work Scheme) and bikeshare schemes, but could be expanded to include more generous and expansive methods.¹⁴

5. **Communicating the benefits of cycling** in a more holistic way is valuable for showing the numerous advantages of the bicycle as a sustainable mobility (beyond being 'merely' a mode of transport. In particular, fun events can change perceptions of cycling in the city and expand the image of cycling in positive ways.

- A bicycle marketing campaign can inspire and motivate people to take up cycling and connect cycling practices to local urban identity (Munich's 'Radlhauptstadt München' campaign is a good example)¹⁵

¹⁴ The Irish Cycling Advocacy Network (cyclist.ie) for example argues for a more inclusive and equitable bike purchase scheme that allows children, retirees, those with limited mobility, carers, unwaged people and others to own bikes. See <https://cyclist.ie/2023/08/cyclist-ie-pre-budget-2024-submission/>

¹⁵ See <https://www.youtube.com/watch?v=dPeTkptuwSU>

- Regular fun events that celebrate the joy and pleasure of cycling deserve support, such as bike parties, festivals, and car-free days¹⁶
- The environmental benefits of cycling with respect to quality of life in the city is important to communicate, such as contributing to better air quality and enjoying the city's green spaces.

6. **Pro-cycling advocacy** groups do extraordinary work in developing and disseminating knowledge about cycling in Ireland. These organisations are vital for showing us how a large-scale shift to sustainable, active mobilities might become possible.

- At the national level, cyclist.ie - The Irish Cycling Advocacy Network offers exceptional expertise in cycling policy, research, infrastructure planning and design, and behavioural change. It is a vitally important resource that requires sustained support, including long-term, permanent funding for the role of the National Cycling Coordinator.
- Listening to local cycling advocacy groups, who can offer unique perspectives on a city's cycling potential, through regular and sustained consultation is hugely important
- Resourcing of local cycling advocacy groups for different initiatives is crucial
- Cycling festivals are a unique space for bringing together cycling activists and advocates and for celebrating cycling pleasures in a fun and impactful way and deserve the highest support from local government and sponsors
- Strong connections between cycling advocacy groups and other collectives that share common interests and goals – such as environmental concerns, social inclusion ambitions – should be fostered with the aim of maximising impact and combining energies and knowledge

7. Continuing **research** into cycling experiences from a range of perspective is valuable for understanding barriers to cycling and the meaning of cycling in everyday life.

- Undertaking community-engaged research with cycling advocacy and environmental advocacy organisations enables connection with a diverse range of experts locally and nationally and amplifies the voices of people who cycle regularly
- Partnership with local government in research activities opens up potentially transformative conversations between policy-makers, researchers, and cycling advocates and fosters good relationships for developing evidence-based and evidence-informed cycling policy
- Interdisciplinary approaches that include a social scientific perspective facilitate fresh insights into cycling that move beyond seeing cycling as utility or as merely a mode of transport
- Using creative research methods enables new ways of seeing cities' cycling potential

¹⁶ In the local context, the pro-cycling collective *Republic of Bike* host a regular 'Bike Bop', for example. See https://twitter.com/rep_of_bike

References

- AECOM (2017) *Cork Cycle Network Plan Cork*: AECOM, Available at <https://www.corkcoco.ie/sites/default/files/2022-05/cork-metropolitan-area-cycle-plan-final-report-january-2017-pdf.pdf>
- Aldred, R. (2015). A Matter of Utility? Rationalising Cycling, *Cycling Rationalities, Mobilities*, 10(5), 686–705. <https://doi.org/10.1080/17450101.2014.935149>
- Aldred, R., and Jungnickel, K. (2014). Why culture matters for transport policy: The case of cycling in the UK, *Journal of Transport Geography*, 34, 78–87. <https://doi.org/10.1016/j.jtrangeo.2013.11.004>
- Bicalho, T., and Silva, C. (2019). Planning for cycling: Examining planners’ attitudes towards the cycling potential of their city, *Transportation Research Procedia*, 41, 750–761. <https://doi.org/10.1016/j.trpro.2019.09.124>
- Brown, K., and Spinney, J. (2010). Catching a glimpse: The value of video in evoking, understanding and representing the practice of cycling. In *Mobile methodologies* (pp. 130-151). London: Palgrave Macmillan UK.
- Buck, M., and Nurse, A. (2023). Cycling in an ‘ordinary city’: A practice theory approach to supporting a modal shift, *International Journal of Sustainable Transportation*, 17(1), 65–76. <https://doi.org/10.1080/15568318.2021.1983674>
- Chatterjee, K., Sherwin, H., and Jain, J. (2013). Triggers for changes in cycling: the role of life events and modifications to the external environment, *Journal of transport geography*, 30, 183-193.
- Central Statistics Office (2022) Interactive Data Visualisations: Towns: Cork City and Suburbs. *Census 2022*. Available at <https://data.cso.ie/table/SAP2022T1T1ATOWN22> [Accessed October 2023]
- Cork City Council (2021) *Air Quality Strategy 2021-2026 Cork*: Cork City Council Available at <https://publications.corkcity.ie/view/162487825/> [Accessed October 2023]
- Cork City Council (2023) *Residential Survey: Survey carried out by BandA [Behaviour and Attitudes Survey Company] on behalf of Cork City Council, Part of the Cork City Climate Action Plan 2024–2029* Cork: Cork City Council. Available at: <https://publications.corkcity.ie/view/618017432/> [Accessed October 2023]
- Delaney, C. (2022) The importance of grassroot initiatives: Cork Cycling Campaign. Available at <https://ecf.com/news-and-events/news/importance-grassroot-initiatives-cork-cycling-campaign> [Accessed October 2023]
- Egan, R and Hackett, J. (2022) The Social Practice and Regulation of Cycling as “A Boy’s Thing” in Irish Secondary Schools, *Active Travel Studies: An Interdisciplinary Journal*, 2(2): 6, 1–20. DOI: <https://doi.org/10.16997/ats.1121>
- Egan, R. (2021). ‘Provoking responsibility’: The struggle for recognition as an everyday cyclist in Dublin City, *Geoforum*, 127, 23-32.
- Egan, R. (2022). Sacrificing entitlement for self-preservation: ‘privatising vulnerability’ as a cyclist in Dublin, *Mobilities*, 17(6), 780–794. <https://doi.org/10.1080/17450101.2021.1985379>
- Egan, R. and Philbin, M. (2023) ‘It’s not disrespect – it’s putting you at risk’: when right meets risk in the field of cycling research and policy, *Health, Risk and Society*, 25:5-6, 199-215, DOI: [10.1080/13698575.2022.2138278](https://doi.org/10.1080/13698575.2022.2138278)
- Egan, R. and Caulfield, B (2023) *Exploring Public Opposition to Active Travel Planning in Dún Laoghaire-Rathdown: Synthesis Report*, Dublin: Trinity College Dublin Available at <http://hdl.handle.net/2262/102927> [Accessed October 2023]

- Egan, R., and Philbin, M. (2021). Precarious entitlement to public space and utility cycling in Dublin, *Mobilities*, 16(4), 509–523. <https://doi.org/10.1080/17450101.2021.1913067>
- Government of Ireland (2018) *Project Ireland 2040 National Planning Framework Dublin: Government of Ireland* Available at <https://www.npf.ie/wp-content/uploads/Project-Ireland-2040-NPF.pdf> [Accessed October 2023]
- Government of Ireland (2019) *Climate Action Plan 2019* Available at <https://www.gov.ie/en/publication/ccb2e0-the-climate-action-plan-2019/> [Accessed October 2023]
- Government of Ireland (2021) *National Development Plan (NDP) 2021-2030*. Available at: <https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/> [Accessed October 2023]
- Government of Ireland (2022a) *National Sustainable Mobility Policy* Available at: <https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/> [Accessed October 2023]
- Government of Ireland (2022b) *Climate Action Plan 2023 (CAP23)* Available at <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/> [Accessed October 2023]
- Government of Ireland (2023) *Ireland's 2023 Voluntary National Review - Sustainable Development Goals* Available at https://hlpf.un.org/sites/default/files/vnrs/2023/VNR%202023%20Ireland%20Report_1.pdf [Accessed October 2023]
- Greene, N. (2023) *The role of motivations and perceived ability to cycle as a mode of transport in an emerging cycling culture The case study of Cork Metropolitan Area, Ireland*. Unpublished Masters thesis. Department of Human Geography, Lunds Universitet. Available at: <https://lup.lub.lu.se/student-papers/record/9117435/file/9117438.pdf> [Accessed October 2023]
- Hoor, M. (2022) The bicycle as a symbol of lifestyle, status and distinction. A cultural studies analysis of urban cycling (sub)cultures in Berlin, *Applied Mobilities*, 7:3, 249-266, DOI: [10.1080/23800127.2020.1847396](https://doi.org/10.1080/23800127.2020.1847396)
- Kent, J. L. (2022). The use of practice theory in transport research, *Transport Reviews*, 42(2), 222–244. <https://doi.org/10.1080/01441647.2021.1961918>
- Madden, R. (2022) *Cycling in Cork City – informing policies for improvement of transport infrastructure*, Cork: University College Cork Available at: <https://www.ucc.ie/en/media/research/carl/RossMaddenCARLReport2022.pdf> [Accessed September 2023]
- National Transport Authority (2020) *Cork Metropolitan Area Transport Strategy 2040* Dublin: National Transport Authority
- National Transport Authority (2023) *National Household Travel Survey 2022 Final Report* Available at https://www.nationaltransport.ie/wp-content/uploads/2023/08/NTA_NHTS2022_IpsosReport_28July2023.pdf [Accessed October 2023]
- Nello-Deakin, S. (2020). Environmental determinants of cycling: Not seeing the forest for the trees?, *Journal of Transport Geography*, 85. <https://doi.org/10.1016/j.jtrangeo.2020.102704>
- O'Tuama, D. (2022) *Climate Action Plan 2023 – Cyclist.ie (Interim) Response*, 23rd December 2022, Available at: <https://cyclist.ie/2022/12/climate-action-plan-2023-cyclist-ie-interim-reponse/> [Accessed October 2023]
- OECD (2022) *Redesigning Ireland's Transport for Net Zero: Towards Systems that Work for People and the Planet*, OECD Publishing, Paris, <https://doi.org/10.1787/b798a4c1-en>
- Piras, F., Sottile, E., and Meloni, I. (2023). Perceived importance of facilitators to cycling: the case of a starter cycling city in Italy, *Transportation Research Procedia*, 69, 416–423. <https://doi.org/10.1016/j.trpro.2023.02.190>

- Ravensbergen, L., Buliung, R., and Sersli, S. (2020). Vélomobilities of care in a low-cycling city, *Transportation research part A: policy and practice*, 134, 336-347.
- Silva, C., Teixeira, J., and Proença, A. (2019). Revealing the Cycling Potential of Starter Cycling Cities. *Transportation Research Procedia*, 41, 637–654. <https://doi.org/10.1016/j.trpro.2019.09.113>
- Sottile, E., Piras, F., Calli, D., and Meloni, I. (2021). Why don't Italians cycle to work? An experimental analysis, *Case studies on transport policy*, 9(1), 362-373.
- Spinney, J. (2021) Understanding Urban Cycling: Exploring the Relationship Between Mobility, Sustainability and Capital London: Routledge
- Spinney, J. (2022). Situating the mobility fix of contemporary urban cycling policy. In *Routledge companion to cycling* (pp. 232–240). London: Routledge
- Spotswood, F., Chatterton, T., Tapp, A., and Williams, D. (2015). Analysing cycling as a social practice: An empirical grounding for behaviour change, *Transportation Research Part F: Traffic Psychology and Behaviour*, 29, 22–33. <https://doi.org/10.1016/j.trf.2014.12.001>
- te Brömmelstroet, M. te, Mladenović, M. N., Nikolaeva, A., Gaziulusoy, İ., Ferreira, A., Schmidt-Thomé, K., Ritvos, R., Sousa, S., and Bergsma, B. (2022). Identifying, nurturing and empowering alternative mobility narratives, *Journal of Urban Mobility*, 2, 100031. <https://doi.org/10.1016/j.urbmob.2022.100031>
- Walker, I., Tapp, A., and Davis, A. (2022). Motornomativity: How Social Norms Hide a Major Public Health Hazard. *PsyArXiv*, December 14 [Preprints] Available at: <https://doi.org/10.31234/osf.io/egnmi>, [Accessed September 2023]
- Wild, K., and Woodward, A. (2019). Why are cyclists the happiest commuters? Health, pleasure and the e-bike, *Journal of Transport and Health*, 14, 100569.
- Willis, D. P., Manaugh, K., and El-Geneidy, A. (2015). Cycling under influence: summarizing the influence of perceptions, attitudes, habits, and social environments on cycling for transportation, *International Journal of Sustainable Transportation*, 9(8), 565-579.

Appendices

Appendix A: Socio-Cycle Interview Questions

1. Tell me about your experiences of learning how to cycle. (Prompts: Do you remember cycling in your childhood? Did you learn later in life?)
2. Tell me about typical journeys you take on your bike these days (Prompts: Do you cycle for leisure? For utility/commuting purposes?)
3. Describe the routes you regularly cycle (Prompts: cycling in the city, cycling for leisure outside the city, using cycle paths, perceptions of danger/safety)
4. What do you like about cycling?
5. What do you dislike about cycling?
6. Do you usually cycle alone or with others? (Prompts: Is cycling a social activity or something undertaken for convenience?)
7. How do you feel other road users perceive you as a person cycling? How do other road users treat you when you cycle? (Prompts: What kinds of attitudes are prevalent in relation to cycling/people who cycle?)
8. Do you cycle more often or less often than you did in the past? For example, a year ago? (What prompted this change?)
9. Do you feel more confident or less confident cycling now than you did in the past (12 months ago)?
10. How do you feel your cycling experiences are impacted by who you are as a person? (e.g. gender, age, ethnicity, etc.)
11. How would you describe the sensation of cycling to someone who has never cycled?
12. How does the environment in which you cycle impact on your mood? (e.g. roads, cycle lanes, buildings, natural surroundings, etc.)
13. Do you have any questions for me?
14. Is there anything you would like to add?

Appendix B: Interview Questions for Narrated Journeys

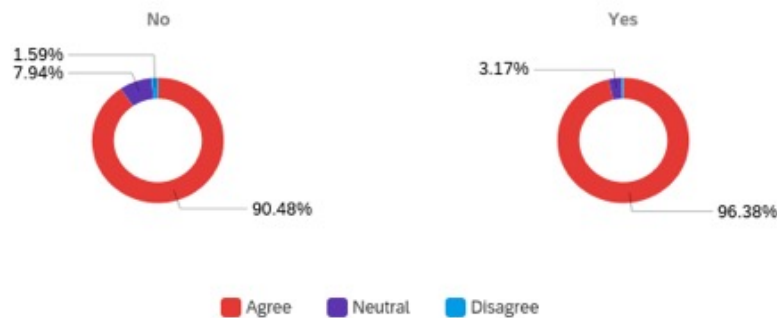
1. Tell me about this particular route. (Why did you choose to record this route? Why is it important?)
2. If you had to choose one specific moment from this route, explain which one and why it is important to highlight (for positive or negative reasons)?
3. What is the most significant building that you encountered on this route and why?
4. What was the most significant element from nature that you encountered on this route and why?
5. How would you describe your general mood as you were cycling this route? What feelings were to the fore? Was your mood different at the end of route than it was at the start of the route? How so?
6. How did the experience of filming this journey change how you thought as you were cycling this route, if at all? (Prompt: Did you feel more aware of your surroundings, your feelings while cycling, or other road users because it was being filmed?)
7. What did you like about cycling this route?
8. What do you dislike about cycling this route?
9. How do you feel other road users perceived you cycled this route? How did other road users treat you as you cycled? (Prompts: Is there an encounter that stood out as particularly significant? What kinds of attitudes are prevalent in relation to cycling/people who cycle?)
10. Would you be confident cycling this route with a child? Would a child be capable of cycling this route alone, in your opinion?
11. Do you cycle more often or less often than you did in the past? For example, a year ago? (What prompted this change?)
12. Do you feel more confident or less confident cycling now than you did in the past (12 months ago)?
13. How do you feel your cycling experiences are impacted by who you are as a person? (e.g. gender, age, ethnicity, etc.)
14. How would you describe the sensation of cycling this route to someone who has never cycled?
15. Do you have any questions for me?
16. Is there anything you would like to add?

Appendix C: Survey findings: Cycling and Children

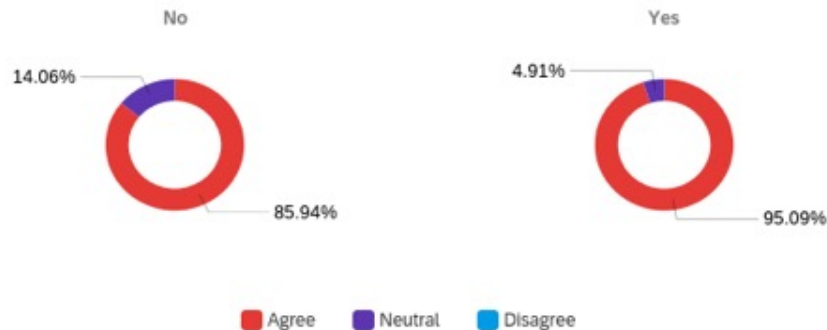
The graphs below show responses to various prompts about cycling and children divided into two sets, namely people who responded 'No' and 'Yes' to the question, 'Do you currently cycle in the Cork city area?'

Q - If you are parent or guardian to one or more children, to what extent do you agree or disagree with the following statements:

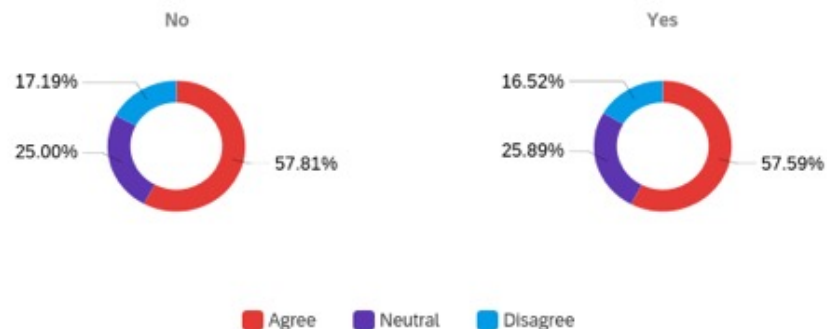
Cycling is a healthy activity for children



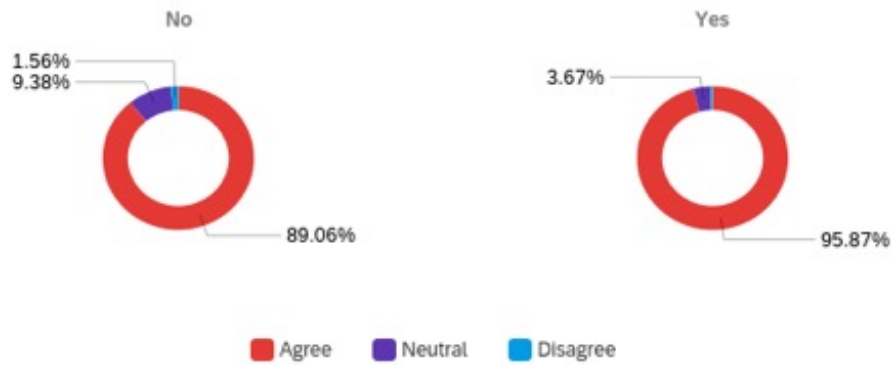
Cycling is a fun activity for children



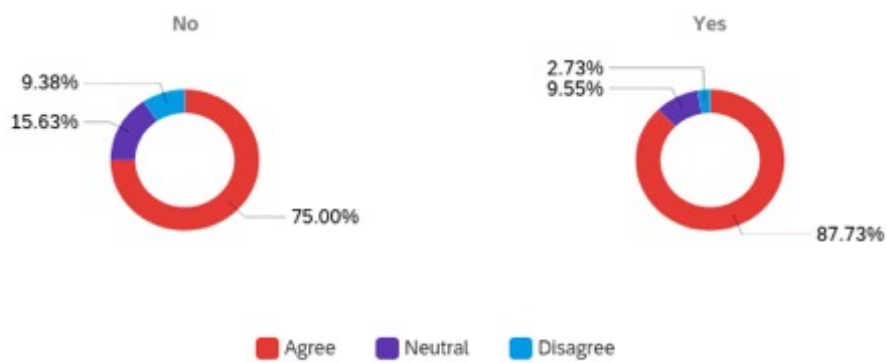
Cycling with children is an enjoyable experience



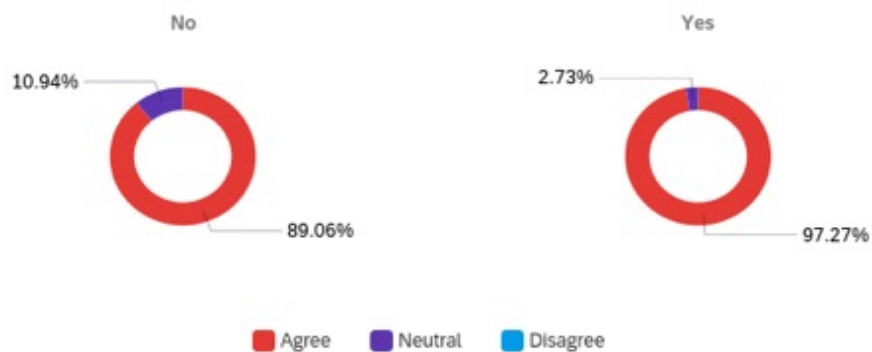
It is important for children to learn how to cycle as soon as they are ready



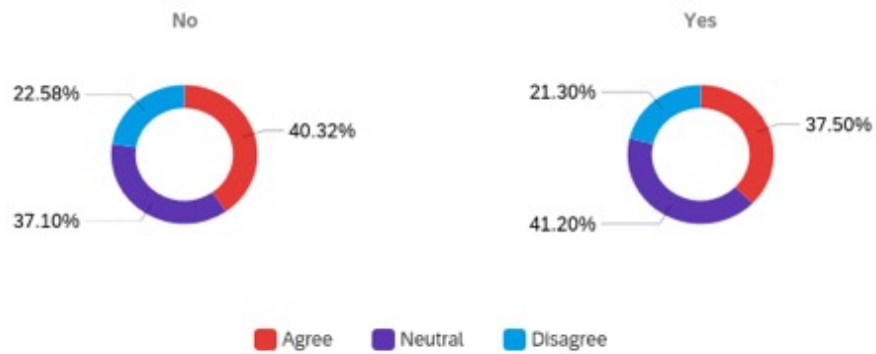
I feel confident enough to teach a child how to cycle



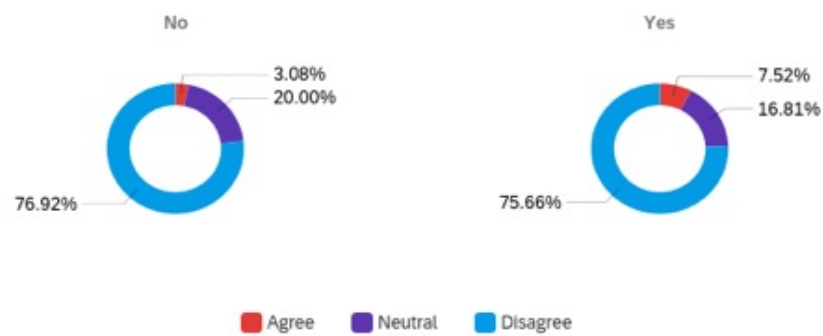
Being able to cycle supports children's independence in a positive way



Children in my house travel to school and on errands mostly by car



In my community, there are safe routes for children to cycle to school, parks or shops with minimal adult supervision



I worry about my children's safety when they cycle alone or with their friends

