



Social Prescribing for Cycling: Key learning

June 2022



Contents

Executive summary.....	2
1. Introduction and background.....	5
1.1 Social Prescribing for Cycling.....	5
1.2 What is social prescribing?.....	5
1.3 Community Links Practitioners.....	6
1.4 Evaluation.....	6
1.5 Policy context.....	7
2. Findings.....	9
2.1 Survey results.....	9
2.2 Feedback from Community Links Practitioners.....	14
3. Discussion and recommendations.....	19
3.1 Study limitations.....	19
3.2 Recommendations.....	20
Appendix 1.....	21
Appendix 2.....	22
References.....	23

Translations and alternative formats

If you require this report in a different language or format, such as a plain text version, accessible PDF, audio, braille, BSL or large print, please contact us at:

info@gcph.co.uk or on 0141 330 2747

For further information contact:

Gregor Yates, Public Health Research Specialist, Glasgow Centre for Population Health

Email: gregor.yates@glasgow.ac.uk

Executive summary

'Social Prescribing for Cycling' is a 10-week cycling programme delivered by Bike for Good and funded by Paths for All. Participants are referred to the programme by Community Links Practitioners (CLP) from the Alliance Scotland. The programme was delivered between April 2021 and March 2022, with the aim of supporting participants' mental and physical wellbeing, confidence and cycling behaviour. GCPH were commissioned by Bike for Good to prepare a report using survey data collected by staff involved in the delivery of the programme. A total of 54 participants provided feedback to a baseline survey (58% response rate) and 19 responded to the follow-up form (20% response rate). To supplement this, four CLPs who had experience of referring patients to the programme were interviewed about their experience. Given the small sample, the low response rate at follow-up and the lack of feedback from those who did not complete the programme, the results presented here must be considered with a degree of caution.

Respondents to the baseline survey were most commonly male (62%), over a quarter were from an ethnic minority, two-thirds were not in work, most were UK residents (83%) and four-fifths had cycled in adulthood. Almost half had access to a bike at sign up, a quarter already owned a bike and 8% had nextbike membership prior to taking part. These percentages were similar at the end of the programme, albeit from a small sample of follow-up participants. Demographic information was not captured on participants at the end of the programme.

From baseline to follow-up, the average percentage of **journeys taken by bike** by participants rose from 15% to 22%. More notably, the percentage of participants stating that they **never cycled for journeys** fell from 72% to 6% over the course of the programme. The percentage of participants who stated that **cycling was their main form of transport** did not increase over the course of the programme, although the percentage of people stating that they **wanted to cycle but required further support** increased from 41% to 58%. After 10-weeks of participation, respondents were more likely to be **confident cycling on main roads** (19% before, 79% afterwards), **quiet paths and roads** (24% before, 95% afterwards) and **for pleasure** (31% before, 95% afterwards). It is notable that the approach has given participants the skills and confidence to cycle on main roads, but that more work is required to encourage use of a bike as a main form of transport.

Changes in **overall life satisfaction** were recorded from the beginning of the programme to the end, with participants giving a higher average score out of ten (4.9 to 6.9). For other indicators of personal wellbeing, notable changes were not observed over the course of the programme. Positive results were found in relation to the direct impact of participation. The results show that all respondents felt that their **mental wellbeing** had improved as a result, 95% **felt better about themselves**, 89% **felt fitter** and 79% **felt that they had more energy**. Beyond these personal impacts, many participants also felt **more confident to try new things in their community** (73%) and over half (58%) had **made new friends in the community**.

Feedback from CLPs also points to a positive experience, with all stating that patients had gained confidence through participation. CLPs referred a range of people to the programme, including a mix of men and women with different levels of cycling ability. They all recognised that the programme was about more than just cycling proficiency, bringing profound impacts for some. Benefits were observed in terms of improved mental health, reduced social isolation and a greater willingness to get involved in other things. Bike for Good were commended for continuing to support people beyond the ten-week period.

From a small sample, and in challenging circumstances, the results presented here illustrate a range of positive impacts for participants. However, despite this, it is important to recognise the potential for responder bias given that only those who completed the programme responded to the follow-up. Should further funding be available, it will be vital to continue to collect information from participants before and after completion of the programme, including feedback from those who drop out.

1. Introduction and background

1.1 Social Prescribing for Cycling

This report summarises key learning from the 'Social Prescribing for Cycling' programme, which has run from April 2021 to the end of March 2022 and has been delivered by [Bike for Good](#) and funded by [Paths for All](#). Bike for Good have worked in partnership with the [Alliance](#) Scotland and their Community Links Practitioner network (CLP) to deliver the project. CLPs identify patients and refer them to Bike for Good to take part in the 10-week cycling programme. By February 2022, 93 people had participated, although not all completed the full ten weeks. Week one of the programme involves working with participants to establish their cycling-related goals. Weeks 2-4 involve building basic cycling skills and confidence, and the remaining weeks are spent working with individuals to build up their skills and confidence cycling on roads. Through this, Bike for Good hope to achieve the following aims:

1. To increase participants' mental and physical wellbeing and confidence through a program of 10 weekly cycling sessions.
2. For participants to complete more short journeys by bike following participation.

About Bike for Good

Bike for Good is a charity and social enterprise with an emphasis on promoting wellbeing and inclusion to support increased participation in cycling. Staff have worked effectively with community groups across Glasgow to enhance opportunities for people from under-represented population groups to cycle. This has been achieved by offering one-to-one support, group rides, access to cheap bikes, advice on maintenance and route-finding and tailored support for specific population groups.

1.2 What is social prescribing?

Social prescribing involves referring primary care patients to appropriate non-medical support in the community. While GPs treat common medical conditions and can refer patients to specialist treatments and mental health support, these options are not appropriate in all circumstances. For example, people facing financial worries, housing issues, addictions, domestic violence, bereavement, or social isolation may require support that is beyond the scope of medical intervention. In such circumstances, patients can be supported by CLPs to identify their personal needs¹. Social prescribing has been promoted

as an approach to mitigate the effects of health inequalities across Scotland². Although it has not been rolled out nationally across the NHS in Scotland or any other UK country, policymakers have supported the approach for its potential to deliver person-centred care and prevent the onset of long-term conditions³.

The continued expansion of social prescribing approaches in Scotland represents an important shift in our understanding of how to support individuals and populations to achieve better health outcomes. However, the approach cannot address the underlying structural factors that create inequalities⁴. From a population health perspective, therefore, social prescribing may be seen as a necessary approach in the absence of more fundamental structural reform.

1.3 Community Links Practitioner programme

The Links Worker Programme is a Glasgow City HSCP funded programme which supports 52 CLPs to work across 31 GP practices in the city⁵. The practices included serve some of the most socio-economically deprived populations in Scotland. CLPs are employed by the Health and Social Care Alliance Scotland (the Alliance), which is the national third sector intermediary for a range of health and social care organisations. CLPs work directly with the practice population on an ongoing basis to identify personal needs. Their role also involves working with the primary care team to support them in adopting the links approach, as well as identifying community organisations to work with⁶.

1.4 Evaluation of Social Prescribing for Cycling

GCPH were appointed by Bike for All to bring together existing data collected on participants through a **baseline form** (Appendix 1), which was issued at sign up, and then a **follow-up form** (Appendix 2), which Bike for Good staff asked participants to complete at the end of the programme. The information collected was determined by Bike for Good prior to the appointment of GCPH as the evaluation partner. Of the 93 people referred to the programme, 54 provided feedback at sign-up (58% of participants) and 19 of these provided feedback after participating (20% of participants). Transitioning to a new monitoring and evaluation system, staff changes and absences due to COVID meant that the number of follow-up responses was lower than hoped for. The sample size is too small to provide statistically significant results. As such, the findings presented here should be considered only in relation to the participating population. Another notable caveat is that participants who did not complete the programme were not asked to complete a feedback form. Again,

absences due to COVID and the implementation of lockdown measures were disruptive to the delivery of the programme.

To supplement the data captured through the baseline and follow-up forms, CLPs were contacted and asked to take part in a short interview by telephone or video link. Due to time constraints, CLPs were offered an alternative of responding to a set of questions by email instead. Two members of staff took part in an interview and another two returned a completed question set.

1.5 Policy context

Cycling across Scotland has increased by 30% since 2017⁷, while Glasgow has seen a 165% increase in cycling trips in and out of the city centre between 2009 and 2021⁸. This has been facilitated by improvements to cycling infrastructure across the city, support for new cyclists, ongoing education, and the continued expansion of the nextbike hire scheme since its introduction in 2014. Funding for active travel has also increased nationally and is expected to reach 10% of transport spending by 2024/25, while a commitment to reduce car kms by 20% by 2030 has also been made⁹.

Glasgow City Council aspires to become one of the most sustainable cities in Europe¹⁰, as demonstrated by its ambitious target of becoming carbon neutral by 2030¹¹. This commitment requires a shift away from a transport system that is dependent on fossil fuels, towards one which supports the transition to electric vehicles, a more sustainable model of public transport and measures that allow cycling to become a realistic mode of transport for all. Glasgow City Council's Active Travel Strategy 2022 to 2031¹² recognises the positive impact that sustainable transport and active travel can make towards the city's climate goals, as well as wider policy objectives relating to Health and Wellbeing, Inclusion and Equality, and Wealth and Inclusive Growth. Proposed policy objectives recognise the need to take a holistic approach to growing and diversifying the cycling population by engaging under-represented groups, by providing training and support for communities and by working with existing community-based organisations, which are recognised as having positive existing relationships with communities. The Glasgow Transport Strategy 2022-2031 Policy Framework sets out a range of proposed policies for discussion and feedback in early 2022. Here, the Council propose that the national sustainable travel hierarchy for transport should be followed when taking transport decisions for the city. This approach would put walking, wheeling, and cycling above other less sustainable forms of transport. In 2023, Glasgow will host the UCI World Cycling Championships. The event will combine 13 cycling events across Scotland, of which six will be held in Glasgow. Although the event will centre around

elite sport, increasing mass participation in cycling is a key policy driver, and community groups will have the opportunity to apply for funds to support cycling projects during the event. These measures aim to create a positive lasting cycling legacy across the city.

Despite continuous growth in cycling, a more favourable policy landscape and the potential that a global cycling event brings to the city, cycling in Glasgow remains a mode of transport for the minority. Cars continue to dominate transport and the cycling population does not reflect the socio-demographic characteristics of the city. That is, most population groups are under-represented, while people living in a most deprived decile are around three times less likely to commute by bike than those living in the least deprived decile¹³. Thus, although Glasgow has been striving to become a city where cycling is safe and attractive for everyone¹⁰, this change takes time, resources, and targeted action. Through the delivery of Bikes for All, GCPH reported on evidence of strong levels of engagement from under-represented population groups¹⁴. In keeping with the ‘Social Prescribing for Cycling’ programme, Bikes for All was predicated on the idea that a comprehensive and personal approach was required to increase participation from under-represented groups. This proved to be effective at engaging minority population groups, but further resources – alongside complementary measures to increase uptake – would be needed to scale-up the approach to a level whereby population level impacts could be achieved.

2. Findings

The findings presented here are based on feedback from participants responding to a baseline survey at sign-up and a follow-up survey after participation. The baseline survey received 54 responses and the follow-up received 19 responses. Feedback is also presented from interviews with four Community Links Practitioners (CLPs).

2.1 Survey results

Table 1 shows the demographic profile of baseline participants^{A B}. Around two-thirds were men, a third were women and one identified as transgender. However, nearly half of the respondents (25) chose 'prefer not to say' or did not complete this question. A quarter of those responding were from an ethnic minority group. This is higher than the percentage of the Glasgow population from an ethnic minority, albeit from a small sample. Two-thirds were not in work and 16% were students. Most (83%) were UK residents, 8% were seeking asylum and 9% had leave to remain in the UK. Finally, 80% had cycled in adulthood.

Table 1. Profile of baseline respondents

Respondents	54
Gender	
Female	10 (34%)
Male	18 (62%)
Transgender	1 (3%)
Prefer not to say/no response	25 (n/a)
Ethnic minority group	
Yes	12 (26%)
No	35 (74%)
Prefer not to say/no response	7 (n/a)
Employment status	
Not in work	34 (67%)
Full-time employed	3 (6%)
Part-time employed	2 (4%)
Self-employed	2 (4%)
Student	8 (16%)
Retired	1 (2%)
Prefer not to say	4 (n/a)
Resident status	
UK resident	44 (83%)
Seeking asylum in the UK	4 (8%)
Leave to remain in the UK	5 (9%)
Prefer not to say	1 (n/a)
Cycled in adulthood	
Yes	43 (80%)
No	11 (20%)

^A Demographic information was not captured on follow-up respondents.

^B Percentages may not add up to 100 due to rounding.

Table 2 shows whether participants had access to different forms of support to cycle at the beginning and the end of the ten-week programme. A small proportion of participants got a bike loan at the beginning of the programme (11%), but no respondents had one at follow-up. Around half of participants had access to a bike and around a quarter owned a bike at both the beginning and the end of the programme. Only a small proportion had a nextbike membership at the beginning and the end of the programme (8% to 11%).

Table 2. Bike access and support

	Baseline (n=54)	Follow-up (n=19)
Bike loan from Bike for Good	6 (11%)	0 (0%)
Access to a bike	26 (48%)	9 (47%)
Own bike (in working order)	12 (22%)	5 (26%)
Bike subscription	1 (2%)	1 (5%)
nextbike membership	4 (8%)	2 (11%)

Participants were asked what percentage of journeys they made using a bike before and after their involvement with the programme (Figure 1). Baseline data shows that 15% of journeys were estimated to be made by bike, with this rising to 22% afterwards. However, before taking part 38 out of 53 respondents never cycled (72%), while afterwards just 1 out of 19 participants never cycled (6%). This is a notable difference; however, these results do not include participants who did not complete the 10-week course.

Figure 1. Journeys by bike

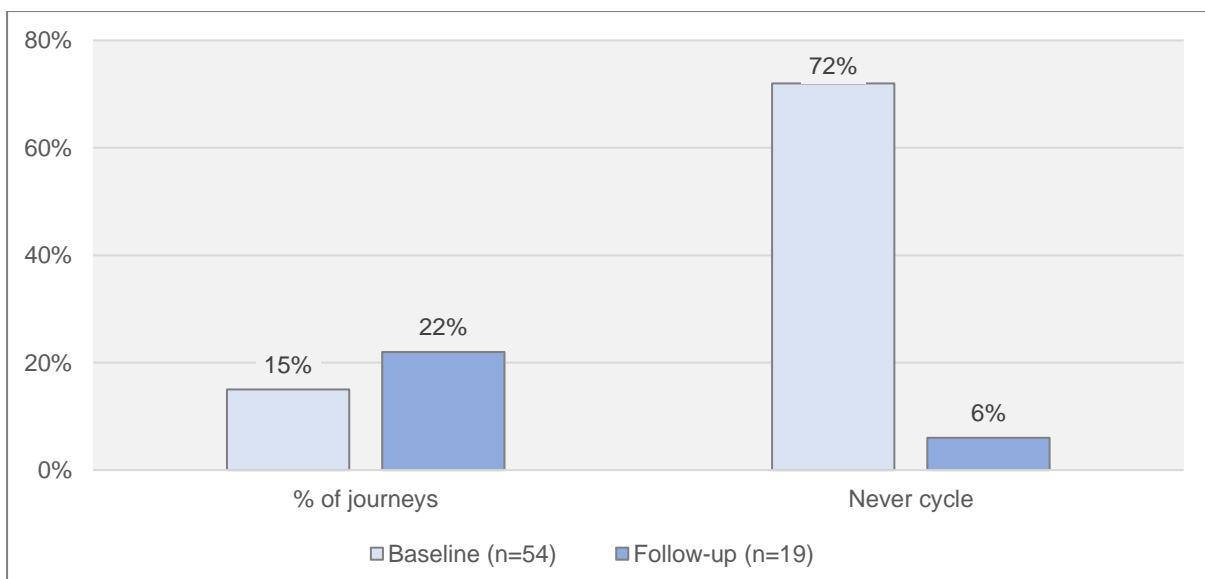


Figure 2 shows how participants felt about cycling before and after participation in the programme. The closed responses available were: 'I already do this', 'I want to but would need support', 'Maybe', 'Doubt it' and 'No way'. The last two options have been combined in the results. Baseline and follow-up results are presented together for each question to show how attitudes changed. First, participants were asked if they would consider **cycling as a main form of transport**. Following participation, no change was found in the percentage already doing so (11%), but respondents were more likely to state that they wanted to but required support to do so (58% from 41%) and are less likely to say maybe (16% from 37%). At sign-up, less than a fifth of participants were **cycling on roads** (19%), compared with four-fifths afterwards (79%). Meanwhile, 95% of participants were **cycling on cycle paths or quiet roads** after participation compared with 31% beforehand. Similarly, 95% stated that they **cycled for leisure afterwards** compared with 24% at sign-up. While these results present a positive picture for participants in terms of cycling intentions and behaviour, it should be noted that the sample is too small to make inference to a bigger population, as well as the fact that only those completing the 10-week programme have responded.

Figure 2. Attitudes to cycling

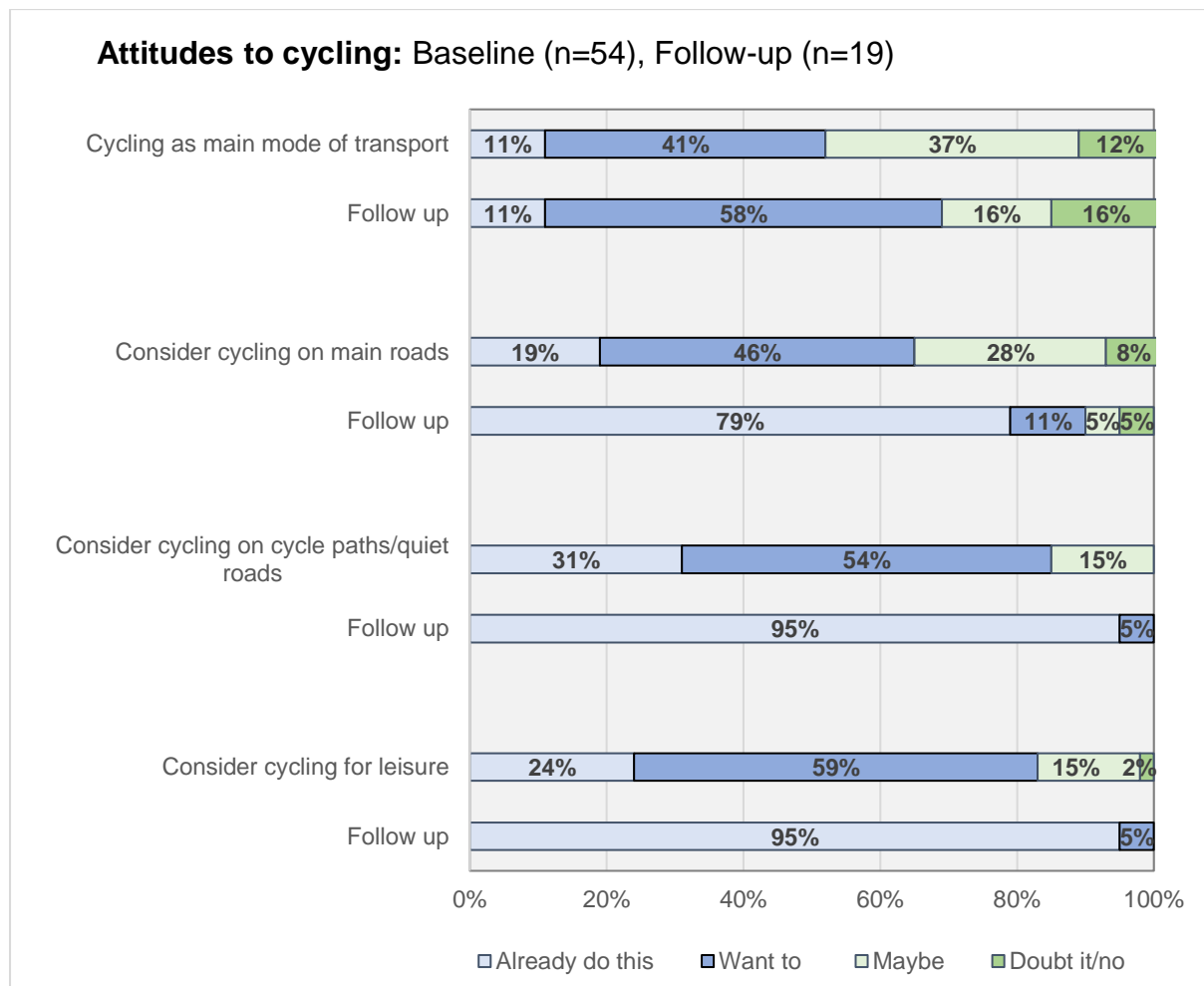


Figure 3 shows responses to personal wellbeing questions at the beginning and end of the programme. Participants were asked to give a score of between 1 (not at all) and 10 (completely). The average score is presented for baseline and follow-up responses to assess change over the course of the programme. Here we can see that on average, **anxiety** rose slightly from the beginning of the programme to the end. Despite this, **feelings of happiness** increased from 5.4 to 6.1 and **overall life satisfaction** increased from 4.9 to 6.9. **Feeling worthwhile** remained at a similar level. These results should be considered with some caution due to the small sample. In addition, it is not possible to attribute changes solely to participation; many other external factors could shape the differences seen here.

Figure 3. Indicators of mental wellbeing

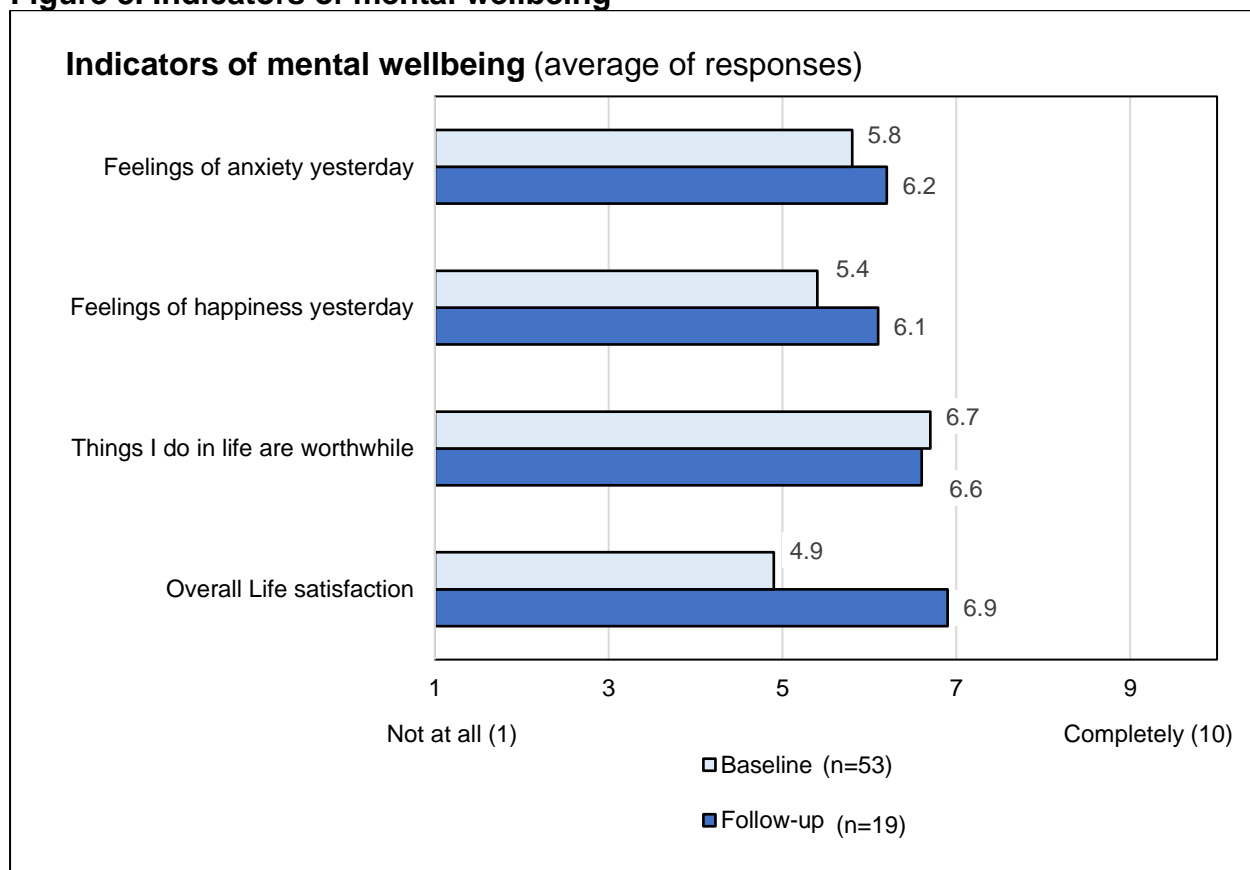
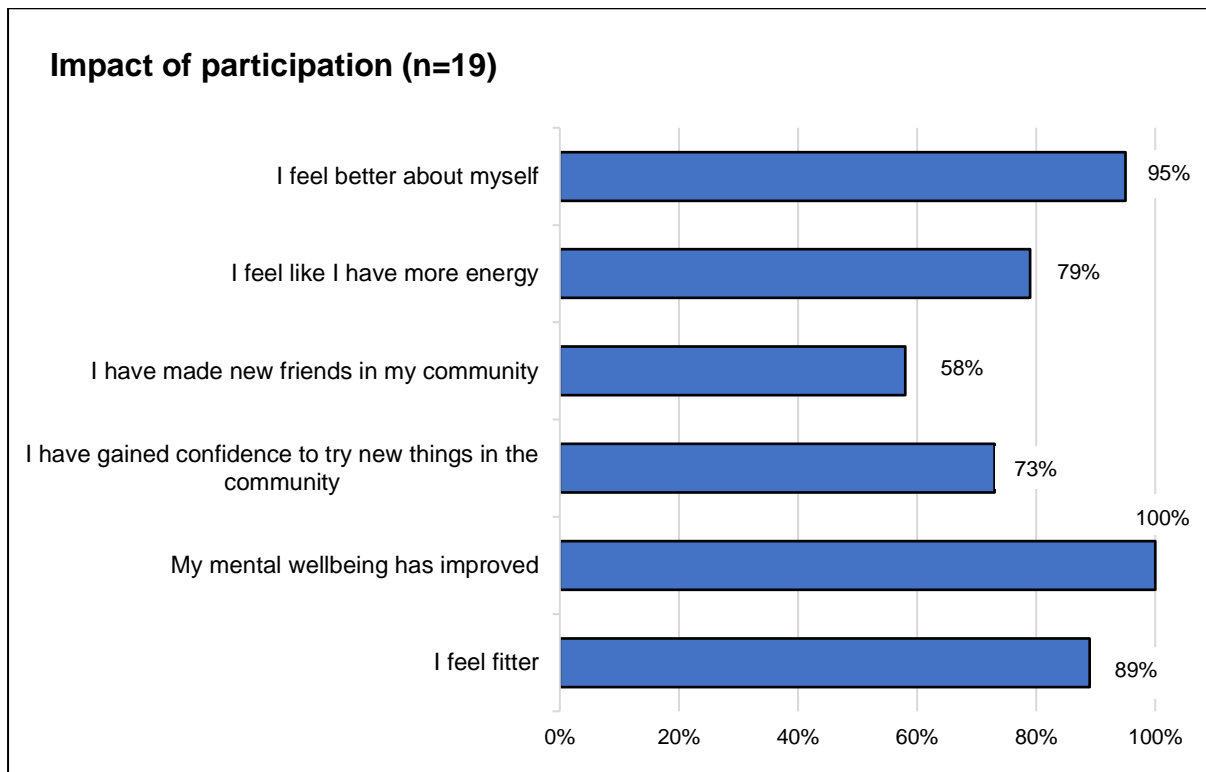


Figure 3 illustrates the impact of participation in different ways. The results show that all respondents felt that their **mental wellbeing** had improved as a result, 95% **felt better about themselves**, 89% **felt fitter** and 79% felt that they **had more energy**. Beyond these personal impacts, most participants reported that they felt more confident to **try new things in their community** (73%) and over half (58%) had **made new friends in the community**.

Figure 4. Impact of participation



Lastly, participants were asked: *“Is there anything else that you would like to tell us?”*. Responses were typically positive and indicated a general level of enjoyment.

“Wonderful to have this opportunity as I always wanted to cycle.”

“Very enjoyable, highly recommend Bike for Good to anyone and will use us again.”

Other benefits were mentioned in relation to confidence, wellbeing and socialising.

“Since I have started cycling with Bike for Good, I have found I have gained my confidence and my wellbeing has improved greatly.”

“Enjoyed my course-time and meet new people and more confidence.”

“Being introduced to Bike for Good has given me more confidence in myself and with others.”

“My mental health, physical and emotional health have all improved during the time I’ve been cycling.”

Another participant valued being able to improve their navigation skills, while another suggested that it would be helpful to provide a handout with information on the M check^c for bike maintenance. From this reasonably small sample of participants, it is clear that the experience was positive and beneficial.

2.2 Feedback from Community Links Practitioners

Community Links Practitioners (CLPs) working for the Alliance Scotland were asked to take part in a short interview to reflect on their experience of referring patients to the programme. For convenience, some staff chose to give feedback by completing the questions and returning them by email. In total, feedback was received from four CLPs. Given the small sample, the feedback has been summarised, rather than thematically analysed for common themes. The findings below do not represent the views of all CLPs involved.

The role of a CLP

CLPs described their role in general before going on to talk about their involvement in the 'Social Prescribing for Cycling' programme. Practitioners described the wide-ranging nature of their role, with the fundamental objective of referring patients to appropriate practical or emotional support based on their personal needs. These needs could differ greatly depending on personal circumstances, and could stem from issues relating to social isolation, bereavement, financial worries, poor mental health, welfare rights issues or trauma. The role was described as involving advocacy work, working with GP practices to ensure that they have a better understanding of the support available to people in the local area, and being a presence in the community to identify suitable opportunities. Some CLPs were aware of Bike for Good before the social prescribing offer was made to them, and all had some experience of cycling.

Who is the programme for?

CLPs felt the offer was not restricted to a particular population group. Instead, people were referred on an individual basis according to their interests and needs. This included men and women of different ages and backgrounds, as well as people who were simply looking to get back on a bike.

"I wouldn't say I target it at any particular group, I just target it at those I think may be interested." (CLP3)

^c The M check is safety check for the working components of a bike.

“There’s’ been a mix, a mix of men and women, a mix of ages, I don’t really work with young people, but it’s not that I wouldn’t try.” (CLP4)

The programme was seen to be beneficial to people who wanted to improve their physical health, build up their confidence, reduce social isolation and get to know their local area better, as well as people who had cycled previously and needed a refresher to improve their cycling confidence. It was also stressed that those referred may initially have been concerned about something else in their life, rather than a particular wish to cycle.

“I referred her into that project, but that was all off the back of a conversation around finances, so that can be quite random, or someone comes specifically to me about wanting to do more exercise.” (CLP3)

“It is ideal for people new to the city, or who may be on a low income, who want to increase their confidence and knowledge of where they can go. I have linked people who are isolated socially or are looking to increase their level of physical activity.” (CLP1)

Although some CLPs had not engaged with asylum seekers, the possibility of referring them to the programme was welcomed as a means of supporting their transition to a new city.

“Being able to direct asylum seekers to Bike for Good for nextbike sign-ups is fantastic, as with ‘no recourse to public funds’ that population group cannot access concessionary travel passes.” (CLP1)

Impact of participation

Increased confidence, both in terms of cycling and more widely, was the main impact of the programme described by CLPs. This was partly facilitated by the one-to-one support offered and was evidenced by the increased willingness of participants to cycle in their community afterwards.

“It has helped build confidence and showed individual’s cycling routes in their local area.” (CLP4)

“She thoroughly enjoyed it and gained confidence. And one of the things she said was that she would never cycle on the roads, and now she cycles everywhere.”
(CLP2)

“You can see a boost in confidence, so whether it’s someone who’s never ridden a bike at all, and they manage to make steps every week, or whether it’s someone who just hasn’t been on a bike for a few years, and just isn’t confident on the road. I think it’s great for confidence” (CLP 3)

Reducing social isolation and building new friendships were also important benefits.

“I’ve found that taking part in activities such as this might be the only time an individual gets to go out and see someone else during the week, and so it is something they come to look forward to and that gives them motivation.” (CLP1)

“And a couple of women didn’t know each other, but because they both had individual 1-1 support once a week, and they then went and practiced together. They never would have socialised together otherwise, so it helped to build friendships.”
(CLP4)

Cycling behaviour

It was highlighted that cycling is more common in some parts of the city than others, and that it needed to become more visible for some people to consider it a viable transport option. The benefits in terms of cost and efficiency were described, but more work was needed to normalise cycling.

“I believe that if things are more noticeable, if you see more bikes, it becomes more normalised, so if there are more people in Springburn in ten years’ time then I think that’ll help. If there are cycle paths and there’s accessibility for cycling, then things will change.” (CLP2)

“The more people who are out cycling, the more people see people cycling then the more people will think that could be for them.” (CLP3)

“I think cycling is a very accessible form of exercise as people can use it as a form of commuting which is quick, accessible and cheap.” (CLP4)

Programme legacy and future direction

CLPs expressed a wish for the programme to continue and secure further funding.

“Just a continuation, I think it has been a success. If it can continue to be rolled out then that would be a good thing.” (CLP3)

“I hope that it gets funding to continue, and we can promote it more. The benefits in terms of confidence, learning new skills, getting around more easily, the environmental benefits too, so if there’s funding for it to continue then we can make more use of it... it’s a great way to get people into cycling who would not consider it otherwise, people who just wouldn’t know where to go to get lessons.” (CLP2)

One CLP argued that ‘nature prescribing’ has increasingly become recognised as an important and cost-effective way of supporting population wellbeing. It was hoped, therefore, that this recognition would be reflected in the amount of funding that projects like this receive.

“There is a growing recognition in primary care about the value of ‘nature prescribing’, getting outdoors, walking, gardening and I think this type of intervention. I’d hope that is reflected in the extent to which these programmes receive funding.” (CLP1)

Although one CLP wished that it had lasted longer than ten weeks, others praised Bike for Good for their overall ethos and for ensuring that participants were supported beyond this period.

“People enjoy the sessions and once finished they might be encouraged to take part in further schemes such as the nextbike sign-up or women’s cycling group. This ensures there is onward progression and the person isn’t left without something to move on into.” (CLP3)

“Bike for Good are one of the better organisations across the board...they’re excellent. And it’s important that we signpost people to the right thing.” (CLP4)

Another suggested that it could be considered successful if those taking part went on to become cycle leaders, while two other CLPs mentioned plans to start new cycling groups which had not yet come to fruition.

“It would be great if folk could get confident enough to be leading a group themselves.” (CLP4)

“A couple of health centres are going to become cycle hubs, so there’s the idea that if people do ten lessons with Bike for Good so they’re not beginners, then if we’ve got a cycle group, they can immediately come to us. Unfortunately, it hasn’t worked out so far.” (CLP2)

3. Discussion and recommendations

Learning from this programme indicates that it has been well received by participants and should be considered for further funding. The benefits of participation go beyond simply improving participants' cycling skills and increasing their confidence to cycle on main roads. Confidence gains were described more broadly, with participants benefiting in other aspects of their life. The approach is personal and involves small numbers of participants. This makes it difficult to shape health at a population level, but it does appear to have benefitted most respondents here. As previously stated in our evaluation of [Bikes for All](#), programmes such as this are an important component of the cycling offer in Glasgow, as well as providing wider benefits to participants and helping to create a sense of community in parts of Glasgow. Bike for Good are considered to be a reputable community organisation by the CLPs interviewed and they were confident about referring patients to the programme.

3.1 Study limitations

It is important to understand the limitations of this study when interpreting the results. Both surveys were agreed and issued in advance of GCPH's involvement in the evaluation of the programme. With earlier involvement, we may have suggested changes to the surveys to avoid the inclusion of 'leading' questions. Secondly, the survey sample is small and the response rate to the follow-up is too small to make confident assertions from one survey to the next or to consider differences across population groups. Thirdly, respondent bias must be considered, because only those who completed the programme were asked to give feedback. For the interview component, the results should be considered as a summary of feedback rather than a representation of CLPs. All interviewees had an active interest in cycling and demonstrated a general support for increasing participation in cycling. Therefore, feedback from CLPs with less experience of cycling may have been beneficial to get a more balanced perspective.

These limitations reflect the challenging times in which the programme was delivered. During this period, Bike for Good transitioned to a new monitoring and evaluation system, while staff changes, absence due to COVID and lockdown measures disrupted the delivery of the programme and the momentum that could only be gained through regular attendance. This resulted in some participants dropping out. Bike for Good are now better placed to deliver the programme and collate information on participants.

3.2 Recommendations

The following recommendations are based on our interpretation of the learning gathered and our understanding of how increasing participation in cycling and diversifying the population of cyclists can support public health and contribute towards Glasgow meeting its ambitious sustainability goals. We believe that further funding should be made available to support the continued roll-out of 'Social Prescribing for Cycling'. This is on the basis that it has the potential to support the following:

- Improved confidence of participants to cycle on roads and to consider cycling as a viable alternative to less sustainable modes of transport.
- Improved mental health and reduced social isolation.
- Improved physical health.
- Wider participation in community activity.

Despite this, the evidence presented here is insubstantial, and it is important that Bike for Good routinely collect data at the end of the programme to demonstrate impact. Feedback forms should include non-leading questions to ensure that the data collected accurately represents the views of participants. The recommendations below are intended to support Bike for Good in their continued delivery and evaluation of the programme.

- Pathways should be developed (or continued) to support further participation in cycling beyond the 10-week period of involvement.
- Continue to work with integration organisations across the city to encourage diverse participation in the programme.
- Collect demographic data on follow-up respondents to allow comparisons to be made across different population groups and collect feedback from those who participate but who do not complete the programme.
- Seek further feedback from participants on what support they need to make cycling their main mode of transport.
- Seek regular feedback from CLPs on their experience of referring patients to the programme.
- Use learning from the programme to promote it further. For example, use evidence of impact in terms of confidence, reduced social isolation, route finding, cycling confidence, saving money and sustainable travel.

Appendix 1: Baseline Form

Participant Information	
First name	
Last name	
What is your preferred pronoun? <small>eg. She/her, They/them, He/him, etc or leave blank if you prefer not to say</small>	
What is your gender? <small>eg. Female, Non-Binary, Male, Transgender, Intersex, etc or leave blank if you prefer not to say</small>	
Mobile number	
Email address	
Date of birth	
Full Postcode <small>This is due to our services being funded.</small>	
Why did you want to take part in this activity or service? <small>tick all that apply to you</small>	
<input type="checkbox"/> To improve my physical health	<input type="checkbox"/> To improve my personal wellbeing
<input type="checkbox"/> To meet new people	<input type="checkbox"/> To try out cycling certain journeys
<input type="checkbox"/> To gain confidence in cycling	Other: _____

Cycling History	
Have you cycled in adulthood?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have access to any of the following? <small>tick all that apply to you</small>	
<input type="checkbox"/> Your own bike (in full working order)	<input type="checkbox"/> A bike subscription service
<input type="checkbox"/> Your own bike (but not roadworthy)	<input type="checkbox"/> A Nextbike membership (Glasgow City Bike Hire Scheme)
<input type="checkbox"/> A bike loan from us	<input type="checkbox"/> I do not have access to a bike
<input type="checkbox"/> Other: _____	
What % of your journeys are currently made by bike?	
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%	

Your Cycling					
Would you consider the following: (Tick 1 answer per line)					
	I already do this	I want to but need support	Maybe	I doubt it	No way
cycling regularly for leisure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cycling on cycle paths and quiet roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cycling on main roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cycling as your main mode of transport?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Personal Wellbeing											
The four questions below are from the Office of National Statistics Personal Wellbeing Scale. There are no right or wrong answers and staff do not review these answers, but they are used as anonymised statistics to report to funders.											
We use four survey questions to measure personal wellbeing and you can respond on a scale of 1 to 10.											
Overall, how satisfied are you with your life at the moment? (Circle one)											
Not at all	1	2	3	4	5	6	7	8	9	Completely	
										10	
Overall, do you feel the things you do in your life are worthwhile? (Circle one)											
Not at all	1	2	3	4	5	6	7	8	9	Completely	
										10	
Overall, how happy did you feel yesterday? (Circle one)											
Not at all	1	2	3	4	5	6	7	8	9	Completely	
										10	
Overall, how anxious did you feel yesterday? (Circle one)											
Not at all	1	2	3	4	5	6	7	8	9	Completely	
										10	
On average how many minutes of moderate activity do you do per week? (Tick or circle one) <small>NB: The NHS defines moderate activity level as if you can still talk, but not sing.</small>											
Less than 1 hr	1 hour+	2 hours+						3 hours+			
4 hours+	5 hours+	6 hours+									

Appendix 2: Follow-up form

About You											
First Name											
Last Name											
Mobile Number											
Email Address											
Gender (circle one)	Male	Female	Non-Binary	Other: _____	Prefer Not to Say						
About Cycling											
Do you have access to.....											
A working bike of your own	Yes					No					
The bike library at our south hub	Yes					No					
Any other loan bikes <i>ie any at a community centre or hostel</i>	Yes					No					
What % of your journeys are currently made by bike?	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Outside of activities with us have you used a bike for;											
Leisure	Yes					No					
Travel	Yes					No					
Practice my cycling	Yes					No					
About this activity											
Has taking part in this activity helped you to....											
feel fitter	Yes					No					
improve my mental wellbeing	Yes					No					
meet new people	Yes					No					
gain confidence in cycling	Yes					No					
link up places around the city	Yes					No					
make more use of the outdoor spaces near me	Yes					No					
to improve my cycling skills	Yes					No					

More about Cycling											
Now you have more skills and confidence on a bike would you consider; (tick 1 answer per line)											
	I already do this	I'd need help to upskill / improve my confidence	Maybe	I doubt it	No way!						
Cycling for Leisure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Cycling on cycling paths and quiet roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Cycling on main roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Cycling as your main mode of transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
Personal Wellbeing Scale; Please tick the box that best describes your experiences over the last 2 weeks;											
Overall, how satisfied are you with your life at the moment?											
Not at All	1	2	3	4	5	6	7	8	9	10	Very
Overall, do you feel the things you do in your life are worthwhile?											
Not at All	1	2	3	4	5	6	7	8	9	10	Very
Overall, how happy did you feel yesterday?											
Not at All	1	2	3	4	5	6	7	8	9	10	Very
Overall, how anxious did you feel yesterday?											
Not at All	1	2	3	4	5	6	7	8	9	10	Very
Activity Levels											
On average how much moderate to vigorous exercise do you do per week?											
What is moderate activity?	<input type="checkbox"/> Less than 60mins <input type="checkbox"/> Over 1 hr <input type="checkbox"/> Over 2hrs <input type="checkbox"/> Over 2.5hrs <input type="checkbox"/> Over 3hrs <input type="checkbox"/> Over 4hrs <input type="checkbox"/> Over 5hrs <input type="checkbox"/> Over 6hrs										
If you can still talk, but not sing	<input type="checkbox"/> Less than 60mins <input type="checkbox"/> Over 1 hr <input type="checkbox"/> Over 2hrs <input type="checkbox"/> Over 2.5hrs <input type="checkbox"/> Over 3hrs <input type="checkbox"/> Over 4hrs <input type="checkbox"/> Over 5hrs <input type="checkbox"/> Over 6hrs										
<i>Moderate activity will raise your heart rate, and make you breathe faster and feel warmer</i>											

References

- ¹ Chang NR, Hawkins K, Fitzpatrick B, et al. Implementing social prescribing in primary care in areas of high socioeconomic deprivation: process evaluation of the 'Deep End' community links worker programme. *British Journal of General Practice* 2021;1153:BJGP.2020.
- ² Scottish Government. A fairer, greener Scotland. Programme for Government 2021/2022. Scottish Government; Edinburgh: 2021.
- ³ Lejac B. *A Desk Review of Social Prescribing: from origins to opportunities*. Support in Mind Scotland; 2021. Available at: <https://www.supportinmindscotland.org.uk/news/social-prescribing-covid-19-rse-report> (accessed March 2022).
- ⁴ Oxford Social Prescribing Research Network. The Ethics of Social Prescribing: An overview. Available at: <https://socialprescribing.phc.ox.ac.uk/news-views/views/the-ethics-of-social-prescribing-an-overview> (accessed April 2022).
- ⁵ Alliance. News Article: The Alliance Links Programme 2021 Review. Available at: <https://www.alliance-scotland.org.uk/blog/news/the-alliance-links-worker-programme-2021-review/> (accessed March 2022).
- ⁶ Alliance. Links worker programme. About the programme. Available at: <https://www.alliance-scotland.org.uk/in-the-community/national-link-programme/about-the-programme/> (accessed March 2022).
- ⁷ Progressive Partnership. *Cycling Scotland Attitudes and Behaviours Towards Cycling in Scotland – Wave 3*. Available at: <https://www.cycling.scot/mediaLibrary/other/english/Cycling-Attitudes-and-Behaviours-Report-Wave-3-FINAL.pdf> (accessed March 2022).
- ⁸ Understanding Glasgow. Glasgow Indicators>Transport>Cycling. Available at: <https://www.understandingglasgow.com/indicators/transport/cycling> (accessed March 2022).
- ⁹ Scottish Government. *Scottish Government and Scottish Green Party: draft shared policy programme*. Edinburgh: Scottish Government; 2021.
- ¹⁰ Glasgow City Council. *Glasgow's Strategic Plan for Cycling 2016 – 2025*. Glasgow City Council. <https://www.glasgow.gov.uk/index.aspx?articleid=20804> (accessed February 2022).
- ¹¹ Glasgow City Council. *Glasgow's Climate Plan*. Available at: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=50623&p=0> (accessed March 2022).
- ¹² Glasgow City Council. *Glasgow's Active Travel Strategy 2022 – 2031*. Glasgow City Council; 2022. Available at: <https://www.glasgow.gov.uk/activetravel> (accessed March 2022).
- ¹³ Understanding Glasgow. Glasgow Indicators>Transport>Cycling>deprivation. Available at: <https://www.understandingglasgow.com/indicators/transport/cycling> (accessed March 2022).
- ¹⁴ Yates G. Whyte B. *Bikes for All evaluation: phase one report*. GCPH: Glasgow; 2019.