

Cycling your way to wellbeing with Changing Gear

Cycling for health

Exercise has been found to have a positive impact on both physical and mental health. With life expectancy, obesity and inactivity increasing in the population, there is a need to improve the health of the nation at both a local and national level. In *All Our Health*, the UK Government set out a framework supporting healthcare professionals working with individuals and communities, to prevent illness, protect health and promote wellbeing (Department of Health, 2018). The guidance highlights the link between physical and mental health and encourages staff to promote physical activity as a way of preventing and managing chronic conditions such as diabetes, depression and some cancers.

Exercise has proven to be beneficial not only for the general population as a preventative measure, but also for those managing health conditions. Studies have shown exercise, such as cycling, improves cognitive functioning as well as increasing physical health in conditions such as post stroke and multiple sclerosis (Quaney et al., 2009; Leavitt et al., 2015). This research evidences the importance of exercise in rehabilitation and the management of chronic health conditions. Another important aspect of exercise is the positive impact on mood and ability to manage a mental illness. A report by Frances (2006) advocates the role of outdoor leisure activities in improving quality of life for those enduring mental illnesses. This correlates with the requirements set out in mental health Government policy to increase social inclusion, reduce stigma and highlight the link between physical and mental health. Research by Herring et al. (2011) found even short-term exercise regimes lessened the symptoms of anxiety and irritability in those diagnosed with Generalised Anxiety Disorder (GAD).

Much of the population use cycling as a form of 'active transport'. The Organisation for Economic Co-operation and Development (OECD, 2013:17) recognises 'bicycles are an essential part of the urban mobility mix'. They note



multiple benefits of cycling including the lack of environmental impact, health benefits and affordability. Although they recognise the risks involved in commuting in cities, they believe on balance, the benefits outweigh these safety concerns. Cycling, due to its suitability for all ages, was the chosen form of exercise in research by Hogan et al. (2013). In their comparative study of young and older people, findings also showed a positive impact on affective experience and cognitive performance. Cycling is an exercise that can be undertaken alone, with others, indoors (on a static bike) or outdoors. This flexibility has led some researchers to consider the difference between these and ask which provides greater psychological benefit. Plante et al. (2011) found participants exercising outdoors were less stressed and tense and reported the experience as more enjoyable, in comparison to those exercising indoors.

However not all have access to this form of transport or would consider this form of exercise for recreation. A study by Steinbach et al. (2011) explored the class, gender and ethnicity inequalities found in the identity associated with cycling, i.e. white, middle class and male. This indicates the hidden barriers that prevent cycling being seen as available to all, and accompanies other difficulties such as finances to buy a bike or lessons learning to ride. Indeed, the four Chief Medical Officers in the UK promote the need to tackle barriers 'from the personal to the environmental' to encourage a more active and healthier population (Department of Health, 2011:47).

About the project

Changing Gear was set up in 2014 with three years funding from the Big Lottery. The aim the project was to encourage groups that would not usually consider cycling to take up this form of exercise, and in doing so, introduce its benefits. Although based in the city of Cardiff, the project catchment area extends to the Vale of Glamorgan and Rhondda Cynon Taff. Research and consultation with partners in these areas highlighted sections of population unlikely to cycle. From these consultations four specific groups became the focus of Changing Gear: individuals of Black and Minority Ethnicity (BME); those with experience of mental illness; those managing chronic conditions and older people (over 50 years of age). The funding allowed Changing Gear to offer five free sessions of cycling to individuals in these target groups.

One barrier to cycling for disadvantaged groups is access to bicycles. Changing Gear is part of the Pedal Power project (a charity which started in 1996) which has a range of bikes available for participants to choose from. These include accessible bikes which can be adjusted to suit most needs and ensure that this is not a barrier to cycling. The growing

team of voluntary and paid staff, offer extensive knowledge of more technical aspects of the bicycles, as well as managing the safety of participants. Changing Gear not only offers a service that encourages individuals to regain in confidence after a period of not cycling, importantly it offers lessons to those who have never cycled. To encourage participants to continue cycling after the initial free sessions, an incremental discounted rate is offered to continue cycling with Pedal Power. This helps to address the barrier that a lack of finances can cause and provides wider support for a habit to be formed.

The research findings

Independent research was conducted by The Centre for Outdoor Activities and Leisure (COAL) based in the Department of Applied Psychology at Cardiff Metropolitan University. The purpose of this qualitative research was to explore the experience of cycling with the Changing Gear project. Semi-structured interviews focused on perceived benefits and challenges of cycling, as well as any noted changes in the participant as a result of joining the project. A number of themes emerged from a content analysis of the interview data which are summarised in Table 1.



The experiences reported by participants can be mapped onto the Five ways to wellbeing tool developed by the New Economics Foundation (NEF, 2011). The aim of this evidence-based tool was to deliver a public health message that focused on improving the mental health and wellbeing of the entire population. Table 2 shows how cycling with the Changing Gear project meets the five ways to wellbeing suggested by the NEF.

Five ways to wellbeing	Benefits from Changing Gear
Connect with people around you	Make new friends on group rides
Be active in something you enjoy	Choice in activity level
Take notice appreciate what matters	Being in nature and mindfulness
Keep learning set a challenge	Learn new skills and techniques
Give do something nice for others	Support and encourage others in group

Table 2: Links between the Five ways to wellbeing and research findings

Higher order theme	Concepts	Indicative content	Quotes
Health and fitness	Cycling to improve health	A natural and healthy activity, preferable to the gym	the end goal would be to have more natural exercise. the fresh air as well, you know you feel a little bit more fresher when you finish for me the benefit is when one is being outdoors...trees, green.
	Address health condition	Motivated to improve conditions such as diabetes, osteoporosis and high blood pressure	I'm doing the right thing you know, my medication and exercise to strengthen the bones. I think I'll benefit in the long run because it is going to strengthen my lung capacity.
	Healthier lifestyle choices	A catalyst for other healthier lifestyle choices, e.g. diet	I got on my bike and joined Changing Gear, I thought well why not do a holistic approach to things, so I thought start healthy eating, so then I'm vegan now.
Wellbeing	Aligning mind and body	Balancing sedentary work with physical activity	I did something like physically I moved, it's not only like in my mind thinking, thinking, thinking.
	Managing emotions	Low mood and anxiety controlled through gaining perspective alongside the benefits of exercise	mainly my mood I think, my mood has definitely increased...when I go to bed it's I get a better night's sleep. my anxiety levels definitely erm they've dropped a lot and my confidence has gone up a lot.
	Aids recovery	Attending weekly provides routine and future goals	forward thinking makes me think about what's the next step in my life. I think it tends to sort of boost your confidence and sort of gives me something else to look forward to each week as well.
Impact on self	In flow when cycling	Space for mindfulness and a sense of calm	it's just that freedom and that not thinking that just being out there and just enjoying it. it calms my brain down a bit...it's just really relaxing, even though you've got to do something to make it move, still find it relaxing.
	Seek a challenge	Learning or re-learning to ride a bike is specifically chosen as a challenge to test themselves	well it's a challenge to do something I know that is going to make me feel a little bit nervous even if it is for a short time, but that's good to challenge.
	Improving sense of self	The achievements made led to increased confidence and self-esteem	I think I'm just chuffed at myself for getting there. I enjoy it and it's a feeling of accomplishment that you've learnt something.
Social impact	Something for the self	Taking an hour out in a busy week and doing something for themselves was valued	the biggest thing I've learnt is to take time out for myself on doing something that I like.
	Supporting others	Competent cyclists offered support by accompanying their less confident partners and friends	I got back on the bike again and I had no problems, you know it's different with [wife] she had to gain a lot of confidence in cycling.
	A social activity	Cycling as an activity to enjoy with others and offered something in common with them	it's just about meeting new people and all having the same interest and the same common goal.
Enhancing skills	Meeting new people	A sense that everyone was on the same level allowed a comfortable atmosphere to make new friends	we get to know each other which is quite nice, so yeah and we're all about the same level as well so, which is quite good as well so I don't feel stupid (laughs) trying to keep up.
	Proficiency and safety	Increased awareness and road safety of those with experience and without	it was all safe for me. you have got to negotiate the traffic a little bit and be a little bit more wary of course and take responsibility for yourself (laughs).
	Techniques and tips	Helpful hints and tips increased both skills and pleasure in cycling	How, you know, like the seating level...so you don't hurt your back so you know you got the right type and...position under your feet, you know gears, I didn't know gears on a bike.
Being outdoors	Exploring the city	Discovery of routes and parts of the city they not previously known	the city is interlinked to the parks...I didn't realise that. I've seen the park which I've never none which existed, as I say when you're cycling you see things that you wouldn't in a car.
	Connection with nature	Cycling through the parks felt freeing and being in nature, calming	I'll be looking at the water and looking out for otters...you can see all different types of wildlife and that's what I like about it. you're not meant to be going on it 100 miles an hour, you're meant to looking at the trees and enjoying the the park.

Table 1: Study findings



Summary and future direction of Changing Gear

The findings highlight the accessibility of cycling as a healthy activity to improve wellbeing. Regardless of age or ability, Changing Gear has provided an opportunity for those with impairments or health conditions to improve their health and fitness. From those learning to ride a bike for the first time at 60 years old, to those managing health conditions or without access to bicycles, the benefits reported were numerous. The routine, support, socialising and development of skills and confidence, enabled some participants to make other positive changes in their lives. Therefore attending Changing Gear not only had benefits to physical and mental health, which supports the literature, but these extended beyond the hour session attended.

Changing Gear continues to work closely with its stakeholders as well as making new partnerships. Monitoring those accessing Changing Gear during its initial funding period, has enabled the project to recognise its future direction. Partnerships with the statutory sector will aid in creating a sustainable platform and a long-term vision for Changing Gear. Providing access to a healthy, environmentally friendly form of exercise supports the preventative approach in healthcare promoted by Governments across the UK.

I think it's good 'cause it's like quite social and it's like it's not hard work but it's quite, you're doing good exercise but it doesn't feel like exercise like, it's enjoyable.

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