

Active Travel Toolbox

The Role of Active Travel in Improving Health

Toolkit Part 3: The role of active travel in improving mental health



Delivered by Sustrans in partnership with:



Toolkit Part 3: The role of active travel in improving mental health
Health And Wellbeing Toolkit
Active Travel Toolbox

Written by Sustrans with support from Dr Adrian Davis, The TAS Partnership Limited and Living Streets.



About Sustrans

Sustrans is the charity making it easier for people to walk and cycle.

We are engineers and educators, experts and advocates. We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute.

Sustrans works in partnership, bringing people together to find the right solutions. We make the case for walking and cycling by using robust evidence and showing what can be done.

We are grounded in communities and believe that grassroots support combined with political leadership drives real change, fast.

Join us on our journey. www.sustrans.org.uk

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This is the third part of the Active Travel toolkit on The Role of Active Travel in Improving Health.

The Active Travel toolkits aim to help LEPs and their local delivery partners to:

- 1 Develop your business case for investment in walking and cycling schemes.
- 2 Link walking and cycling schemes to your strategic economic growth priorities, housing growth and planning, and public health.
- 3 Support the planning and delivery of walking and cycling schemes in your local area.

This toolkit will cover the following areas:

- 1 The financial and personal costs of poor mental health
- 2 The benefits of physical activity for mental health
- 3 The benefits of active travel for mental health through the commute

A slide pack on *the role of sustainable transport in improving mental health* can be downloaded separately. It summarises the key evidence base and statistics to help you prepare presentations, funding bids and reports.

Our key messages include:

- 1 Poor mental health is a significant and often poorly understood issue in the UK and one in six workers will be experiencing depression, anxiety or problems relating to stress at any one time.
- 2 Many benefits to mental health have been proven to be associated with physical activity including:
 - a reducing the risk of depression, dementia and Alzheimer's,
 - b improving self-perception and self-esteem including a sense of purpose and value, mood and sleep quality, and
 - c reducing levels of anxiety and fatigue
- 3 Evidence suggests walking and cycling (often alongside public transport) can contribute positively towards mental health both through physical activity and other factors in comparison to commuting by car.
- 4 More needs to be done to improve links between transport, health and wellbeing nationally and locally including how we account for mental health outcomes in transport planning.
- 5 Physical activity also makes people feel better which improves their enjoyment of life, their work etc and may plausibly have long term health benefits

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1. The financial and personal costs of poor mental health

One in six workers will be experiencing depression, anxiety or problems relating to stress at any one time in the UK. Coupled with this 91 million days are lost each year due to mental health problems. Therefore incidences of mental ill health are not uncommon in the workplace.

Cost for employers

The total cost to employers is estimated at nearly £26 billion each year. That is equivalent to £1,035 for every employee in the UK workforce.¹ There is also the cost of £2.4 billion a year in replacing staff who leave their jobs because of mental ill health.

Performance and productivity

Research has shown a direct correlation between psychological wellbeing and performance. For example, a study on a sample of 750 employees in the North West of England showed that an increase of one point on a psychological wellbeing scale of 1 to 5 points is associated with an increase in productivity of 8%.²

2. The benefits of physical activity for mental health

An increase in physical activity has been proven to be associated with benefits to mental health. Physical activity can reduce the risk of depression, dementia and Alzheimer's. Physical activity can enhance psychological wellbeing by improving self-perception and self-esteem including a sense of purpose and value, mood and sleep quality, and by reducing levels of anxiety and fatigue.³

Depression and anxiety

The link between physical activity and depression is well established. Research has found that people who are inactive have three times the rate of moderate to severe depression as active people.⁴

Moderate regular physical activity should, therefore, be considered as a valuable means of treating depression and anxiety, and of improving mental wellbeing in the

population. Conversely, inactive people are more likely to develop clinically defined depression.⁵

There is unequivocal evidence that physical activity has positive effects on anxiety, and specifically that short bursts of physical activity appear to be sufficient. The most positive effects are noted among those who maintain physical activity programmes over several months.⁶ Physically active people report fewer symptoms of anxiety or emotional distress than those who are inactive. Physical activity can help people feel less anxious in general, and even single exercise sessions can help individuals feel less anxious. Moderate intensity activity can reduce short-term psychological reactions to psychological stress and can help people recover more quickly. Physical activity has some beneficial effects for people with generalised anxiety disorder, phobias, panic attacks and stress disorders. For both 'state anxiety' (acute anxiety, or 'right now' feelings) and 'trait anxiety' (an anxious predisposition to react nervously), physical activity can have a moderate, but measurable, effect in reducing anxiety.

Personal wellbeing and self-esteem

There is strong and consistent evidence to show that physical activity makes people feel better about themselves. Activity provides benefits for wellbeing, for example improved mood, a sense of achievement, relaxation or release from daily stress.⁷

Becoming physically active also causes positive changes in overall physical self-worth as well as specific aspects of physical self-perception such as body image, perceived fitness and strength. This may be particularly important for women, as research shows that compared to men, women tend to be more self-critical of their own body shape, and their body image is more closely linked to overall self-esteem.⁸

Surveys show that physically active people feel happier and more satisfied with life.⁹ Higher levels of physical activity are associated with more positive subjective wellbeing, mood and emotions, life satisfaction and quality of life.

In particular, physical activity can bring more generalised beneficial changes in self-esteem for those who have initial low self-esteem.

Environmental factors

In addition, there are external factors which impact on mental wellbeing related to physical activity. This includes, for example, living in an area with significant access or exposure to green spaces as this has a lasting positive effect on mental wellbeing for all ages and socio-economic groups.¹⁰

3. The benefits of active travel for mental health through the commute

Active travel

Psychologists have long recognised the potentially detrimental effect of the commute upon our mental health. As walking and cycling contribute towards physical activity both modes are good for our mental health. Public transport journeys typically feature physical activity when accessing bus stops or railway stations and therefore are also often proven to be good for mental health.

Most studies of the commute and stress find that active travel, followed by public transport use are the least stressful modes and that active travel is often reported as a positive experience in terms of stress management. Across the developed world research indicates that active travellers tend to be less dissatisfied with their commute,¹¹ or actually enjoy their journey. Users of public transport also “complain” about delays; however, this results in stress as well as boredom.

Walking and cycling journeys are the most relaxing and exciting and therefore seem the most optimum form of travel from a wellbeing perspective.¹² Research suggests that understanding and improving commuter satisfaction is not a straightforward task, as satisfaction is determined by both objective and subjective factors.¹³

Explanatory factors include desirable physical exercise from walking and cycling, as well as that short commutes provide a buffer between the work and private spheres. Nonetheless, evidence indicates that 30 minutes or more round trip commuting either on foot or by bicycle has a significant positive effect on mental health, most notably for men.¹⁴

Commuting by private motor vehicle

Car commuters find their journey more stressful than other mode users. The main sources of this stress appear to be delays and other road users. Car commuting stress has been found to be associated with increased negative moods on arrival at work and the home, lower tolerance threshold, cognitive impairment, greater illness and work absenteeism, job instability and a negative effect on overall life satisfaction.¹⁵ Driving is also the most stressful mode because drivers must budget a considerable amount of extra time to deal with unexpected delays and are more likely to be stressed when faced with disruptions to their journey. This additional time budget indicates that they have, perhaps paradoxically, less control over their commute than commuters on other modes.¹⁶ Traffic congestion has been found to disturb mood, lead to frustration and work absences. Studies have reported a larger Body Mass Index (BMI) and higher Blood pressure in individuals exposed to increased periods of time behind the wheels.¹⁷

Research addressing those who switch from car has shown that switching to walking or cycling is associated with an increase in subjective wellbeing as measured within a year of the switch. Increases in walking time and decreases in car

commuting time have shown to be associated with improved subjective wellbeing scores.

Roads however can lead to community severance and be dangerous and unfriendly environments for people. Therefore without adequate pedestrian and cycling infrastructure to overcome barriers and enable attractive, continuous, direct and safe routes for active travel these benefits are unlikely to be realised.

Case study: Adults' commute travel behaviour over time and wellbeing

In a longitudinal survey of the British Household Panel Survey (1991/2–2008/9)¹⁸, researchers found associations between wellbeing and:

- travel mode choice,
- changes in time spent commuting by specific travel modes and
- switching to more active travel modes.

This research found a positive association between active commuting and wellbeing, for example

- there was a positive relationship between time spent walking and wellbeing.
- with regards to public transport there was a positive association observed between wellbeing and public transport when compared to car travel of a comparable magnitude to that observed between wellbeing and active travel overall.

The researchers noted that a partial explanation for their finding could be that public transport journeys typically feature physical activity when accessing bus stops or railway stations.

Together, these results appear to suggest that avoiding car driving may be beneficial to wellbeing. This view complements existing evidence of a negative association between driving and physical health and is consistent with the hypothesis that car driving (a non-passive travel mode that requires constant concentration) can give rise to boredom, social isolation and stress.

This view is also consistent with the hypothesis that intrinsic enjoyment is gained from the exercise or relaxation associated with active travel. In addition to potential physical health benefits, the positive psychological wellbeing effects identified in this study should be considered in cost–benefit assessments of interventions seeking to promote active travel.

4. Improving links between transport health and wellbeing

There is some evidence of the financial value of health and wellbeing benefits resulting from investment in transport schemes, most notably for walking and cycling schemes.¹⁹

As the Chartered Institute for Highways and Transportation has stated, there are opportunities to improve links between transport, health and wellbeing, but progress is being hampered by a lack of strategic integration nationally and joint working locally. They note that the health and wellbeing benefits of transport investment need to be measured in terms of cost and non-monetary values to better influence funding decisions. Moreover, the influence of transport choices on people's mental health and wellbeing should be emphasised more in policy and practice.²⁰ The key to unlocking the benefits is routine physical activity through active travel.

5. Acknowledgements

This toolkit was written by Adrian Davis, Independent Consultant on Health and Transport and Sustrans, in partnership with Living Streets and The TAS Partnership. The toolkit was peer reviewed by Stephen Watkins, Director of Public Health at Stockport Council.

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