



ELSEVIER

Contents lists available at ScienceDirect

Health & Place

journal homepage: www.elsevier.com/locate/healthplace

Urban air pollution perception through the experience of social practices: Talking about breathing with recreational runners in London



Antonia Hodgson, Russell Hitchings*

Department of Geography, UCL, Gower Street, London WC1E 6BT, UK

ARTICLE INFO

Keywords:

Air pollution perceptions
Recreational running
Social practice theory
Qualitative interviewing
Embodied exercise
Public health promotion

ABSTRACT

This paper examines how interviews with outdoor recreational runners can help us understand how urban air pollution insinuates itself into the consciousness of those who may be breathing more polluted air than most. It begins by making the case for why studies of air pollution perception might turn to the subjectivities associated with taking part in relevant social practices. Then, with reference to debate about the extent to which groups of exercisers are thinking about certain aspects of what is physically happening during their exercise, we examine how outdoor recreational runners in London talk about the air that they breathe when running. We might imagine that this group would be particularly alive to urban air pollution in view of a presumed interest in physical performance and a personal history of running through various bodies of city air. However, through close scrutiny of their running talk, this paper documents how and why the suggestion of breathing polluted air is often placed beyond the realm of conscious thought for them during their runs. These findings point to particular strategies for encouraging healthy urban lifestyles and illustrate the potential of further studies on how social practices shape pollution perceptions.

1. Introduction

In line with its continued growth in international popularity (Scheerder et al., 2015), recreational running has become one of the most common forms of exercise in the UK (Sport England, 2017). Running can take place in a variety of environments, can be done alone or in a group, is comparatively low-cost, and requires little specialist knowledge or experience to get started (Shipway and Holloway, 2010; England Athletics, 2013). All this makes running an easily accessible form of exercise, particularly when finding the time to exercise in modern societies means working around what are often felt to be increasingly busy schedules (Hitchings and Latham, 2016; England Athletics, 2017). From a public health perspective, this is a positive trend, since the health and wellbeing benefits of regular aerobic exercise are numerous. They include reduced risk of chronic health conditions such as coronary heart disease, obesity, diabetes and stroke, as well as improving mental health by enhancing mood, self-esteem and reducing fatigue (Department of Health, 2011).

Yet the environments in which people run are not always conducive to health. Urban air quality is of particular concern in this regard due to the effects of emissions from vehicles, buildings and industry. So, though running is encouraged in terms of public health, those who run in cities, and who will likely be running at traffic level, are defined as an

‘at risk’ group, due to their increased exposure to vehicular pollution, which in many cities is the main source of air pollution (Carlisle and Sharp, 2001; Greater London Authority, 2017a). Those focused on athletic impact therefore advise exercising away from the roadside wherever possible when running in cities (Carlisle and Sharp, 2001; Sharman et al., 2004). In the UK, London Air Quality Network (2017) goes as far as to suggest planning to avoid outdoor exercise during high pollution events and in heavily polluted areas. However, in most cities avoiding the roadside is difficult. Furthermore, it is not at all clear whether those who seek a healthy lifestyle through regular urban running are particularly attuned to the dangers of air pollution.

This paper examines how air pollution risk is refracted through the experienced breathing of London runners. Though other cities routinely experience far higher levels, pollution has recently become a priority for London policymakers as it has been recognised as one of the most polluted places in the country with over 9000 people being estimated to die each year as a result of its ‘dangerously’ and ‘illegally’ poor air quality (Greater London Authority, 2017b:19). We begin by arguing that studies of air pollution risk perception might usefully turn to those taking part in relevant social practices. Then we consider what existing research suggests about the extent to which runners are actively thinking about the environments through which they run. After that, with reference to debate about the value of interviews in researching

* Corresponding author.

E-mail address: r.hitchings@ucl.ac.uk (R. Hitchings).

the exercise experience, we argue for scrutinising how established exercise ‘practices’ are partly sustained by particular combinations of talk and thought. This then leads to a discussion of the findings of an interview study with recreational runners in London and a consideration of how and why the suggestion of breathing polluted air when running is often beyond the realm of conscious thought for them. We end with the implications for public health promotion before arguing for the value of further studies on how social practices shape pollution perceptions in view of a prevailing focus on residential location.

2. Literature review

2.1. Urban air pollution perception and the exercise experience

As a product of modern industrial society, urban air pollution has become a significant public health hazard (D’Amato et al., 2010; Wakefield et al., 2001). One response from social researchers has been to explore how public ‘perceptions’ of this hazard can positively inform relevant policy (Bickerstaff and Walker, 2001). Some of them have particularly highlighted the role of direct sensory experience in shaping perceptions, with sight and smell being particularly recognised as key sensory cues in shaping the awareness of air pollution (Bickerstaff and Walker, 2001; Johnson, 2012; Xu et al., 2017). Johnson (2012) has, for instance, argued that individuals rely on sensory information more than any formalised air quality data because it is seen as more reflective of their immediate surroundings.

These studies generally centre on those who live in specific areas (Xu et al., 2017; Bickerstaff and Walker, 2001; Johnson, 2012; Day, 2007), with various studies across the world exploring how particular groups of urban residents respond to local pollution risk (see, for example, Muindi et al., 2014; Zhang et al., 2014; Wakefield et al., 2001). This focus makes sense when living in areas with greater pollution levels will likely translate into higher exposure. However, it is not only where you live that shapes exposure but also what you do. In this respect, there have been comparatively few studies on the relationship between specific social practices and the air pollution perceptions produced by taking part in them. Badland and Duncan (2009) consider the experience of ‘commuting’ in Australia to argue that those who commute through ‘active travel’ – running, cycling and other activities linked to greater pollution exposure – are relatively unfazed by this risk. Partly because their experience is short lived, Li et al. (2016) document how international tourists to Beijing are more concerned about the implications of pollution for the quality of their photographs than any personal health impacts. Others have focused on cyclists and their experience of traffic related pollution (de Hartog et al., 2010; Zuurbier et al., 2010). This work considers the cost-benefit health payoff of cycling through polluted air but does not examine the detail of the experience. So, whilst there is certainly mention in the air pollution perception literature (e.g. Saksena, 2011) of how certain ‘lifestyle factors’, such as the amount of time spent during activities outside buildings, may influence pollution perceptions, few have looked in-depth at how the experience of taking part in particular activities plays into this process.

Were we to attempt to address this oversight, outdoor exercisers represent an excellent group with which to start because exercise puts them at particular risk (Sharman et al., 2004). As a person’s average daily dose of air pollution can be understood as a product of average pollutant concentration and ventilation rate, the dose received will vary depending on the level of activity being undertaken as well as the environment in which it takes place (Pope et al., 2011). However, the enhancement of the respiratory process associated with exercise nonetheless generally entails the increased deposition of pollutants in the lungs due to increased ventilation (breathing more deeply and frequently), the inflammation of airway cells, and the impairment of nasal clearance (Carlisle and Sharp, 2001; Sharman et al., 2004; Rundell, 2012; Cavalcante de Sá et al., 2016). Smaller particles, such as those

commonly found in the fresh exhaust fumes that will likely be inhaled when in close proximity to road traffic are also thought especially problematic for exercisers because their size allows them to infiltrate the lungs more deeply (Rundell, 2012). As a result of all this, air pollution has been argued both to decrease athletic performance in the short term and contribute to health problems in the longer term due to stress on the respiratory and cardiovascular systems (WHO, 2016; Rundell, 2012). However, most studies on this topic have focused on physiological impact by collecting data on matters such as blood gas concentrations, lung function and athletic performance (Sharman et al., 2004; Rundell, 2012; Helou et al., 2012). Less has been said here about how outdoor exercisers themselves relate to air pollution.

The project on which this paper draws sought to respond to this situation through a focus on outdoor recreational runners in London. London is a city where the health impacts of air pollution are a growing concern. The size and scale of the city’s road network, along with building emissions, make London one of the most highly polluted areas in the UK (London Air Quality Network, 2018). Cleaning up London’s air has therefore become a priority for the Mayor of London and forms a significant part of London’s newly proposed Environment Strategy (Greater London Authority, 2017b). Strategies within that currently centre on cutting emissions from the most polluting vehicles with an emphasis on diesel, via the proposed Ultra Low Emission Zones and Toxicity Charge which form part of future plans to secure better air for London (Greater London Authority, 2017a). This is in addition to anti-idling campaigns and strategies to promote fresh air squares, green walls and tree planting that have already been implemented by local authorities (Greater London Authority, 2016). Though the pollution levels seen in this city may be lower than those found in others around the world, the health implications of London’s air quality for those who live, work and play in this city have become a topic of considerable concern.

2.2. How recreational runners relate to their environments

As lifestyles have become more and more sedentary in many countries, encouraging regular physical exercise in order to improve the health of populations has become an increasingly important focus of public health research (McKenna and Riddoch, 2003). With this in mind, a number of qualitative studies have examined the recreational running experience with a view to further aiding its international growth (for example, Barnfield, 2016; Hitchings and Latham, 2017a; Shipway and Holloway, 2010). Within this, an understanding of how it is to exercise in certain physical environments has been argued to have a valuable role in devising strategies to encourage greater participation (Hitchings and Latham, 2017a).

The picture produced by this work in terms of how actively engaged runners are with their environments is, however, currently mixed. In some studies, for example, they would appear to be very aware of the environments through which they move. Lorimer (2012:83) for example, sees the runner as a ‘highly accomplished sensualist’, for whom the experience of different surfaces underfoot supplies an on-going stream of information about the physical environment. Others emphasise how runners interpret various physiological effects such as those associated with injury, pleasure, pain and comfort through their physical experience of environmental engagement (Hockey, 2013; Shipway et al., 2012; Howe and Morris, 2009). Barnfield similarly argues that urban recreational running ‘is bound up with particular intensities and sensations generative of daily sense-making practices and experiences’ (2016:282), noting in passing how these sensations can lead some runners to avoid areas with greater air pollution. Edensor et al. (2018) also suggest that ‘urban runners’ may be particularly attuned to the density of obstacles by which the city is characterised, including a diversity of people, animals and objects (on this, see also Cook et al., 2016). Taken together, these studies can leave the impression of a constant feedback loop between the running body, the running mind,

Download English Version:

<https://daneshyari.com/en/article/7456635>

Download Persian Version:

<https://daneshyari.com/article/7456635>

[Daneshyari.com](https://daneshyari.com)