

Walking as a social practice: dispersed walking and the organisation of everyday practices

Tim Harries and Ruth Rettie

Kingston Business School, Kingston University London, UK

Abstract This paper uses social practice theory to study the interweaving of walking into everyday practices and considers how greater awareness of everyday walking can influence its position within the organisation and scheduling of everyday life. Walking is of policy interest because of its perceived benefits for health. This paper asserts that increased awareness of everyday walking allows users to become more active without having to reschedule existing activities. Using Schatzki's distinction between dispersed and integrative practices, it argues that increasing awareness of dispersed walking can enlist walking into the teleoaffective organisation of some social practices and prompt the performance of new 'health practices' within everyday domains of life such as shopping and employment. While this analysis offers useful insights for the design of behaviour change strategies, it also points to some unintended consequences of using digital feedback to increase walking awareness. In directing the gaze of participants at one particular element of their daily practices, the paper suggests, digital walking feedback provides a 'partial' view of practices: by highlighting the exercise value of walking at the expense of other values it can prompt feedback recipients to pass moral judgements on themselves based on this partial view.

A Virtual Abstract of this paper can be found at: <https://youtu.be/WV7DUnKD5Mw>

Keywords: exercise/activity, health education/promotion, behavioural interventions, healthism

Introduction

The limited success of public health initiatives in increasing walking (Killoran *et al.* 2006, Nettleton and Green 2014) is attributed, in part, to the insufficient inclusion of sociological perspectives in their design (e.g. Darker *et al.* 2007, Green 2009, Nettleton and Green 2014). This view is echoed by critics of the 'health behaviour' paradigm (e.g. Cohn 2014) and, recently, within the public health discourse itself (NPRI 2015). However, sociological research in this area is rare – perhaps because walking is sometimes considered mundane and unremarkable by sociologists if it is not being constrained by environmental, social or biological factors (Green 2009).

Within the medical and public health literatures, increased walking is presented as a route to improved health and the prevention of ill-health. Walking is associated with a reduced occurrence of obesity, type-2 diabetes, cancer, osteoporosis, cardiovascular diseases and musculoskeletal disorders, and with improved health outcomes for those who experience these conditions (Knowler *et al.* 2002, Lee 2003, Melzer *et al.* 2004, Morris and Hardman 1997,

Pate *et al.* 1995). As a low cost, widely accessible form of exercise, walking has obvious appeal to policymakers seeking to promote healthier lifestyles – particularly in the present neo-liberal environment, in which self-determination and responsibilisation are given more prominence than structural influences on health (Lupton 2013).

Despite this, many OECD countries have seen a decline in walking. In the last 35 years, the percentage of daily trips made on foot has fallen from 44 per cent to 21 per cent in the UK and from 50 per cent to 20 per cent in France (Pucher and Buehler 2010). In the US, 61 per cent of journeys of less than 2.5 km are made with motorised forms of transport and only 11 per cent of all daily trips are on foot (Pucher and Buehler 2010). Partly as a result of changes in walking patterns, many populations fail to achieve the recommended target of thirty minutes moderate exercise at least 5 days a week (Darker *et al.* 2007, Department of Health 2009). Given the intense focus on health and health promotion that has emerged since the 1970s (Lupton 2013), it is perhaps unsurprising that many countries have adopted the promotion of walking as a public policy objective. Increased walking features in the policy objectives of 35 US states (Alliance for Biking and Walking 2012) and in UK public health policies (Department of Health 2009).

This paper follows Nettleton and Green (2014) by adopting a practice theory approach to the analysis of everyday walking and draws on an example of the more recent ‘generation’ (Postill 2010) of practice theorists, Schatzki (1996, 2002, 2010, 2013). Practice approaches are often presented as particularly suitable for the study of the mundane in its social, affective and material context (Cohn 2014). Practice theory takes practices, rather than individuals or society, as the primary unit of investigation and analysis. A practice is theorised as a manifold of socially organised, embodied activities (‘sayings and doings’) that are ‘bundled’ with material arrangements and linked into a nexus by understandings (‘knowing how to carry out desired actions through basic doings and sayings’), rules (‘explicitly formulated directive, remonstrance, instruction, or edicts’) and teleoaffective structures (‘ends, projects, tasks, purposes, beliefs, emotions and moods’) – (Schatzki 2001b, 2010, 2011, 2013). Although practices are social entities, they are performed by individual carriers who actualise and sustain these social entities (Schatzki 1996). Within the social ontology of practice theory, social phenomena ‘occur within and are aspects and components of the field of practices’ (Schatzki 2001a: 11).

Most previous empirical work on social practices has focussed on integrative practices but this study looks at dispersed walking practices; this distinction is therefore of particular importance to this paper. Integrative practices consist of complex sets of ‘multiple actions [and] projects’ (Schatzki 2010: 88), while dispersed practices ‘centre around a single type of action’ (Schatzki 2010: 88) and circulate, in transfigured forms, through many facets of social life and through many integrative practices. Unlike integrative practices, dispersed practices rarely have teleoaffective structure (‘ends, projects, tasks, purposes, beliefs, emotions and moods’, Schatzki 2010: 89) or rules; rather, they depend on the teleoaffective structures and rules of the integrative practices that they are woven into. Dispersed practices do carry their own understandings, but these are ‘sensitised’ towards the integrative practice of which they form a part. Dispersed practices, therefore, are less ‘complex’ and, unlike integrative practices, course through numerous parts of social life rather than being ‘constitutive of particular domains’ of social life (Schatzki 1996: 98).

Walking provides examples of both dispersed and integrative practices. As a dispersed practice, it is present in many social practices such as shopping, gardening and work: people commonly walk around a shop while doing their shopping, walk around the garden while maintaining it and walk around offices and factories while working. However, in most circumstances it is the integrative practices (shopping, gardening, working, etc.) that carry the teleoaffective elements of the practice and that set the rules for how the walking is performed. The

aims of the walking are inherent in the aims of the gardening etc.; the walking does not, usually, have any goals of its own beyond those that serve the purposes of the integrative practice, namely, getting to the tool shed or the checkout, crossing the warehouse, etc. In the same way, the rules of walking, too, inhere in the practices of shopping, gardening and work rather than in any independently existing notion of 'walking'. For example, the rules of walking-while-shopping are influenced by the need to push a trolley, to weave between other shoppers etc. (examples of what Schatzki calls the 'practical arrangements') – factors that do not influence walking rules in other settings. Although all these forms of walking have a Wittgensteinian family resemblance, this resemblance exists only at the level of the basic know-how of how to walk (what Schatzki 2013, calls practical understandings) and not at the teleoaffactive level or at the level of rules. It is only from other (integrative) practices that dispersed practices acquire aims and rules, and become what Warde (2013) calls particular or concrete.

As argued by Schatzki (2002: 88), the existence of a 'dispersed practice of X-ing' does not preclude the existence of other, integrative, X-ing practices. Rambling is one example of such an integrated walking practice (see Green 2009). In rambling, walking is part of the teleoaffactive organisation of the practice: the walking aspect of the practice is not incidental but is one of its key aims – part of what is being achieved. Furthermore, many of the defining rules of rambling pertain directly to walking: for example, the importance of footpaths; laws of trespass, and social norms about matching your pace to slower walkers. From a social practice theory perspective, the aspects of the organisation of rambling that regard walking are clear and relatively easy to specify precisely because this form of walking, unlike the walking within shopping, work or gardening, is itself a social entity.

The distinction between integrative and dispersed walking practices is important to understanding the stability of the position of these practices within everyday schedules. Drawing on interviews in which participants were asked to describe how they organised the passage of time in their daily lives, Southerton (2006) argues that practices are given priority within schedules if they involve the co-participation of others (for instance playing a game of football) or are enmeshed in relationships of temporal interdependence with other practices (for example, getting dressed usually precedes commuting to work, which usually precedes working). From the perspective of the individual, dispersed practices typically occur incidentally as part of integrative practices. Consequently, they are not themselves scheduled, for their timing arises from their associated integrative practice. Warde (2013) makes a similar point, noting that dispersed practices don't usually have the sort of bounded presence that permits recording in time-use studies.

The significance of teleoaffactive structure (or its absence) for the distinction between dispersed and integrative practices allows us to apply a practice perspective to everyday walking by asking participants what they are trying to achieve when they walk. In doing so we follow Green's (2009: 36) suggestion that researchers uncover 'how walkers conceptualise their own activity, not from the perspective of health gain and barriers to participation, but from the perspectives of what is being achieved and how'.

This was the aim of the qualitative interviews analysed in this study. These interviews were conducted with participants in a trial that used a form of surveillance technology (Lupton 2013) to track participants' walking, enhance its visibility and, by quantifying it, change the way in which they saw their own bodily performance. The feedback supplied by the app would, we speculated, change the performance of walking and thereby make both the practice performances and the associated practices more visible to the participants and, therefore, the research team. Furthermore, although pedometer interventions are said to be one of the most efficient ways of increasing activity (Laine *et al.* 2014), little is known about how and why they do so (Tudor-Locke and Lutes 2009) and this study presented an opportunity to explore this issue. We also aimed, therefore, to understand how the technology (re-)configured the

performance of practices and, by so doing, enhance our understanding of the impact of pedometers on the practice organisation of users' everyday lives and of the place of everyday walking within social life.

Methodology

Participants in this study were recruited from the sample in a randomised controlled trial that tested the effects of a pedometer-style mobile phone app among males aged between 22 and 40 (Harries *et al.* 2013). This app automatically counted users' steps throughout the day and provided participants with feedback of current, weekly and historical data. The app phone had to be carried in a trouser pocket, so because it is less usual for women to carry phones in trouser pockets, only men were recruited as participants. Analysis of the trial data showed that, during the trial period, participants that received feedback from the app walked substantially more than those in the control condition, who received no such feedback; they were also significantly more likely to report an increase in walking (Harries *et al.* 2013).

Although randomised controlled trials can establish the impacts of interventions, unless they also include an element of qualitative investigation, they are not able to reveal the reasons behind these impacts. Furthermore, if they focus exclusively on the measurable aspects of practices, they neglect outcomes that are non-measurable or that, because unanticipated, were not chosen for measurement. Qualitative research can fill these gaps (Ong *et al.* 2014). This paper reports the findings of follow-up interviews and group discussions that explored participants' walking practices and examined whether, and why, these had changed during the trial.

Qualitative enquiry typically focusses in-depth on detailed data from small numbers of participants or even single cases (Patton 1990, Richards 2005). This allows them to better illuminate the questions under study (Kuzel 1992) with a sufficiently intensive analysis of the data (Gaskell 2000). For example, Dukes (1984) recommends a sample size of 3–10 for phenomenological studies and Cresswell (2007) 20–30 for the grounded theory approach, and Gaskell (2000: 43) suggests that the number of interviews and groups be kept low enough to allow the researcher to 'live and dream the interviews – to be able to recall each setting and participant, and the key themes of each interview'.

In this study, three focus groups and 15 interviews were conducted using male interviewers/group facilitators aged 40–55, with the groups and seven of the interviews being conducted two months after the trial and the remaining eight interviews being completed ten months later. Participants in the interviews and groups were recruited from among the 151 participants in the trial and were each offered a £20 incentive. Participants for the focus groups were selected on the basis of availability and geographical proximity to the two group venues. Interviewees were selected with a purposive sampling approach that used reported changes to walking behaviour as the sampling criterion (see Table 1). Of the seventeen trial participants invited to participate in the interviews, four declined to be interviewed. All the interviews and groups were audio-recorded and transcribed. Ethical approval was obtained from Swansea University.

One danger with the approach just outlined is that the social contexts of the groups and interviews can prompt participants to produce overly rational accounts of the events of interest in the study. Although a more ethnographic approach might have reduced this risk, this was precluded by the demands this would have placed on the time of the researchers and the interference it would have brought to participants' lives. Like Will and Weiner (2014: 135), we felt that a focus on 'practicalities, materialities and events' would reduce the risk of the research data being distorted by post-hoc rationalisation, so we focussed on eliciting talk about practices rather than on attitudes or beliefs.

Table 1 *The Sample Structure – number of participants*

	<i>Interviews</i>	<i>Focus groups</i>	<i>Total</i>
Self-reported response to monitoring and feedback			
Walked more	7	7	14
Walked less ^a	1	0	1
Walked neither more nor less	7	6	13

^aOnly two participants reported a reduction in walking and one of these declined to be interviewed.

Furthermore, during analysis we maintained what Green and Thorogood (2013) term a reflexive awareness of the interview, examining participants' comments in the light of the rest of the interview and evaluating the extent to which they might have been prompted by the interview context. For instance, we looked for indications that participants' reluctance to treat walking as exercise and their talk about 'proper walks' might signify attempts to present themselves to the (older) interviewers as active younger men (Allen 2005, Padfield and Procter 1996). We also noted whether accounts were presented as reflections of what was generally accepted (e.g. 'walking is just something you do as a means to an end') or as personal opinions '[the app] comes along and tells me, "stop feeling good about yourself"' – both types of comment can be seen as examples of identity work, but the former are presented in participants' accounts as taken-for-granted, shared understandings.

The coding process drew on grounded theory (Charmaz 2014, Glaser and Strauss 1967), with most codes emerging from the analysis. Three transcripts were independently hand-coded by the authors of this paper, who then agreed a code list that was used for the coding of the remaining interviews. Analysis involved the identification, examination and interpretation of emerging themes across transcripts, and the constant comparison of cases. To guard against selective use of the data, all segments with relevant codes were examined when analysing specific themes and negative cases were proactively identified and considered. We, the two authors, collaborated in analysis and discussed and checked emerging findings with each other.

As the study was influenced by practice theory, the interviewers set out to engage participants in discussions about their walking practices – including the understandings, rules, emotions and aims they associated with these practices and the conceptual distinctions they drew between different walking practices. This is no small challenge; as Bourdieu (1977: 18) notes, research participants tend to leave unsaid that which 'goes without saying'. Recognising that participants might take aspects of their social practices for granted, the interviewers encouraged participants to be reflexive, to talk about what seemed obvious and to unpick differences – for example, between walking and exercise, or between different sorts of walking.

Findings

An analysis of participants' talk in the interviews and focus groups suggests that walking occurs both as integrative practices (e.g. hiking) and as a dispersed practice. It also indicates that for the population of young men included in the study, walking that occurs as a dispersed practice often passes unnoticed and is not regarded as part of what is being achieved. We argue below that the measurement of steps changed this for some, making visible the incidental walking embedded within integrative practices and thereby providing participants with a means to increase their walking that did not involve difficult changes to complex daily

schedules. In some cases, participants added walking to their aims when shopping or socialising, or established practice performances in which health was the central teleoffective element.

Walking as a dispersed practice

In the interviews and focus groups, discussions of walking led participants to distinguish 'proper walks', where walking is a goal and is considered an accomplishment (e.g. hikes), from everyday dispersed walking, where it supports the core teleoffective goals of a different, integrative practice such as travelling or socialising with friends. Thus, John (interview participant) asserted that walking was often no more than a 'means to an end' and Warren (focus group) distinguished activities where walking was an intrinsic part of what people set out to accomplish ('it's an actual pursuit on its own') from those where it was a secondary activity ('walking you don't really even realise you're doing. Just walking round the house, yes, just getting to and from places'). In these examples of dispersed walking, the answer to Green's question, 'what is being achieved', would be arrival at a destination and socialising, but not walking. Walking is not part of the teleoffective structure of these practices; nor, usually, is it part of the goals of their performance. As a result, walking is less salient and less noticeable: for example, Peter (interview participant) says that when he is walking with his friends, the focus of the activity is 'having a laugh' and 'joking' and that 'you're not knowing that you're walking'.

The measurement of walking can change the organisation of performed practices

Participants' accounts indicate that the app's data visualisations changed this by making them more aware of the incidental walking they did within everyday practices that they had not previously associated with walking: for example, the 'little bits here and there, walking around the workshop' (Keith, interview participant). The quantification of their incidental walking also encouraged them to value it – perhaps for the first time – and this, in turn, sometimes prompted them to increase it. For example, Alan (focus group participant) explained that on seeing how 'stationary' he was while at work, he began to walk over to colleagues' offices instead of emailing them; similarly, John (interview participant) explained how he began 'doing an extra walk with the dog' or 'walking to the shops' on days when he was working at home and would otherwise have been inactive.

These examples illustrate how, as a result of the feedback, walking that had been incidental to an integrative social practice sometimes became part of what was being achieved when the practice was performed – a transformation from 'just something you do' to something that has value as 'a measurable exercise' (John, interview participant). In some cases, walking was added to the teleoffective structure of existing integrative practices alongside existing goals: 'I guess it does make walking to the shops a bit more of an activity; because you're trying to achieve a goal' (Warren, focus group). In such cases, participants described the pleasure of realising that an existing practice could acquire an additional benefit for little effort:

Well, for me it was kind of awesome, the idea of integrating exercise into what you do. So like, yes, you forget that commuting walking is actually exercise. Wicked. That's free! You don't have to think, 'oh, I've got to go and walk to work'. It's kind of like, 'oh, brilliant, this is now integrated into what I do'.

In this excerpt, Tony (interview participant) argues that 'commuting walking' is 'free' because it doesn't use up any of his time and is 'integrated' into his journey to work. The incidental ('free') walking is represented as both an exercise practice and part of the integrative practice of commuting and this is described as enabling him to simultaneously exercise and commute.

These comments reveal how the intervention influenced those who wanted to exercise more but were unwilling or unable to schedule exercise activities into their socially coordinated schedules. Rather than having to engage in additional exercise events (such as 'proper walks') that would have required scheduling, awareness of incidental walking allowed participants to increase walking that was embedded within existing routines – by walking to the shops when they would otherwise have driven or, in John's case (interview participant), doing small work tasks themselves if they involved walking, when previously they would have delegated them.

In other cases, rather than adding to the teleoaffective structures of the performances of everyday practices, increased awareness of walking led to an inversion of these structures. In an interview conducted six months after the end of the trial, Brian described how walking had become the primary goal of some shopping trips:

Since [using the app], I'll just walk out and buy like the simplest thing. I needed a rubber yesterday so I went to the shop just to get a rubber. I really didn't need to do it but it was more about just getting out and making sure I'd go ... I try and get out once a day now because there were days in the past where I maybe just wouldn't

The purchase of the eraser is depicted by Brian as no more than a pretext for this trip to the shops – the term 'just' implying that he would not have gone solely for that purpose. The real focus of the trip, the text suggests, is 'making sure' that he 'gets out' and is active.

Finally, as well as changing the goals embedded within the performance of existing integrative practices, the app also sometimes changed understandings. Participants reported that the miles-walked feedback changed their perceptions of distance and encouraged them to believe they could walk on occasions when they would previously have chosen to use another form of transport. For example, David (interview participant) recounted that while two miles had previously seemed too far to walk ('Phew two miles. I'll hop on a bus.'), it now felt achievable ('Actually, I walked two miles the other day and it seemed like nothing'; 'Oh I can walk that.')

It is important to note that these changes to the performances of integrative practices do not necessarily imply changes to the practices as social entities. Although practice entities are sustained and actualised by individuals' performances of them, change to the social entity of a practice is usually wrought but slowly by variations in its performance (Schatzki 2005). However, the substitution of one teleoaffective structure for another (as illustrated by Brian's account of his trip to buy a rubber) might indicate an early stage in the emergence of new integrative walking-for-exercise practices in which other, perhaps more socially acceptable, goals remain as pretexts.

Discussion and conclusions

The analysis conducted in this study supports the suggestion that walking exists both as dispersed practices and integrative practices: in their accounts, participants distinguished 'proper walks' (e.g. hiking), in which walking was what was being achieved, from walking within practices whose aims did not include the achievement of walking (e.g. shopping or socialising). Participants' accounts of the trial, however, suggest that the digital feedback precipitated some changes to practice organisation. Where walking had previously been performed as a dispersed practice, it sometimes gained teleoaffective structures of its own, becoming not just a means-to-an-end but an end-in-itself. On other occasions, participants reported performing

integrative practices in entirely new ways, substituting walking-for-exercise for the more familiar goals of practices such as shopping and employment.

As these findings suggests, the smartphone app used in the trial was not just configured by its users but was also configuring of these users: it created new ways of seeing, talking and being and, like other forms of biometric self-tracking, bestowed on them new subjectivities, capacities and desires (Lupton 2013). By directing a participant's gaze at his bodily actions within practices where he had not previously been aware of them, the process of measurement and feedback bestowed meaning and purpose on walking that, erstwhile, had been perceived as incidental. In some cases, one could argue (following Crawford 2006) that the app resulted in integrative practices such as shopping and work being performed as health practices. A number of participants made overt references to this change (e.g. the person who reported going to the shops solely in order to get more exercise); others, though not talking explicitly about health, frequently drew on a health discourse (e.g. when they talked of being 'active'). Such changes in the performance of practices may, however, be of only short endurance. Concerns about health have to 'jostle' with competing desires (Will and Weiner 2014): daily life is organised around practices that occur at fixed times and are characterised by the co-participation of others (Southerton 2006), so practices that are dedicated solely to an individual's own health can often be pushed out of crowded schedules.

Such scheduling pressures are less likely to influence dispersed walking than they are integrated walking practices. Dispersed practices are often wedded to integrative practices that occur at fixed times and/or are characterised by the co-participation of others. Furthermore, by pushing them higher up what Schatzki calls the 'action hierarchy', the teleoaffactive organisation of dispersed walking practices makes them less vulnerable to substitution by alternative modes of locomotion (e.g. driving or taking the train) or being rendered redundant by alterations in practical arrangements (e.g. deferring small purchases until one big, weekly shop).

However, the reorientation of everyday practices towards health considerations carries some risks. By promoting health enhancement through self-measurement and instrumental behaviour change, tracking implies that health is subject to individual management and that the performance of practices can be what Ruckenstein (2014) describes as 'controlled by reason'. This can lead to the configuration of those who do not engage in practices considered to produce health as morally deficient or inferior, and to feelings of failure, guilt and self-hatred (Lupton 2013). There was evidence of this in the study data, which suggested that the app configured some participants as physically vital and socially responsible when they had 'high' step-counts and as morally deficient (a 'dosser') when they had low step-counts.

Furthermore, by directing the user's gaze on this one aspect of the practices they were performing, the app conveyed what Ruckenstein (2014) describes as a 'partial story' of the practice, foregrounding walking at the expense of other aspects of the practice that might be of equal or greater importance for overall health – for example, mindfulness or communion with nature. If the widespread use of such interventions were being considered, the impacts of this on the lived-life and on ways of seeing would need to be weighed carefully against the benefits pertaining to increased physical activity. Our research suggests that the concept of dispersed practices, hitherto largely neglected in practice theory research, can usefully inform this debate and should be investigated further – particularly in the context of research into, and critical evaluations of, behavioural interventions.

Address for correspondence: Tim Harries, Kingston Business School, Kingston Hill, Kingston-upon-Thames, Surrey KT2 7LB, UK. E-mail: T.Harries@kingston.ac.uk

Acknowledgements

The authors would like to acknowledge the EPSRC and the RCUK Digital Economy Programme (grant EP/H006966/1) for their support of this study and the wider CHARM project of which it was a part. We are grateful, too, for the invaluable comments made by the two anonymous reviewers.

References

- Allen, L. (2005) Managing masculinity: young men's identity work in focus groups, *Qualitative Research*, 5, 1, 35–57.
- Alliance for Biking and Walking (2012) *Bicycling and walking in the United States: 2012 benchmarking report*. Washington: Alliance for Biking and Walking.
- Bourdieu, P. (1977) *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Charmaz, K. (2014) *Constructing grounded theory*. London: Sage.
- Cohn, S. (2014) From health behaviours to health practices: an introduction, *Sociology of Health & Illness*, 36, 2, 1–6.
- Crawford, R. (2006) Health as a meaningful social practice, *Health*, 10, 4, 401–20.
- Cresswell, J.W. (2007) *Qualitative enquiry and research design – choosing among five approaches*. Thousand Oaks, CA: Sage.
- Darker, C.D., Larkin, M. and French, D.P. (2007) An exploration of walking behaviour – an interpretative phenomenological approach, *Social Science and Medicine*, 65, 10, 2172–83.
- Department of Health (2009) *Be active be healthy*. London: Department of Health.
- Dukes, S. (1984) Phenomenological methodology in the human sciences, *Journal of Religion and Health*, 23, 3, 197–203.
- Gaskell, G. (2000) Individual and group interviewing. In Gaskell, G. and Bauer, M. (eds) *Qualitative research with text, image and sound – A practical handbook*. London: Sage.
- Glaser, B.G. and Strauss, A. (1967) *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Green, J. (2009) 'Walk this way': public health and the social organization of walking, *Social Theory & Health*, 7, 1, 20–38.
- Green, J. and Thorogood, N. (2013) *Qualitative methods for health research*, 3rd edn. London: Sage.
- Harries, T., Eslambolchilar, P., Stride, C., Rettie, R., et al. (2013) Walking in the wild – using an always-on smartphone application to increase physical activity. In Kotzé, P., Marsden, G., Lindgaard, G., Wesson, J., et al. (eds) *Interact 2013, part IV, LNCS 8120*. Laxenburg: IFIP International Federation for Information Processing.
- Killoran, A., Doyle, N., Waller, S., Wohlgemuth, C., et al. (2006) *Transport interventions promoting safe cycling and walking: Evidence Briefing*. London: NICE.
- Knowler, W.C., Barrett-Connor, E., Fowler, S.E., Hamman, R.F., et al. (2002) Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin, *North England Journal of Medicine*, 346, 6, 393–403.
- Kuzel, A.J. (1992) Sampling in qualitative enquiry. In Crabtree, B.F. and Miller, W.L. (eds) *Doing qualitative research*. Newbury Park, CA: Sage.
- Lee, I.M. (2003) Physical activity and cancer prevention – data from epidemiologic studies, *Medicine and Science in Sports and Exercise*, 35, 11, 1823–7.
- Lupton, D. (2013) Quantifying the body: monitoring and measuring health in the age of health technologies, *Critical Public Health*, 23, 4, 393–403.
- Melzer, K., Kayser, B. and Pichard, C. (2004) Physical activity: the health benefits outweigh the risks, *Current Opinion in Clinical Nutrition and Metabolic Care*, 7, 6, 641–7.
- Morris, J.N. and Hardman, A.E. (1997) Walking to health, *Sports Medicine*, 23, 5, 306–12.
- Nettleton, S. and Green, J. (2014) Thinking about changing mobility practices: how a social practice approach can help, *Sociology of Health & Illness*, 36, 2, 239–51.

- NPRI (2015) Initiative outcomes and future approaches. National Prevention Research Initiative. Available at <http://www.mrc.ac.uk/publications/browse/national-prevention-research-initiative-npri-report-2015/>. Last accessed 4th January 2016.
- Ong, B.N., Rogers, A., Kennedy, A., Bower, P., *et al.*, (2014) Behaviour change and social blinkers? The role of sociology in trials of self-management behaviour in chronic conditions, *Sociology of Health & Illness*, 36, 2, 69–81.
- Padfield, M. and Procter, I. (1996) The effect of interviewer's gender on the interviewing process: a comparative enquiry, *Sociology*, 30, 2, 355–66.
- Pate, R., Pratt, M., Blair, S., Haskell, W., *et al.* (1995) Physical activity and public health: a recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine, *JAMA*, 273, 5, 402–7.
- Patton, M.Q. (1990) *Qualitative evaluation and research methods*. Newbury Park: Sage.
- Postill, J. (2010) Introduction: theorising media and practices. In Brauchler, B. and Postill, J. (eds) *Theorising media and practice*. New York: Berghahn Books.
- Pucher, J. and Buehler, R. (2010) Walking and cycling for healthy cities, *Built Environment*, 36, 5, 391–414.
- Richards, L. (2005) *Handling qualitative data: a practical guide*. London: Sage.
- Ruckenstein, M. (2014) Visualized and interacted life: personal analytics and engagements with data doubles, *Societies*, 4, 1, 68–84.
- Schatzki, T.R. (1996) *Social practices: a Wittgensteinian approach to human activity and the social*. Cambridge: Cambridge University Press.
- Schatzki, T.R. (2001a) Introduction: practice theory. In Schatzki, T.R., Knorr-Cetina, K. and von Savigny, E. (eds) *The practice turn in contemporary theory*. London: Routledge.
- Schatzki, T.R. (2001b) Practice minded orders. In Schatzki, T.R., Knorr-Cetina, K. and von Savigny, E. (eds) *The practice turn in contemporary theory*. London: Routledge.
- Schatzki, T.R. (2002) *The site of the social: a philosophical account of the constitution of social life and change*. Pennsylvania: Penn State Press.
- Schatzki, T.R. (2005) Peripheral vision: the sites of organizations, *Organization Studies*, 26, 3, 465–84.
- Schatzki, T.R. (2010) *Site of the social: a philosophical account of the constitution of social life and change*. Pennsylvania State University.
- Schatzki, T.R. (2011) Theories of practice. In Southerton, D. (ed.) *Encyclopaedia of cultural consumption*. London: Sage.
- Schatzki, T.R. (2013) A primer on practices. In Higgs, J., Barnett, R., Billett, S., Hutchings, M., *et al.* (eds) *Practice-based education: perspectives and strategies*. Rotterdam: Sense Publishers.
- Southerton, D. (2006) Analysing the temporal organisation of daily life: social constraints, practices and their allocation, *Sociology*, 40, 3, 435–54.
- Tudor-Locke, C. and Lutes, L. (2009) Why do pedometers work? A reflection upon the factors related to successfully increasing physical activity, *Sports Medicine*, 39, 12, 981–93.
- Warde, A. (2013) What sort of a practice is eating? In Shove, E. and Spurling, N. (eds) *Sustainable practices: social theory and climate change*. London: Routledge.
- Will, C.M. and Weiner, K. (2014) Sustained multiplicity in everyday cholesterol reduction: repertoires and practices in talk about healthy living, *Sociology of Health & Illness*, 36, 2, 132–44.