

Health group walks: making sense of associations with the natural landscape

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Health group walks: making sense of associations with the natural landscape

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ABSTRACT

Literature about health group walks typically focuses on explaining health and wellbeing outcomes. Less attention has been paid to how encounters with the natural landscape are experienced during these walks. This paper is based on an ethnographic study of a health walk group in a rural area of the UK that encapsulated health, social and environmental connections. It examines how walkers describe and make sense of their connections with natural landscapes. Mobility practices and contingent factors are found to mediate walkers' exposure to and experience of the natural landscape. Theories underpinning connections with the natural landscape and place are used to review the findings. Implications for health walks and further research are considered.

ARTICLE HISTORY

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KEYWORDS

Health walks; therapeutic mobilities; natural landscape

Background

For many years public health initiatives have encouraged more people to take up walking on a regular basis to address problems associated with sedentary lifestyles and poor physical and mental health (Public Health England, 2018). One response in England has been organised schemes like Walking for Health (W4H) (www.walkingforhealth.org.uk). Hosted by the Ramblers in the UK, W4H schemes are aimed at encouraging less active people to participate in regular short walks of no more than 90 minutes duration. This means that a typical walk is 2–3 miles. All W4H walks are led by trained volunteers after careful route planning. The attraction of W4H schemes has strengthened through the growing evidence about the many benefits of regular walks.

Improvements in physical and psychological wellbeing associated with regular walks are well established (Kelly et al., 2018, C3 Collaborating for Health, 2012, deMoor, 2013). In their metareview of outdoor walking groups Hanson and Jones (2015a) reported significant benefits beyond making people more physically active. Clear improvements were reported in systolic and diastolic blood pressure, resting heart rate, body fat, BMI, total cholesterol, oxygen uptake, depression, 6-minute walk test and quality of life physical functioning. In some vulnerable groups, regular walking has been reported to reduce risks of mortality (Gregg et al., 2003, Smith et al., 2007).

Less well researched are the additional therapeutic gains and their means of production associated with patterns of socialising within walking groups. Doughty's (2013) detailed ethnographic study of a rambler group is a rare exception. It was found that bodily movement relaxed social norms around communication, fleeting moments of proximity were valued as a mode of companionship, and people were responsive to the landscape and each-other affectively. As she contended 'Thus, the companionship of walking-with was creating a shared sense of presence and sense of discovery of the unfolding of place, which had the potential to focus in the embodied present' (p.144).

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Findings from the parent study of our own W4H group point in the same direction (Grant, Pollard, Allmark, Machaczek, & Ramcharan, 2017; Grant, Machaczek, Pollard, & Allmark 2017) but they also confirm two further issues central to an understanding of what makes the group cohere. First, the social capital (Putnam, 2000) generated by the group, as indicated by interactions between walkers that were confiding, relationship-building and sustained over time, was the principal reason why walkers kept returning to the walks. Secondly, different patterns of socialising were observed prior to each walk at the briefing sessions, during the walks, and afterwards when walkers returned to the pavilion for relaxation where volunteers had laid on tea and coffee. For the walkers the overriding view was that the walks would not be walks without each of these elements being present. There were also 'multiplier effects' where the social capital generated by and through the group extended into forms of mutual helping between walkers in wider familial and social contexts. Social capital is reported to be key to adherence to a range of outdoor activities including not only walks but also, for example, parkrun schemes (Wiltshire and Stevinson, 2018) and allotment work (Dobson, Reynolds, Warren and Edmonson, 2020). Despite such claims, the norms and practices of walking groups can also be exclusionary (Paddon, 2020, Hanson et al., 2016).

Walking in green spaces and farmland seems to be conducive to psychological wellbeing (Barton et al., 2009, Sugiyama et al., 2008), when compared to walking in urban environments (Marselle et al., 2013). Findings from studies by Roe and Aspinall (2011) suggest that walking in natural environments improves mental health in adults, irrespective of whether people have good or poor mental health. Activity in natural outdoor environments is reported to be better for physical and mental wellbeing than indoor physical activity (Thompson Coon et al., 2011). Therapeutic benefits of walking in green spaces appear to parallel those associated with gardening or allotment work (Dobson, Reynolds, Warren and Edmonson 2020, Stuart-Smith, 2020).

Problematising the association between walking, place and the natural environment

Though the association between exposure to the natural environment and wellbeing is well established, understanding the underpinning mechanisms remains open to debate. Before undertaking the present study the authors were aware of theoretical perspectives informing studies of the links between landscapes and human wellbeing so it seems sensible to say something about them here. We do so, not because we are interested in theory testing in any direct sense, but rather because we wish to outline constructs that may help to inform our own findings.

Edensor's (2000) classic account of walking in the British countryside reminds us that people engage in countryside walking for many reasons and in doing so express themselves in a diversity of ways. He suggests that theories about the relationship between the body and different spaces and places should not overlook the material character of space or the sensual propensities of the body. Indeed Edensor (2000, p.100) asserts that the varied contingencies of any walk 'mean that the walker is in experience, feels and thinks in his movements through space and time' (Robinson, 1989, p.4). In similar vein Waitt et al. (2009) speak of walking as an activity that extends beyond that of simply inhabiting a pre-configured world. Rather the claim is that people and place are '*relationally constituted within processes that are distinctively performative*' (p.44). How we do our walking and socialising then becomes an important part of understanding processes linking body to environment, a central interest of this paper.

Early writing about associations with the natural world has been undoubtedly influenced by E.O. Wilson's (1984) biophilia hypothesis which asserts the existence of a fundamental, genetically based, human need and propensity to affiliate with life and lifelike processes (Kahn, 1997). The affiliation is therefore assumed to be in-born and instinctive. Despite the popularity of biophilia and its more recent incorporation into built design values, it has been critiqued for its allegedly narrow evolutionary psychology underpinnings (Joye and Block, 2011).

The research and critical commentaries of Doughty (2013), Edensor (2000), Waitt, Gill and Heard (2009) and Lee and Ingold (2006), among others, have suggested a more nuanced understanding by emphasising the intersubjective relations between human experience and the natural environment. However, it is Gesler (1992) who is generally credited with signalling the more dynamic qualities of what he came to term a therapeutic landscape:

Furthermore, landscape formation is dynamic, a constantly evolving process, moulded by the interplay, the negotiation between physical, individual and social factors. Thus therapeutic landscape becomes a geographic metaphor for aiding the understanding of how the healing process works itself out in places. (p.743)

Emphasising these connections Doughty (2013, p.145) argues for 'a mobile understanding of the therapeutic landscape' and for 'a more thorough exploration of modalities of sharing therapeutic spaces with others (including non-human others)'. W4H groups can be regarded as one such modality where connections between the material, the embodied and the social deserve closer scrutiny towards a better understanding of landscape appreciation.

Lee and Ingold (2006) talk of walking as a place-making practice where routes are embodied and imagined, with routes brought into focus through familiar landmarks, remembered encounters and through places that have evoked emotions. This line of thinking has been consolidated by Duff (2011) who speaks of 'enabling places' grounded in an analysis of the reproduction of social, affective and material resources, arguing that places are 'mobilised, transformed and reproduced in the dynamic force of inhabiting place' (p.155). For Duff therefore, these resources define enabling places as much as they are the product of them. In a subsequent study about recovery from mental ill health Duff (2012) demonstrated that participants either encountered or created places and spaces through exploiting family and social networks, building and extending material resources (like sheds, shops, one's own home or natural environments considered protective), and managing diverse feeling states. Of particular relevance to the present study is how Duff's participants went about fashioning enabling places.

A further perspective seeking to explain links between the environment, especially natural settings, and human wellbeing can be found in Kaplan's attention restoration theory (ART) (1995). The contention is that individuals benefit from (1) being away from everyday stresses, (2) being in expansive spaces and contexts, (3) taking part in activities compatible with intrinsic motivations, and (4) experience of stimuli that are 'softly fascinating'. The idea is that this combination of factors encourages 'involuntary' or 'indirect attention', leaving space and time for 'voluntary' or 'directed' attention capacities to recover and restore (Kaplan, 1995). It is recognised that settings assumed to be relaxing (for example home or places of worship) may provide restorative opportunities. However ART suggests that natural settings have an 'aesthetic advantage' and provide opportunities for reflection and restoration. Ohly and colleagues (2016) subsequently undertook a meta analysis of 31 studies of ART that showed some support for the central idea, but there remained uncertainty about which aspects of attention are affected by exposure to natural environments.

As a result of increasing urbanisation we rarely spend lengthy periods of time in the natural landscape unless we farm, live or take holidays there. However, green spaces like parks, allotments and private gardens create opportunities for people to get close to nature. We walk, run, cycle or drive through more expansive countryside areas, and occasionally fly over them. This is a short step away from the idea of *therapeutic mobilities* Gatrell (2013); the idea that movement itself can be conducive to wellbeing and health. As Gatrell (2013) has convincingly argued:

"Whilst wellbeing is inextricably linked to the types of places people inhabit, so too it depends on the kinds of places through which they move, and how it is, of course, hard to disentangle the benefits to health and wellbeing, conferred by the experience of the walk itself, from those of the places and landmarks perceived on the way', (p.104).

This was seen as both an analytic challenge but also an opportunity for investigation in the present study.

Given the above, the present paper aims to describe how members of a health walk group experience and make sense of their connections with the natural landscape during their weekly walks. It then considers how these findings are shaped by the group's mobility practices and contingent factors that came to light during the walks. The theoretical perspectives described above are then used to frame the main findings before considering implications for health walks and further research.

Methods

Study setting

The health walk group is based in Lincolnshire, UK, and was formed over ten years ago. It is part of the Walking for Health (W4H) network supported nationally by the Ramblers. On average about 40 people walk regularly with the group each week, the majority of whom are aged 70 plus. Roughly 60% of the group are women. To arrive at the registration point by the pavilion most participants come on foot or by car, but several travel by bus from a town nine miles away. Most of the group's walkers have long-term health conditions or disabilities. Walks are cost-free save for a modest £1 charge for tea/coffee and biscuits laid on by volunteers at the village pavilion, so there are no financial barriers to participation. Over thirty different local walks have been developed. Following national W4H policy, none take longer than 90 minutes.

With membership retention being high, the walking group has been growing older together or 'ageing in place' (Wiles et al., 2012). As the months and years have passed, conditions associated with ageing have become more noticeable, bringing additional restrictions to mobility and energy among walkers who have remained with the group. In order to accommodate increasingly diverse activity requirements, three groups have evolved. A 'strider' group follows routes of 2.5–4 miles; a 'stroller' group walks between 1–2 miles at a more leisurely pace; and latterly a small 'straggler' group was formed that completes short walks of up to a mile. Walkers can move seamlessly between these groups as a means of adapting to changes in personal capacity and energy.

The local landscape embraces villages, hamlets and farmsteads as well as arable land and some woodland. The area is bisected by a busy main road. To the east the land rises to expansive heaths, whilst to the west it drops down to the Trent Valley, providing vistas of open countryside. Public and permissive footpaths are accessible but some of the latter have been removed in recent years. The district in which the walks take place is ranked 234 out of 326 on the index of multiple deprivation (Lincolnshire County Council 2019), so it lies in the third quartile measured against all districts in England (1 being most deprived, 326 being least deprived).

Ethnography

Ethnography (Gobo, 2008) involves the study of a culture or social group, typically by observing members' behaviours and asking questions about their actions, interactions and experiences (Morse, 2016). It requires direct and participant observation, often over a sustained period of time. This is usually accomplished through an 'insider' perspective. With the first author having been a volunteer walk leader since the group was first established, an ethnographic inquiry was considered the best way of garnering the experiences of walkers. Over five years he contributed to shared experiences of route planning and walk timetabling at the quarterly meetings with walk leaders, during which time there was constant review of health and safety issues, and of liaison with landowners over access issues and footpath blockages. He helped to create a walks booklet that summarised the routes of the group's 30+ different walks. He had access to the group's register and was therefore able to monitor patterns of attendance. By the time of the fieldwork he had taken part

in over 200 walks with the group, representing 350 hours of walking at a cumulative distance of roughly 600 miles. This provided a rich reservoir of opportunities to observe how walkers interacted with each other and with the different environments through which they walked. Many of the insights described in the paper were based on direct observation of walkers' behaviours as well as from conversations with walkers during and after the walks. This insider information was crucial in helping to make sense of the myriad of contingent factors shaping walkers' health and social wellbeing outcomes and also their associations with places and spaces.

Nineteen walkers also took part in face-to-face interviews about their walk experiences. A maximum variation sampling approach was adopted to generate a sample with a diversity of personal circumstances, including age, gender, civil status and existence of a long-term condition. No-one refused to be interviewed. The sample comprised 13 women and six men; age range 58–89 years; 13 married, four widowed, two divorced. Six lived alone. Almost all had long-term health conditions encompassing cancer, polycythaemia, myalgic encephalomyelitis, angina, COPD/ asthma, arthritis, depression and sensory impairments, in addition to which there were everyday conditions associated with ageing to deal with such as pain management and depleted energy. Despite having been established with encouragement from the local general practice, all those interviewed, like the vast majority in the walking group as a whole, chose to start walking with the group either as a product of their own volition or as the result of a recommendation from a friend. Walkers therefore owned the decision to join the walking group in contrast to having the activity prescribed.

Aided by prompts, interviews were tape-recorded and transcribed within 24 hours. Together with the field notes, the transcriptions were analysed thematically in order to create content-based codes encompassing walk organisation, walk dynamics, walkability, production of capital (individual, social and community), landscape appreciation, measurement and outcome issues, and walking for health going forward. Transcripts were read many times to identify overarching themes linking walk experiences to health, social capital and environmental appreciation outcomes. Transcripts were also read by the second author to cross-validate the themes. A draft overarching report describing the results of the whole study was circulated to all study participants who were invited to comment on matters of accuracy, representation and interpretation, almost all of them doing so with confirmatory observations. This took place before any of the ensuing papers were drafted. Four of the group's walk leaders later read and commented on a draft of this paper. As forms of member-checking and co-construction (Tetley et al., 2009) these processes helped to reduce the risk of imposing the interviewer's world-view, whilst adding to the credibility and trustworthiness of the data (Denzin and Lincoln, 2008). The resulting 'thick description' (Geertz, 1973) is intended to provide others with sufficient contextualised information to assist comparison or replication.

Ethical approval for the study was given by Sheffield Hallam University. Governance was agreed with the Ramblers who sponsor W4H schemes nationally. All participants gave their consent to be interviewed. Pseudonyms have been used to preserve anonymity.

Experiences of the natural environment

Although individual narratives were very varied, three broad themes were induced that seemed to account for how these were portrayed by walkers.

Appreciation of natural beauty

The most obvious theme that arose from the interviews was the appreciation of natural beauty. Some walkers described themselves as 'having a healthy interest in beauty and nature'. However the dividing line between the natural environment and that created or modified by humans was not so

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clear cut. Speaking on behalf of others in the group, Beth suggested that the environmental canvas was broadly drawn: 'It's not only green spaces we're interested in, we're interested in people's front gardens and architecture and what they've got in them' (laughter).

Walking in a group past interesting houses and gardens appeared to loosen norms around curiosity, even nosiness, to the point that it gave people permission to exchange comments on the aesthetic qualities of these environmental features. Curiosities were frequently reinforced when others with nuggets of specialist knowledge chipped in to explain the behaviours of pollinators or to identify different plant species and their characteristics. The learning involved animated deepened interest. This unfolding awareness of the range of knowledge about the natural world shared during walks still takes people by surprise, even after years of walking together. Currently the group can count amongst its members experts in a host of subjects related to the natural environment including flora, birdlife/birdsong, farming, foraging (berries for drinks), gardening, local history, countryside planning and landscape photography. The chatter between walkers on these subjects served not only to enrich the experience of the walks, but also to deepen an understanding of the natural world and one's sense of connection to it. In this regard the social capital generated by the group served to enrich its cultural capital comprising specific environmental knowledges and experiences that were integral to the walks, similar to how parkrun participants have been reported to acquire and use social capital to accumulate cultural capital related to injury management, performance and health (Wiltshire and Stevinson, 2018).

However, there were also voices suggesting that more could be done to mine these experiences during the walks. As someone with an amateur interest in botany, and echoing the sentiments of many fellow walkers, Colin voiced his frustrations very clearly:

'I would like people to stop and think and look. I think on occasions we have found an orchid or something and a lot of the comments are 'oh yes' whereas for somebody like me it's fascinating and I would like to stop more Being a frustrated botanist, I would like us to spend more time looking at the wild flowers and this sort of thing'

Other walkers spoke not only about the beauty of the countryside but also the sense of freedom it gave them to roam safely along winding footpaths and field edges. For Steve a clutch of qualities worked together as a kind of gestalt, this being a combination of sensations coming from an appreciation of the scenery, wildlife, fresh air and the change of seasons. For walkers like Steve, it was associated with continuity and renewal in a world that for humans is transient. In short it prompted people to re-evaluate in a contemplative manner the very concept of time and their place in the biosphere. In addition to its visual components, walking could at times be a very pleasurable tactile and auditory experience. This was especially noticeable when the group walked through meadows or along narrow footpaths with long grasses and wild flowers that allowed walkers to caress long grassy stems. Fields of rapeseed and barley provided variants of this experience. The sounds of larks ascending over grassy meadows during summer months and the warning cries of crows harassing buzzards were reminders to walkers of nature's wonders.

These experiences provide further evidence about walking as a reflexive practice in which the relationship between people and place is relationally constituted and evolving. With visual, tactile and auditory senses being prominent in these experiences, the walks can be seen as a type of embodied practice (Edensor, 2000). As an activity in which the previously unknown becomes familiar through the experience of emotions and the gathering of insights about the natural world, it hints at how we continue to construct our identities as well as make sense of the world around us (Waitt et al., 2009).

For some walkers there was evidence of an instinctive affinity with the natural environment, echoing of E.O. Wilson's biophilia thesis. They saw themselves as 'country people' as if being close to or in the natural environment was their intended space. Helen even spoke about moving house when the countryside gets built up 'or else the traffic follows you'. Others were more inclined to talk about the need to be away from the mechanised world of urban environments. An implicit

comparison with urban environments was common in many of these stories. For walkers like Tricia, a strong affective response was created from being in the countryside. The experience had spiritual overtones for her because it prompted contemplation and deep reflection, sometimes causing outward expressions of emotion like '*Wow, praise the Lord*'! However, even Tricia admitted that these deeper feelings were more likely to be evoked when she was either walking alone or with her close friend Stella, also a member of the walking group. However, as we and others have noted (Grant, Pollard, Allmark, Machaczek and Ramcharan, 2017; Doughty, 2013), group walks are never linear; people are still able to create personal spaces in the group if they wish to walk alone to have private moments when they can be contemplative.

Discovery of new places

A second theme to emerge was the discovery of new places. Several walkers, all resident in the locality for quite a few years, one for well over a decade, had never realised until they joined the walking group that there were so many footpaths in the surrounding area. To Steve this came with feelings of regret. It made him realise that he could have been taking his dogs for more varied and interesting walks instead of doing the same walk with them twice a day for the last 12 years. Tricia had presumed previously that beyond the perimeter of her home village was all arable farmland that was not walkable. Discovery of permissive footpaths around many of the local headlands came as a welcome surprise to her.

During the walks it was not unusual for people to make new discoveries about particular features of the landscape. The location of just about every blackthorn bush has now been charted, much to the delight of those who make sloe gin. Vantage points for panoramic views and photography have been plotted. Places of shelter, mostly in copses and woodlands reachable by footpaths, have been pinpointed on OS maps or their digital equivalent on mobile phone apps. How the local network of footpaths join up (or do not) has been committed to memory, this having become especially important during a period when the loss of farming subsidies led to the disappearance overnight of permissive footpaths and bridges over dykes. For some people the regular walks had changed their associations with the local environment in subtle ways. Sylvia suggested that increased familiarity with the area from the regular walks had shaped the notion of ownership: 'A huge advantage to us is that, though we knew different walks here and there, because we've now discovered other little bits of footpaths we can link them up and make longer walks, so we feel even more that this is "our" area'.

Quite a few of the walkers drew attention to what might be termed the 'comfortable distortion' of feeling far distant whilst being very close to home. The feeling of being transported to another place was very comforting because it represented a form of escape, albeit temporary, from the everyday pressures and routines of being back home. This sentiment was captured well by Tricia:

'How wonderful it all is. You know and you can just sit on a footbridge and look, you know the one that's got the really steep steps and you can sit on that You're only half a mile probably from the nearest properties but you could be five miles away'.

The walking group also attracted people new to the community and it became an important vehicle for facilitating their social integration (Grant, Pollard, Allmark, Machaczek and Ramcharan, 2017). For these same people the walks had the added value of acquainting them with previously unknown features of the local landscape like footpaths, glades and places of shelter that they came to value, as well as sites that required attention to safety such as sharp bends in country roads, electric fencing or ground liable to become unwalkable after heavy rain.

Implicit within these experiences are evidences of different types of place-making activity (Duff, 2011, Lager et al., 2019, Waitt et al., 2009, Lee and Ingold, 2006), ranging from discoveries relating to new walking routes to features of the landscape hitherto uncharted and now committed to memory. For Sylvia there were hints that her very notion of place had become enlarged and

enhanced by feeling a greater sense of ownership of it through repeated walks. And for Tricia her notion of space, place and time had altered in such a way as to suggest that it had a restorative capacity (Kaplan, 1995, Roe and Aspinall, 2011).

Places with special meaning

Walkers occasionally drew attention to places along the walking routes that had very personal meanings for them. One of the walkers, Phil, had been bereaved for some time but joining the walking group had helped him to reconnect with people and also to places. One such place at the top of a well walked lane evoked a special memory when he had been with his wife:

'This was I think shortly after we moved here – and the mist was in the valley and we were above that and it was the tops of the trees poking through – it was magical, so when I walk up there I always think about that again – haven't seen that since then, magical'.

When Phil expressed these words his voice was halting and there was more than a sense of a passing nostalgia, suggesting that the experience had a special meaning for him in evoking memories of his wife. In this instance 'place' had more than physical and social connections; familiarity with specific places that evoked powerful memories arising from repeated walks helped to create a sense of autobiographical insideness (Lager et al., 2019) as well as assisting walkers like Phil to deal with biographical disruptions (Morris et al., 2019) like bereavement.

For Steve, coming to any spot that presented a vista was associated with a sense of awe and wonderment. Historical features of the landscape created a feeling of timelessness that had a special appeal for some walkers like Amy:

'I like to see the church cos you think that's been there hundreds and hundreds of years, and it's just like it's rooting the countryside, and you think, this has been here for years and years and it'll be here for years to come but we'll be here for a very short time'.

Amy's observations, prompted by halts during the walks, about the interplay between notions of transience and continuity seemed to evoke a wistful if not a meditative state of being about the human life course. In Kaplan's (1995) terms the 'involuntary' or 'indirect attention' created by Amy's encounter with the church clearly provided her with the opportunity for reflection. Whether or not it alone prompted restoration is not known.

Factors mediating experiences of the natural environment

As walkers talked about the natural landscape, it became clear that there were factors that had different roles in shaping their experiences.

Mobility practices

Most noticeable in shaping engagement with the landscape were mobility practices. With the group having split into three (striders, strollers and stragglers) to accommodate people with different energy levels and stamina, thereby enabling inclusivity, pacing emerged as a key factor mediating appreciation of the natural environment. Comments about the aesthetic qualities of this environment predominated in the stroller and straggler groups. Because of their more leisurely pace, these two groups had more time to soak up features of the landscape through which they were walking. Beth summed this up for many:

'We old people in the stroller group, we have a healthy interest in beauty and nature, and we don't feel we have to race because we only go half the distance of the main group. We have leisure to stop and look and appreciate, and that's part of the wonder of it'.

In the strider group there was a more evident focus on speed, aerobics and testing of personal stamina, redolent of what Wunderlich (2008) terms purposive walking. As a consequence attention was more likely to be diverted from sensing the wider landscape to looking where you were going and watching the heels of the person in front. However, the major distraction was the sociality of the group, the very quality of the group that was so central to its success and sustainability (Grant, Pollard, Allmark, Machaczek and Ramcharan, 2017; Grant, Machaczek, Pollard, and Allmark, 2017). Comments from Sylvia and Ellen capture the sentiments of many others: 'I think a lot of people on the walks are deep in conversation so they are not taking as much account of the surroundings as they might But I think every now and again you are brought up short with a lovely view'. (Sylvia)

'One thing I have noticed, because you're walking with a group and you might be engrossed in conversation with somebody else I don't always take notice of where I'm going (laughter). We get so far and I think now, drat, how did we get here because I'm not going to remember later'. (Ellen)

Delia, one of the walk leaders, questioned whether walkers in the strider group were even aware of the countryside features and of routes followed. She commented wryly:

'It always amazes me how we can do a walk and occasionally put that walk in backwards and people say "oh, this is a new walk you know". So you wonder how much they take in of the countryside sometimes'.

Almost every time walkers talked about the appreciation of beauty or places that had special meanings for them, they had come to a physical halt or were forced to do so by a sudden ambient change, for example when coming upon a vista, or entering or exiting from an area of woodland. Such halts in the walk seemed to trigger stillness, contemplation and a degree of quiet to reset the senses. Because the walks were guided, walkers were also able to suspend having to concentrate on picking their way through the landscape. This freed them to focus on the sensory experience of the walk or on socialising with other walkers.

Contingent factors

Though the walks were for the most part experienced as seamless, there were at times interruptions, not to say disruptions. Edensor (2000) speaks of climate and terrain imposing themselves upon the body irrespective of claims about the rural idyll. With the area around (the study locality) being on an incline above the Trent Valley it was exposed to prevailing westerly weather systems. Exposure to stormy conditions was rare, but when weather patterns took a major turn for the worse the impacts were obvious. With persistent heavy rain, strong winds, snow or ice, the response was to keep your head down and watch carefully where you were placing your feet. This was especially important for those walkers with limited mobility, energy and sight. On one noteworthy occasion strong winds and sleet that had an icy capacity to pierce exposed skin caused walkers to question wrily why protective goggles were not standard issue. In such conditions the primary attention to personal protection and safety led to a much diluted sense of landscape awareness. However, when weather conditions were particularly bad, only a handful of fitter 'stalwarts' from the strider group turned out so extremes of poor weather suppressed access to the natural environment, particularly among those walkers with more compromised health and energy. Precipitation is known to suppress participation in outdoor physical activity (Chan and Ryan, 2009) but there is surprisingly little literature about how weather extremes affect group walking behaviour.

Whilst green spaces were the predominant feature of the walks, some of their features were not appreciated. Bob, for example, offered the opinion that (Lincolnshire) had some of the least attractive green spaces, 'namely around the edge of fields'. The absence of 'serious hills' was for him a gap in his ability to test his stamina. With footpaths not always being linked to each other, a few walks were of an 'out and back' form. These were considered 'boring' compared to walks involving a complete circuit. Boredom appears to be more common where walks are not so varied (Hynds and Allibone, 2009). Occasionally, 'blots on the landscape' coloured perceptions of the environment in negative ways. One in particular, the local recycling plant damaged after a major fire and still not repaired years later, was even the cause of hostile feelings because of human neglect.

More recently the walks have been suspended like so many other group activities as a result of the Covid-19 pandemic. Correspondence between walk leaders and walkers suggests that many are greatly missing the experience. Some of the walkers have used their raised knowledge of local footpath networks to go on walks by themselves or with household members. One walker has even set out to ensure that she walks each one of the 30+ walks during the lockdown period.

As mentioned earlier, the walking group had divided into three in response to ageing and increased frailty in the membership over a number of years. It was noticeable, however, that the two groups walking at a more leisurely pace were comprised almost entirely of women. For some, like Anna who had been forced to use two walking sticks after a knee operation, the decision to 'change down' was the direct result of her reduced physical capacity. However, for most of the women in the stroller and straggler groups their decision was prompted less because of reduced personal capacity or energy, but rather because they wished to continue associating with their close friends in these groups so that they could be emotionally supportive. In this sense sociality trumped the need for continuing association with 'speed merchants' and aerobics. This was less in evidence among men in the walking group. This nod towards gender differences in walking practices has some support in the literature. For example Morris et al. (2019) have reported that women's reasons for joining walking groups were closely linked with their life circumstances and relationships that acted as a lifeline for the physical and social body.

Discussion

Three broad themes – *the appreciation of natural beauty, places with special meaning* and *discovery of new places* – encapsulated the breadth of experiences described by walkers, reinforcing the idea that natural landscapes can be experienced as having a variety of aesthetic, therapeutic, spiritual and restorative qualities (Perriam, 2015, Roe and Aspinall, 2011, Kaplan, 1995, Gesler, 1992). Unlike pilgrims who visit sacred places and spaces in the hope and anticipation of renewal and restoration, walkers in the present study could be described as discovering these experiences, often to their surprise, during the walks. Deeper meanings associated with particular places were reinforced when walks were revisited. As knowledge of these places and spaces accumulated, it appeared to give walkers a greater sense of identity with, and even ownership of, the area in which they lived. In short it served to anchor people to place, reinforcing ideas about walking being a reflexive practice (Edensor, 2000) and one that involved different types of place-making (Duff, 2011, Lager et al., 2019).

In relation to personal recovery journeys it has been noted that people often create their own 'healing landscapes' by identifying specific places that have acquired personal, familial or cultural meanings to them (Boucher et al., 2019). In the present study this was very evident in Phil's story but it was also a recognised feature of the walking group itself in that it was perceived as having physical and psychological healing properties for its members on a number of levels (Grant, Pollard, Allmark, Machaczek and Ramcharan, 2017, Grant, Machaczek, Pollard, and Allmark, 2017). As highlighted earlier, the collective knowledge or cultural capital (Wiltshire and Stevinson, 2018) of the group was instrumental in deepening an understanding of features of the natural landscape. This, coupled with the regularity of the walking experience, but mediated by the group's mobility practices, gave rise to forms of reflexivity that changed walkers' relationships with the environment in some marked and beneficial ways.

All of the principal theoretical perspectives linked to the study – biophilia, ART and enabling places – have something useful to say about how walkers in the present study made sense of their relations with the natural landscape. However, biophilia failed to capture the essentially intersubjective elements of walkers' narratives, and the recovery focus of ART was too narrow to encapsulate

the diversity of walkers' associations with the landscape. As well illustrated by many writers (Edensor, 2000, Waitt et al., 2009, Lee and Ingold, 2006) place-making in its different forms was a core ingredient in the present study. Arguably, Duff's (2011) enabling places conceptualisation came closest to capturing the diverse ways this was expressed in relation to the dynamics of landscape appreciation. The *materiality* of place was evident in the many discoveries of new landmarks, in the deepening of knowledge about nature's considerable assets, and how these transformed the relationship between body, mind and environment. *Affective* resources were demonstrated in the spectrum of emotions associated with the appreciation of nature's beauty and in the evocation of cherished memories and feelings connected to specific places on the walks. *Social* resources, essentially the walking group's membership, were the main vehicle for acquiring or sharing new knowledge about the natural landscape (and many other subjects too). Yet, the main asset produced by the group, its sociality or social capital, was also a distraction from landscape appreciation, much to the frustration of some walkers.

Contingent factors like the unheralded Covid-19 pandemic, which caused W4H walks across the country to be suspended, blots on the landscape, 'out and back' walk routes, and adverse weather conditions all had very evident impacts on exposure to and experience of the natural landscape. Other contingencies and unanticipated landscape features will inevitably come into play in different regions depending on the proximity of walks to built environments and urban centres, and variations in topography and weather systems.

As identified earlier, Gatrell (2013) has questioned if it is possible to disentangle whether the health and wellbeing benefits of walking are due to the walk itself or to the landmarks and places encountered. Some walkers in the present study articulated this difficulty in making such connections. Reflecting on her feelings about the prospect of the walks being halted for some reason, Susan commented:

'I don't know that I would miss just one aspect of it. I would miss the whole thing. I'm not saying I would miss the walking because I walk anyway. And I'm not saying I would miss people because I meet people anyway. It's the whole morning really. You always feel better when you come home'.

The experience for Susan was therefore a kind of indivisible gestalt. However, our findings also point tentatively towards a link between gender, social capital, pacing and landscape appreciation, underscoring the complexities and subtleties of walking as a social practice. With social capital being a 'relational achievement' of the group, we are unsure whether our gender-based observations are idiosyncratic; an 'achievement' limited to our walking group.

The findings raise some challenges for W4H groups. As groups 'age in place' and embrace diverse groups of people with yet more varied or serious health conditions, meeting different pacing requirements will become increasingly important. This might require groups to sub-divide, as in the present study, or to schedule their walks at different times to suit different groups. This is likely to have consequences for the supply and availability of enough walk leaders to support them. Groups themselves may have to consider what trade-offs they are prepared to make between valued attributes of walks like fitness and aerobics, sociality, and environmental appreciation. For walkers bent on enjoying and learning more about the natural landscape, guided walks incorporating expert commentators might be one way forward. The experience of the walking group in the present study suggests that subject experts might well be found within a group's membership. Otherwise, shorter routes with more halts and longer pauses to encourage contemplation of the natural landscape may be the most practical way forward.

Limitations and implications for further research

The small qualitative study is limited in its scope and chosen methodology. It is restricted to the experiences of one well established health walk group in a rural setting with access to a good network of footpaths and walkable headlands. The catchment area from which walkers are drawn is neither particularly affluent nor deprived in socio-economic terms. Neither, like many rural areas in the UK, is it

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diverse with respect to ethnicity. The connections between personal agency, sociality, gender and natural landscape appreciation appear to be signalling something surprisingly new that would benefit from further study of W4H groups. Interestingly, others have already suggested that greater sensitivity to gender in understanding therapeutic mobilities is likely to be helpful in future research (Pollard and Wagnild, 2017). We think this needs to be extended urgently to other markers of difference and diversity so as to address important issues about equity in walking groups (Hanson and Jones, 2015b). Despite the best efforts of the walking group to be open and inclusive, as well as adaptive in its mobility practices, there remains a dearth of participants with more severe or limiting health conditions and disabilities. Access to, let alone enjoyment of, the natural landscape for such groups of people remains a pressing challenge for W4H groups across the country and for public health policy. Given the central role played by social capital generated by the walking group as a vehicle for transmitting cultural capital in the form of shared knowledge and expertise, and in mediating landscape appreciation, it would be interesting to explore whether social capital, to the extent it exists, works in the same ways when walks are the result of social prescriptions.

Given the character of the factors mediating experiences with the landscape within this study, subsequent research on this topic would benefit from a more structured ecological framework, along the lines of those adopted by others (Cronin-de-Chavez et al., 2019, Ogilvie et al., 2011) so that the interplay of individual, relational and contingent factors in W4H and other walking groups can be examined more systematically for their effects on landscape appreciation. In addition, experiences of the natural landscape could usefully be deconstructed with a clearer focus on *access* (to the landscape), *awareness* (of the landscape) as well as *appreciation* of it. This more nuanced view would seem to have potential for continued exploration of how experiences of the natural landscape.

Conclusion

We concur with Gatrell (2013) in asserting the challenge of disentangling experiences due to walks from those of landmarks and places perceived along the way. Nevertheless, our small-scale study has highlighted three themes – *appreciation of natural beauty, discovery of new places* and *places with special meaning* – that appear to encapsulate how members of a health walk group experienced associations with the natural landscape. Moreover, mobility practices and contingent factors were seen to mediate these experiences, and social capital emerged not only as a bridge to landscape appreciation but also as a source of distraction from it. Theoretical perspectives were helpful in framing many of these experiences but further conceptual work is indicated to account for the nuances of health group walking as a social practice, particularly in relation to an improved understanding of the interplay, and potential trade-offs, between aerobics, sociality, landscape appreciation and wellbeing.

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Data availability statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data are not available. The data, interview transcripts and field notes, are stored securely in the university's research data repository with access restricted to the authors at myfiles.shu.ac.uk

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References

- Barton, J., Hine, R., & Pretty, J. (2009). The health benefits of walking in green spaces of high natural and heritage value. *Journal of Integrative Environmental Sciences*, 6(4), 261–278. doi:10.1080/19438150903378425
- Boucher, M. E., Groleau, D., & Whitley, R. (2019). Recovery from mental illness in Quebec: The role of culture and place. *Health & Place*, 56, 63–69. doi:10.1016/j.healthplace.2019.01.008
- Chan, C. B., & Ryan, D. A. (2009). Assessing the effects of weather conditions on physical activity participation using objective measures. *International Journal of Environmental Research and Public Health*, 6(10), 2639–2654. doi:10.3390/ijerph6102639

C3 Collaborating for Health. (2012). The benefits of regular walking for health, well-being and the environment.

- Cronin-de-Chavez, A., Islam, S., & McEachan, R. R. C. (2019). Not a level playing field: A qualitative study exploring structural, community and individual determinants of greenspace use amongst low-income multi-ethnic families. *Health & Place*, 56, 118–126. doi:10.1016/j.healthplace.2019.01.018
- deMoor, D. (2013). Walking works. walking for health team. London: Ramblers.
- Denzin, N. K., & Lincoln, Y. S. (Eds). (2008). Collecting and interpreting qualitative materials (3rd ed.). Sage.
- Dobson, M. C., Reynolds, C., Warren, P. H., & Edmondson, J. L. (2020). My little piece of the planet: The multiplicity of well-being benefits from allotment gardening. *British Food Journal*, 23(3). doi:10.1108/BFJ-07-2020-0593
- Doughty, K. (2013). Walking together: The embodied and mobile production of a therapeutic landscape. *Health & Place*, 24, 140–146. doi:10.1016/j.healthplace.2013.08.009
- Duff, C. (2011). Networks, resources and places: On the character and production of enabling places. *Health & Place*, *17*(1), 149–156. doi:10.1016/j.healthplace.2010.09.012
- Duff, C. (2012). Exploring the role of enabling places in promoting recovery from mental illness: A qualitative test of a relational model. *Health & Place*, *18*(6), 1388–1395. doi:10.1016/j.healthplace.2012.07.003
- Edensor, T. (2000). Walking in the British countryside: Reflexivity, embodied practices and ways to escape. *Body and Society*, 6(3-4), 81-106. doi:10.1177/1357034X0006003005
- Gatrell, A. (2013). Therapeutic mobilities: Walking and 'steps' to wellbeing and health. *Health & Place*, 22, 98–106. doi:10.1016/j.healthplace.2013.04.002
- Geertz, C. (1973). The interpretation of cultures. Basic Books.
- Gesler, W. (1992). Therapeutic landscapes: Medical issues in light of the new cultural geography. Social Science & Medicine, 34(7), 735–746. doi:10.1016/0277-9536(92)90360-3
- Gobo, G. (2008). Doing Ethnography. Sage.
- Grant, G., Machaczek, K., Pollard, N., & Allmark, P. (2017) Walking, sustainability and health: findings from a study of a Walking for Health group. *Health and Social Care in the Community*, 25(3), 1218–1226. doi:10.1111/hsc.12424
- Grant, G., Pollard, N., Allmark, P., Machaczek, K. and Ramcharan, P. (2017) The social relations of a health walk group: an ethnographic study. *Qualitative Health Research*, 27(11), 1701–1712. doi:10.1177/1049732317703633

- Gregg, E. W., Gerzoff, R. B., Caspersen, C. J., Williamson, D. F., & Narayan, V. (2003). Relationship of walking to mortality among US adults with diabetes. Archives of Internal Medicine, 163(12), 1440–1447. doi:10.1001/ archinte.163.12.1440
- Hanson, S., Guell, C., & Jones, A. (2016). Walking groups in socioeconomically deprived communities: A qualitative study using photo elicitation. *Health & Place*, 39, 26–33. doi:10.1016/j.healthplace.2016.02.007
- Hanson, S., & Jones, A. (2015a). Is there evidence that walking groups have health benefits? A systematic review and meta-analysis. *British Journal of Sports Medicine*, 49(11), 710–715. doi:10.1136/bjsports-2014-094157
- Hanson, S., & Jones, A. (2015b). A spatial equity analysis of a public health intervention: A case study of an outdoor walking group provider within local authorities in England. *International Journal for Equity in Health*, 14(1), 106. doi:10.1186/s12939-015-0256-x
- Hynds, H., & Allibone, C. 2009. What motivates people to participate in organised walking activity? Natural England Research Report, NERR028.
- Joye, Y., & Block, A. (2011). Nature and I are two: A critical examination of the Biophilia hypothesis. *Environmental Values*, 20(2), 189–215. doi:10.3197/096327111X12997574391724
- Kahn, P. H. (1997). Developmental psychology and the biophilia hypothesis: Children's affiliation with nature. *Developmental Review*, 17(1), 1–61. doi:10.1006/drev.1996.0430
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, *15*(3), 169–182. doi:10.1016/0272-4944(95)90001-2
- Kelly, P., Williamson, C., Niven, A. G., Hunter, R., Mutrie, N., & Richards, J. (2018). Walking on sunshine: Scoping review of the evidence for walking and mental health. *British Journal of Sports Medicine*, 52(12), 800–806. doi:10.1136/bjsports-2017-098827
- Lager, D. R., Van Hoven, B., & Huigen, P. P. P. (2019). Neighbourhood walks as place-making in later life. Social and Cultural Geography. doi:10.1080/14649365.2019.1672777
- Lee, J., & Ingold, T. (2006). Fieldwork on foot: Perceiving, routing, socializing. In P. Collins & S. Coleman (Eds.), Locating the Field: Space, place and context in anthropology (pp.67–85). Berg Publishers.
- Lincolnshire County Council. (2019). Indices of Deprivation 2019.
- Marselle, M. R., Irvine, K. N., & Warber, S. L. (2013). Walking for well-being: Are group walks in certain types of natural environments better for wellbeing than group walks in urban environments?. *International Journal of Environmental Research and Public Health*, 10(11), 5603–5628. doi:10.3390/ijerph10115603
- Morris, S., Guell, C., & Pollard, T. M. (2019). Group walking as a 'lifeline': Understanding the place of outdoor walking groups in women's lives. *Social Science & Medicine*, 238, 112489. doi:10.1016/j.socscimed.2019.112489
- Morse, J. (2016). Underlying ethnography. *Qualitative Health Research*, 26(7), 875–876. doi:10.1177/ 1049732316645320
- Ogilvie, D., Bull, F., Powell, J., Cooper, A. R., Brand, C., Mutrie, N., Preston, J., & Rutter, H. (2011). An applied ecological framework for evaluating infrastructure to promote walking and cycling: The iConnect Study. *American Journal of Public Health*, 101(3), 473–481. doi:10.2105/AJPH.2010.198002
- Ohly, H., White, M. P., Wheeler, B. W., Bethel, A., Ukoumunne, O. C., Nikolaou, V., & Garside, R. (2016). Attention restoration theory: A systematic review of the attention restoration potential of exposure to natural environments. *Journal of Toxicology and Environmental Health, Part B*, 19(7), 305–343. doi:10.1080/10937404.2016.1196155
- Paddon, L. I. (2020). Therapeutic or detrimental mobilities? Walking groups for older adults. *Health & Place*, 63, 102346. doi:10.1016/j.healthplace.2020.102346
- Perriam, G. (2015). Sacred spaces, healing places: Therapeutic landscapes of spiritual significance. *Journal of Medical Humanities*, 36(1), 19–33. doi:10.1007/s10912-014-9318-0
- Pollard, T. M., & Wagnild, J. M. (2017). Gender differences in walking (for leisure, transport and in total) across adult life: A systematic review. *BMC Public Health*, *17*(1), 341. doi:10.1186/s12889-017-4253-4
- Public Health England. (2018). Cycling and walking for individual and population health benefits: A rapid evidence review for health and care system decision-makers. Public Health England.
- Putnam, R. (2000). Bowling alone: The collapse and revival of American community. Simon and Schuster.
- Robinson, J. (1989). The walk: Notes on a romantic image. University of Oklahoma Press.
- Roe, J., & Aspinall, P. (2011). The restorative benefits of walking in urban and rural settings in adults with good and poor mental health. *Health & Place*, 17(1), 103–113. doi:10.1016/j.healthplace.2010.09.003
- Smith, T. C., Wingard, D. L., Smith, B., Kritz-Silverstein, D., & Barrett-Connor, D. (2007). Walking decreased risk of cardiovascular disease mortality in older adults with diabetes. *Journal of Clinical Epidemiology*, 60(3), 309–317. doi:10.1016/j.clinepi.2006.06.013
- Stuart-Smith, S. (2020). The well gardened mind: Rediscovering nature in the modern world. William Collins.
- Sugiyama, T., Leslie, E., Giles-Corti, B., & Owen, N. (2008). Associations of neighbourhood greenness with physical and mental health: Do walking, social coherence and local social interaction explain the relationships?. *Journal of Epidemiology and Community Health*, 62(5), e9. doi:10.1136/jech.2007.064287
- Tetley, J., Grant, G., & Davies, S. (2009). Using narratives to understand older people's decision-making processes. *Qualitative Health Research*, 19(9), 1273–1283. doi:10.1177/1049732309344175

- Thompson Coon, J., Boddy, K., Stein, K., Whear, R., Barton, J., & Depledge, M. H. (2011). Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environmental Science & Technology*, 45(5), 1761–1772. doi:10.1021/es102947t
- Waitt, G., Gill, N., & Head, L. (2009). Walking practice and suburban nature-talk. *Social and Cultural Geography*, 10 (1), 41–60. doi:10.1080/14649360802553186
- Wiles, J. L., Leibing, A., Guberman, N., Reeve, J. L., & Allen, E. S. (2012). The meaning of 'aging in place' to older people. *The Gerontologist*, 52(3), 357–366. doi:10.1093/geront/gnr098
- Wilson, E. O. (1984). Biophilia: The human bond with other species. Harvard University Press.
- Wiltshire, G., & Stevinson, C. (2018). Exploring the role of social capital in community-based physical activity: Qualitative insights from parkrun. *Qualitative Research in Sport, Exercise and Health*, 10(1), 47–62. doi:10.1080/ 2159676X.2017.1376347
- Wunderlich, F. M. (2008). Walking and rhythmicity: Sensing urban space. *Journal of Urban Design*, 13(1), 125–139. doi:10.1080/13574800701803472