Title: Walking, connecting and befriending: a qualitative pilot study of participation in a lay-led walking group intervention

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1

Abstract

Lay-led walking group interventions to increase physical activity often use community engagement methods to ensure intervention reach and to address the determinants of neighbourhood walking. More needs to be known about how social factors support engagement and maintenance of group activity. This paper presents results from qualitative research on a pilot project in the North of England, UK that sought to increase participation in lay-led walking groups run as part of the national Walking for Health scheme. The 'Walking for Wellness' project included the introduction of a befriending role as a support mechanism. Focus groups and individual interviews were used to examine social processes within lay-led walking groups and how these processes facilitated participation and led to wellbeing outcomes. The sample comprised walkers attending six health walks, befrienders and professional stakeholders. In total 92 people were interviewed, including 77 walkers. Thematic data analysis identified six major themes: pathways to involvement; factors influencing involvement; widening access; befriender role; benefits from participation; and strengthening communities. There was strong qualitative evidence that social factors, which included mutual aid, strengthening of social networks and social support to facilitate participation for those having mild difficulties, facilitated engagement in group-based walking. Walk participants did not see social benefits as an unanticipated outcome but as integral to the processes of engagement and maintenance of activity. In contrast the introduction of a formal befriending role was seen to lack relevance and raised issues around the stigma associated with poor mental health. The paper concludes that understanding social processes and how they link to health outcomes has implications for the design and evaluation of lay-led walking group interventions.

1. **Introduction**

Reducing sedentary activity is a major public health challenge requiring action around health behaviours and the environmental and social determinants of those behaviours (Public Health England, 2014). Promotion of walking as a physical activity that most individuals can engage in, either as a means of transport or as a leisure activity, offers potential for population level health benefits (Bull & Expert Working Groups, 2010; Heron and Bradshaw, 2010, Department of Health, 2011). However, public health interventions may inadvertently generate health inequalities (Lorenc et al., 2013); in the case of walking interventions, by appealing more to low risk groups or by failing to reach disadvantaged groups where significant barriers may be present. Health promotion programmes based on the formation of walking groups, often led by volunteers, aim to break down barriers to physical activity by providing a social structure to motivate and sustain engagement in walking (de Moor, 2013). The US Surgeon General's Call to Action highlights the key role of volunteer and non-profit community organisations in promoting walking, including where they reach and connect with underserved communities (US Surgeon General, 2015).

In England, a volunteer-led scheme 'Walking for Health' (WfH) was established in 2000 with the aim of increasing physical activity in the sedentary population (The Countryside Agency, 2005). The scheme, which is currently coordinated by two national charities, has grown to be a national network of health walks based on the recruitment and training of volunteer walk leaders, who organise regular short health walks in their local areas (Macmillan Cancer Support and Ramblers, undated). WfH has proved to be a sustainable community-based model with over 10,000 volunteers and 70,000 regular walkers, of these 72% are over 55

years old (Coleman et al., 2011). Despite the scale of the network, there are questions about intervention reach (Phillips et al 2011; Department of Health 2009), coupled with evidence of inequalities in scheme provision (Hanson & Jones, 2015a). This paper presents results from qualitative research undertaken as part of an evaluation of a pilot project in the North of England, UK (South et al., 2013a) that sought to increase access to and engagement with walking groups run through the WfH scheme. The aim of the paper is to examine social processes within lay-led walking groups that facilitate participation and lead to improved wellbeing.

Lay-led group walking interventions

There are a variety of models of community-based walking group interventions, both professional and lay-led, and these range from primary prevention to those targeted at individuals with existing health conditions (Hanson and Jones, 2015b). Walking group interventions have been found to be broadly effective for increasing physical activity, with no statistically significant difference found between lay and professionally-led groups (Kassavou et al., 2013). Hanson and Jones (2015b), in their systematic review and meta-analysis of outdoor walking group interventions, found evidence of positive health effects including reductions in blood pressure, Body Mass Index and increased physical functioning scores. The results also showed statistically significant changes in depression but not in mental health as measured by SF-36.

Many interventions use community mobilisation methods and involve lay walk leaders, coaches or volunteers in recruitment, health education, social support or walk organisation. Examples include interventions that utilise community-based organisations to deliver walking groups (Schulz et al., 2015, Peissers et al., 2013), training lay health advisors for outreach and peer education (Westhoff and Hopman-Rock, 2002, Plescia et al., 2006, Anderson-Lewis et al., 2012), and walking groups involving advocacy activities to improve neighbourhood walkability (Hooker et al., 2009, Adams and Cavill, 2015).

Our review of the literature indicated that more needed to be known about how social processes affect engagement in lay-led walking groups, particularly for marginalised groups. Social capital, that is the social networks, norms of reciprocity and social trust within and between groups (Ferlander 2007), is central to understanding this. Research points to the associations between social capital, the local environment (including walkability) and physical activity (Ball, Renalds et al., 2011, Kaczynski and Glover, 2012, King, 2008). Social support has been shown consistently to predict physical activity behaviour (Trost et al., 2002, McNeill et al., 2006). Types of support include informal social support from family and friends (McNeill et al., 2006), neighbourhood social connectedness (Kaczynski and Glover, 2012) and community-based social structures (Peissers et al., 2013). Lay-led walking interventions often aim to formalise support systems through volunteer or lay health advisor roles (Plescia et al., 2006, Anderson-Lewis et al., 2012). In that regard, leader behaviour, including having enthusiasm and ability to motivate, was found to be related positively to group cohesion in a women's walking programme (Caperchione et al. 2011). A case study of WfH also found that the volunteer walk leader was a pivotal role requiring

good social and communication skills to manage the group and ensure people were supported during the walk (South et al., 2013b).

The opportunity to strengthen social networks can provide a motivation for participation in walking groups (Ashley and Bartlett, 2001, Jones and Owen, 1998) and interventions may in turn strengthen community capacity and networks (Anderson-Lewis et al., 2012). In contrast, Hanson et al. (2016) found that while some walking group participants valued the social aspects, others saw this less positively and reported experiencing anxiety about joining. Some US interventions have successfully worked with underserved communities (Plescia et al., 2006, Schulz et al., 2015), but overall there is scant research on how social factors might improve the reach and accessibility of lay-led walking groups. This paper now reports on a qualitative evaluation of a project to increase engagement with walking groups, which included the introduction of a befriending role as a support mechanism.

2. *Walking for Wellness project*

Walking for Wellness was a pilot project that sought to widen access to the national WfH scheme within one county in the North of England, which is characterised by a mix of rural areas, towns and coastal villages. In term of health indicators, life expectancy at birth is similar for men (79.4 years) compared to the national average in England (79.5 years) and for women slightly lower (82.5 years compared to 83.2 years). Like much of England, there is evidence of significant health inequalities related to the socio-economic differences, with a gap in life expectancy of 9.3 years for men and 7.3 years for women between the most and

least deprived areas. The percentage of physically active adults is lower than the national average (55.2 % to 57.0%) (Public Health England, 2016).

The Walking for Wellness project was commissioned by the county council and delivered through two local voluntary sector organisations working in partnership with Natural England, then the national agency with responsibilities for coordination of WfH. The pilot project, which began in 2010, had a number of objectives related to increasing uptake of health walks for all sections of the population. Project activities included the expansion of existing provision through the establishment of new walking groups, recruitment of additional volunteer walk leaders, funding of walk coordinator posts and strengthening referral routes from primary care. One innovative element was the piloting of a befriender role to support the engagement of people with mild to moderate mental health needs in health walks. This element involved the identification of individuals willing to undertake a befriending role in health walks, information sharing sessions with all active volunteer walk leaders and the development of a befriender volunteer training package. The target was to develop a network of 80 volunteer befrienders.

An independent evaluation was commissioned by Natural England to examine the new befriending element and to gather further qualitative data on the links between engagement in health walks and social outcomes. At the time of the evaluation (2011), a small number of potential befrienders had been identified across the region. These individuals were offered bespoke training consisting of a 2-3 hour course that aimed to

increase awareness of mental health issues and to prepare volunteers to 'befriend' new walkers. Content included: what the befriender role entailed; information on common mental health conditions; the health benefits of physical activity and organisational aspects of the new scheme. The proposed role was to 'meet and greet' new walkers, offering reassurance, support and encouragement to enable them to become active and self-sufficient group members. It was envisaged that the befriending role would apply to anyone joining a group, regardless of whether they had mental health needs, therefore was intended as a new universal offer within the WfH scheme. The role did not include promotion activities nor recruiting new walkers.

Methods

a. Design and methods

The study used a qualitative design and methods to gain a context-rich understanding of the processes supporting engagement in walking groups, including the new befriending role, and participants' perspectives on outcomes (Patton, 2002). A Theory of Change approach was applied (Connell and Kubisch, 1988) in order to articulate the links between purposeful activities, underlying assumptions, mechanisms of change and outcomes (see Figure 1). The main research objectives were to:

i.   explore the links between processes of engagement in walking groups, wellbeing outcomes and social capital

ii. examine whether the new befriender role provided a mechanism to increase access, particularly for people with mental health needs.

Some secondary analysis was also conducted, using anonymised monitoring data on registered walk participants collected through the Outdoor Health Questionnaire (OHQ) (Fitches , 2012); results from this component are reported elsewhere (South et al., 2013a).

The main methods were focus groups with walk participants and volunteers combined with individual semi structured interviews with stakeholders involved in the delivery and management of the walking scheme. Focus groups were chosen as an appropriate method to elicit views on the experience of group walking (Finch and Lewis, 2003), thereby retaining the naturalistic orientation of qualitative research (Silverman, 2006).   Individual interviews with those with a role in implementation allowed in depth exploration of process issues. Interview and focus group schedules were prepared using open ended questions and probes on recruitment and engagement processes, perceived outcomes from participation and views on the befriender role. In the focus groups, questions were carefully chosen to stimulate discussion and allow participants to identify matters of significance (see supplementary file A).

b. *Sampling*

A purposive sampling strategy was developed to ensure a heterogeneous sample of walking groups, including those with potential befrienders, and to identify individuals whose roles in the project made them 'information-rich cases' (Patton, 2002). There were three types of participants in the sample: in the focus groups, there were walk participants attending a group walk in areas covered by the scheme and individuals who had volunteered to act as a befriender. For the individual interviews, stakeholders involved in project implementation

including the project manager, walk co-ordinators (paid roles) and representatives from commissioning and other partner organisations.

For the focus groups, the first stage involved identifying a varied purposive sample of walking groups using the project monitoring data. Six health walk groups (Table 1) were selected; four of these groups were part of the befriender project, and two represented health walks which had not identified any befrienders. The sample also reflected variation across different communities and geographical areas, the type of walk and typical size of attendance. The research team liaised with the project manager to identify potential stakeholders and walking groups. The second stage of sampling within the walking groups was opportunistic, as all those attending a group walk on the day specified for data collection were invited to take part. No exclusions were made in order to listen to a range of participant perspectives.

c. Recruitment and data collection

Data collection and analysis were undertaken by three of the authors (GG,KK,JS), all of whom are experienced in qualitative research and community-based fieldwork.   The team was not based in the region and was independent from the project management and staff. Recruitment to the study was through a letter of invitation and information sheet from the research team to individual stakeholders and walk participants (distributed through the walk coordinators as personal contact details were not available). All those invited to individual interviews agreed to take part and interviews were conducted at mutually convenient times. For the focus groups, the research team arranged to attend specific

walks and then held a focus group immediately following in the community settings where the walking group normally met. Each walk and subsequent focus group was attended by two researchers, with one team member (KK) providing consistency by attending all the groups, although the lead for discussions varied. Large numbers opted to participate in three of the walks, so additional focus groups were run. Only a small minority of those attending the walk chose not to join the focus groups. Individuals who volunteered as befrienders were invited to a single focus group. All interviews and focus groups were recorded on digital recorders with the permission of participants. These recordings were later transcribed verbatim.

In total, 92 individuals participated in the study (see Table 2). Nine focus groups were conducted with participants attending six health walks; of these 61% were female and 39% were male. Table 3 shows the demographic characteristics of the sample of walkers. One focus group was conducted with five individuals who had been identified by the project as befrienders, all of whom were women and aged between 55 and 74 years. Ten individual interviews were conducted; eight with stakeholders and two telephone interviews with befrienders who were unable to attend the focus group.

d. Analysis

Thematic analysis was undertaken to organise and code the data, in line with the guidelines suggested by Braun & Clarke (2006), who set out a six phase process from familiaristion to producing the report. In the first instance, the research team (GG,JS,KK) independently

coded selected transcripts, identified themes and then agreed an initial coding framework together. This framework was based on descriptive categories aligned to topics of interest in the study with the addition of interpretive themes developed inductively from the data. Nvivo, the computer assisted qualitative data analysis software, was then used to manage and explore the whole data set in a systematic fashion, codes being added and merged as the process continued. As Braun and Clarke (2006) suggest, a thematic map was eventually produced that best represented the whole data set and was supported by coded sections of data. At this stage, some themes remained that were closely aligned to areas of questioning eg. 'motivations', but the coding tree also included many interpretive themes that had been inductively generated, eg 'group ethos'. Finally a narrative summary was produced which was agreed by all researchers.

In terms of reflexivity, being an experienced team and the naturalistic approach to data collection (literally walking the walks) enabled rich data to be generated. Some distance between the researchers and the researched was present as the team were younger than participants and from a different region of the country; nonetheless study participants gave full accounts of social contexts. Two of the team (JS, KK) had some previous research experience with walking groups, but this had been focused on volunteer walk leaders. Data analysis was therefore approached with some sensitivity to the social aspects of walking groups, but not to the specific befriending role nor to the broader research agenda around promotion of physical activity. Subject expertise on physical activity, leisure and health was provided by another group of researchers who formed the steering group (DC, JL, JM) but did not take an active role in the analysis.

e. Ethics

The evaluation received ethical approval from the Faculty of Health & Social Sciences Research Ethics Committee, Leeds Metropolitan (now Beckett) University. The evaluation conformed to recognised ethical practice guided by the Social Research Association (2003). Due to the potential for discussing sensitive issues in the focus groups, care was taken to focus on group experiences and to allow participants to identify the issues they felt most relevant whether relating to physical or mental health. At the end of the groups, participants were asked their views about how future research should be conducted and responses indicated that focus groups were an appropriate method. Anonymity has been preserved through removing all identifying details from quotations.

3. Findings

The analysis generated six major thematic categories: pathways to involvement; factors influencing involvement; widening access; befriender role; benefits from participation; strengthening communities.

a. Pathways to involvement

In the focus groups, walk participants discussed the processes of recruitment and motivations for joining a health walk. A range of motivations were described with the most prominent themes related to social circumstances. A number of participants identified the health walk as an opportunity to meet new people, in some cases to prevent or address

social isolation. This could be triggered by significant life events: the transition to retirement, moving new to the area or bereavement:

I would think to be honest that the thoughts of getting fitter when we first joined were not really the motives. The motive as far we were concerned was getting to know people and getting to know the town as well. (FG, health walk)

However, health related motivations were also described including wanting to improve fitness or counter the onset of physical health problems:

[…] I was just recovering from a heart attack and we started doing half hour walks from the leisure centre. So I joined this group about seven years ago and I've been here forever since. I got my brother to join too. (FG, health walk)

Recruitment routes ranged from chance, for example seeing an advertisement in a tourist information centre, through to formal referral by a general practitioner or through an exercise referral scheme. Social networks were important and word-of-mouth was a means of recruitment, particularly when the walk was recommended by family or friends.

b. *Joining the group*

The focus groups and interviews explored engagement processes in order to understand the additional element of a befriender role. Most health walks had a core group of walkers,

however new people regularly joined, with the exception of one group where membership was described as static. The act of joining a walk for the first time was perceived as daunting. Two major factors emerged that hindered involvement. Firstly apprehension about the extent of physical activity involved, with the fear of not being able to complete the walk. Secondly, the problem of joining an existing group and not knowing people or dealing with established friendship groups when new:

> I know it took me a few times to actually come, thinking I wouldn't be able to keep up. And I've known other people were the same. (FG, health walk)

> Well it's always hard for people that [are] new coming to break into a group so we're quite open in welcoming strangers because we know that's a difficulty for people. (FG, health walk)

Factors that facilitated involvement related directly to these two barriers. Having a short walk was seen as reassuring for new starters and as their physical confidence increased, individuals could move on to longer walks. In relation to social apprehension, some individuals chose to come with a friend or family member. Both groups with and without befrienders identified the friendliness of the walking group and having people who would happily talk with new recruits as important factors facilitating involvement:

> Well I had always walked but it was just like once a month and I lost my husband and I was on my own and once a month wasn't enough, I needed more. I had heard about this, these walks and I came and I felt like a kiddy starting school because not

knowing anybody and I said "hello everybody" and I was amazed at the people who

turned around and said "hello". (FG, health walk)

A positive social experience was reinforcement to continue. Perceived reasons for lack of

retention included individual choice, walks were 'not for them', the slow pace of health

walks and family commitments.

    c. Widening access

The accessibility of health walks for those with physical or mental health needs was

explored in focus groups and interviews. A dominant theme was the inclusiveness of health

walks in supporting the involvement of people with long term limiting conditions or more

short term health needs, such as recovering from surgery. Walk participants described

adaptive responses including slowing the pace of the walk, often with a volunteer staying

with anyone struggling, having an option of a short walk and planning walks with no

physical barriers such as stiles:

And you can't walk too slowly, there's no such thing as walking too slowly. The walks

are for people of all abilities. And as you get fitter, you're able to walk faster. You get

your heart beating. There's absolutely nothing at all wrong with walking very slowly

at the back. And if somebody needs to stop and go back that's fine. (FG, health walk)

Whilst walking groups were viewed as relatively accessible, there were perceived limits to this; walks were not accessible for those using wheelchairs and individuals did leave if their health deteriorated.

In terms of mild to moderate mental health needs, a similar picture emerged with examples of individuals joining health walks to alleviate mental health problems or to cope with stressors. Again there were adaptive responses reported in circumstances where individuals were perceived to have communication or social difficulties. One strong theme was that unlike physical conditions, mental health needs were seen as 'hidden' and disclosure to other walk members was not necessarily appropriate. In the stakeholder interviews, stigma was raised as an issue and there was a reported unwillingness of walk participants to recognise mental health issues:

> *[...] I mean mental illness is not something that sticks out like horns, quite a lot of people with mental illness you wouldn't actually notice. (FG, health walk)*

> *This age group don't really like to talk about mental health, because it's all over-50s [...] mental health is not something that is talked about and I was really taken back by that. The amount of stigma. (Interview, professional stakeholder)*

    d. Befriender role

The introduction of a befriender role was a new component but implementation had met difficulties. Identified reasons included project delivery issues, low recruitment of volunteers willing to be befrienders, resistance of walk leaders to collecting additional monitoring data on self-esteem scores and the stigma of mental health affecting engagement:

> *A lot of it really was that I suppose there's quite a stigma attached to people with mental health problems. I think that's why we're having trouble getting people onto the courses at the moment…You know, cause if you say 'mental health' to someone they think of, automatically think of the extreme cases as opposed to people who maybe just suffer from a bit of you know anxiety and depression. (Interview, professional stakeholder)*

Overall there was little evidence of a formal befriending role being taken up in the health walks, even though some befrienders had been identified (Table 2). The sample was therefore limited to a focus group (n=5) where participants identified as befrienders but could not recall the training, an individual who had volunteered for the role but had not undertaken training and an individual who had completed the training but chosen not to take up the role. A specific question was asked about the befriender role in the focus groups with walkers, but even in walking groups with befrienders, this generated little discussion except to explain that any buddying was done informally. The lack of resonance around a formal role contrasted to a strong theme that walk participants regularly provided peer support to others. Participants, including those identified as befrienders, were

emphatic that the befriending role occurred naturally and the wider group ensured people were welcomed:

I think to be honest with you everybody here is very sociable. If somebody new comes into the group, it might be just going over a stile or something and you just go with them and you say hello, who are you, what's your name, and I think everybody just invites them into the group. (FG, health walk)

I suppose you could class everyone as a befriender within our group. All our people in our group you could say are befrienders really because they wouldn't let people walk on their own anyway. (FG, befrienders)

e. *Benefits from participation*

Perceptions about the social and health outcomes associated with group walking were explored in focus groups and interviews. Responses were universally positive about the benefits of being involved in a health walk. A specific question was asked about drawbacks, but this generated little discussion with only minor drawbacks mentioned, such as dealing with the odd difficult personality.

The perceived benefits were grouped into five categories: increased physical fitness; improving mental wellbeing; providing incentives to go out; gaining local knowledge; and improved social networks. For a number of participants, taking part in health walks had

resulted in feeling fitter and having improved physical function. A strong theme was that social aspects facilitated participation in physical activity; one individual described: "The jaw gets exercised, the body gets exercised".

Mental wellbeing benefits were reported in focus groups and interviews. Walking was seen to promote wellbeing through the combination of being outdoors, companionship and exercise. This could be about primary prevention, for example, feeling more relaxed, or alternatively coping with stressors or mental health conditions:

> *Generally though, walking lifts you. I mean if you are feeling down or you're worried about things, just physically getting out there and walking, particularly with a group cause you're talking to people all the time, you know just gives you a lift and you feel so much better at the end. (FG, health walk)*

A strong cross-cutting theme was the social benefits from meeting people and forming friendships. These outcomes were highly valued by all study participants and seen as integral to the experience of the health walk:

> *I suppose we can get hung up on the health walk business but meeting and talking to people is part of the health walk to me. It gets your mind going and gets conversations going. It's all part and parcel of it for me. (FG, health walk)*

A regular organised walking group was perceived to have value in reducing social isolation and providing an incentive to leave the house. Health walks opened up opportunities to gain local knowledge and link to other activities. A further theme was the importance of feeling safe walking as a group, especially for women.

f. Social networks – with group and external to group

The walking group as a social group and community links were major themes. Having a place to stop for refreshments after the walk was viewed as important and some groups organised additional social activities such as trips out.   The friendly and open nature of groups was emphasised as was the nurturing ethos, with walkers helping each other out:

We've got a fantastic group there's no doubt about it. Everybody's friendly and there's been a lot of friendships made through the group, people that didn't know each other before, they've made really good friends. (FG, health walk)

Walk participants described moving to talk to different people and this natural movement of the group meant that new people could be welcomed easily:

I like the way that people intermingle because you look around and it's never the same two people that are walking together. (FG, health walk)

The findings indicated the formation of stronger social networks. Participation could lead to increased contacts in the local community, as well as the development of personal friendships and 'spin-off' activities, such as meeting for coffee. In terms of wider social networks, health walks ran alongside a range of community-based activities and many participants took part in other walks, fitness activities or community education. There was some cross flow of information which raised awareness of what was available locally and walking groups could open access to social networks for those who were new to an area. At the same time groups were embedded in established networks, with some participants speaking of living in tight knit communities:

> *People get to know new people and we've got some really good examples of where [..] groups have been set up and people have gone out on trips together, and joined in with all sorts of other activities in the community, because they've met people on the health walks and talked to them about that. The social networking really works very well. (Interview, professional stakeholder)*

4. Discussion

This study provides qualitative evidence that social factors affect motivations to join walking groups, ongoing engagement and connections outside the group. The findings contribute to knowledge on social support and social capital as determinants of physical activity (Long, 2008, Ball et al., 2011, Lindström et al., 2001). Some participants reported that joining the scheme could prevent or reduce social isolation, which is a significant health issue (Victor and Bowling, 2012, Holt-Lunstad et al., 2010). A key objective of the study was to evaluate

the introduction of a befriending role as a means to widen access to walking for health schemes. Whilst there is an evidence base for befriending as an intervention to address social isolation (Windle et al., 2011), in this study the befriending component was seen by walk participants as having low relevance because informal processes within walking groups provided the necessary mutual aid. This finding contrasts with the value given to the formal role of walk leader (South et al., 2013b; Caperchione et al. 2011).

Explanations about the lack of resonance of the befriending role were consistent across stakeholder groups. This may reflect the point in time when data were collected early in project development. There was some evidence of incomplete implementation, as the befrienders' focus group could not recall any training, although they did talk about befriending as something that occurred naturally. Overall strong themes about the value of informal mutual aid compared to formal roles have wider implications. The study highlights the value of formative evaluation as part of intervention development (Wimbush and Watson, 2000) as the project, which had a number of other successful components, was able to evolve to support recruitment more effectively.

There was evidence on the accessibility of walking groups for those with physical health needs. National monitoring data show that WfH is accessed by those with existing physical health conditions (Fitches, 2011), but at same time health-related barriers to walking may be an important factor in physical activity levels for participants (Dawson J et al., 2007). A survey of individuals who had registered for health walks and then dropped out found that deterioration in health and time pressures were the main reasons reported, however a

minority of respondents cited barriers around group aspects (Phillips et al., 2011). Walkers in this study reported apprehension about joining in an established walking group; a finding also highlighted by Hanson et al. (2016).

Participants saw health walks as having value for those with mental health needs, but stigma and the hidden nature of mental health was identified as a factor in the incomplete implementation of the befriending role. Carless and Douglas found that mental health service users in the Bristol Active Life Project valued 'closed' physical activity groups specifically for people with mental health issues as they were felt to offer a safe space and reduced the risk of stigma (Carless and Douglas, 2012, Carless and Douglas, 2016). Overall, this study has developed understanding of how WfH walks function to support people with health needs to access group activity and the limitations to that. The extent of group adaptation reported around disability was an unexpected finding and worthy of further research to explore how those with physical and mental health needs can be enabled to participate in health walks.

The study adds to a growing evidence base on the wellbeing benefits from walking and engagement with the natural environment (Marselle et al., 2013, Roe and Aspinall, 2011). The findings reported here indicate that walking groups can contribute to social capital, in particular, bonding capital as membership of the group brought companionship, mutual support and personal friendships. Critically these social aspects were not described by participants as an unintended consequence but as an integral aspect of participation. There are implications for programme design and management, as social activities should be

recognised as a fundamental element of group walking interventions and evaluation therefore needs to measure psycho-social outcomes as well as physical activity levels.

There was some evidence of strengthened social networks external to the groups, but more research is needed to investigate the nature of those networks, and whether walking groups built bridging capital, in terms of links to people with different social characteristics (Ferlander, 2007), or simply reinforced existing community networks. The geographical context with the scheme run in both rural and urban areas, may be a factor as communities were described as close knit. Understanding existing social ties is important in interpreting neighbourhood and walkability (Kegler et al. 2015). There was some evidence of spin off activities, which may have potential health benefits for individuals (Holt-Lundstadt et al 2010) and aid sustainability of walking group interventions (Andersen-Lewis et al 2012).

   a. Limitations

This qualitative study used replicable methods to ensure rigour with attention to the social context (National Institute for Health and Care Excellence, 2012). Notwithstanding that there was a varied sample of walking groups, transferability may be limited due to the study being located in one region of the UK described by participants as socially cohesive. More research is needed to test the applicability of the findings in other areas. Focus groups were chosen as the primary method to elicit views within the walking group. This method was highly acceptable for walk participants and in depth discussion was generated. A limitation is that participants may have felt constrained in expressing negative views of the group (see Hanson et al 2016). Individual interviews may have generated a wider set of perspectives and more in depth discussion on mental health needs. More research is needed on those

who self-select not to join an organised group or who drop out, as regular participants may have a more social or community orientation. This may also have affected the choice to participate in the research, leading to social factors having prominence. Only a minority of walk participants opted not to take part in the focus groups and no data were collected on their characteristics,

The finding on perceived stigma around mental health is an important one with implications for further studies. Prior to the study, the project had attempted to use a self esteem instrument additional to the monitoring questionnaire routinely used, but this had been firmly resisted by walk leaders and groups due to perceived intrusiveness. This negative experience may have framed views on the befriending role. A further limitation was the lack of quantitative data on mental health needs of focus group participants, as this would have helped interpret the results. There are clear challenges around gathering evidence on this topic within community-based settings.

5. Conclusions

This study provides qualitative evidence that social factors, which include mutual aid, strengthening of social networks and social support to facilitate participation for those having mild difficulties, can support engagement in lay-led walking groups. These social processes are not an unintended outcomes but are integral to the processes of engagement and maintenance of activity and are linked to improved wellbeing. The findings have implications for intervention design and evaluation. More research is needed to explore

how best to overcome barriers to access for those with physical or mental health problems. The introduction of a formal befriending role was not found to be applicable or effective in this project. Conversely, the informal, mutual aid within groups is evidently a positive process that needs more recognition within walking interventions as access to social support and social networks are key determinants of health. Evaluation studies ideally should measure psycho-social aspects as well as physical activity as this study shows there is a synergy between the two aspects.

Acknowledgements

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Figure 1.   Theory of Change – Walking for Wellness

Context: Walking for Health is a tried and tested model that successfully supports uptake of walking

Low level of physical activity in the population with barriers to uptake of physical activity

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Assumptions: People with mild to moderate mental health needs will benefit from participating in health walks but may face additional barriers to joining walks

Adding a befriender role will widen access to Walking for Health, including for those with mental health needs

⇩

Mechanisms of change:

Volunteer walk leaders organising local walks (existing mechanism)

Engagement in health walks (existing mechanism)

Befrienders (introduced by Walking for Wellness project) will provide an additional support mechanism and welcome new recruits and help them become established in the walking group

⇩

Outcomes: Participation in health walks results in a range of individual health outcomes around wellbeing. More people with mental health needs are able to participate

Participation in health walks leads to improved social networks within group and within community, which in turn reinforces wellbeing outcomes

Table 1: Sample of health walks

Health walk group	Urban/ Rural	Walk	Average Attendance	Befrienders identified by project
A	Semi-Rural	Intermediate walk	8	5
B	Urban (town)	Flat coastal walks - 4 miles	40	4
C	Urban (town)	Flatish walks with 2 mile, 4 mile and 6 mile options	53	3
D	Urban (town)	Longer walk although short walks also available	23	None
E	Rural	Short starter walk	12	None
F	Rural	(Short walk)	15	1

Source: Project monitoring data

Table 2: Data collection and number of study participants

Type	Focus group/ interview	Females	Males	All participants
Health walks				
A	1 focus group	2	1	3
B	2 focus groups	15	8	23
C	2 focus groups	9	5	14
D	2 focus groups	7	11	18
E	1 focus group	5	2	7
F	1 focus group	9	3	12
Sub total - walking groups	**9 focus groups**	**47**	**30**	**77**
Other roles				
Befrienders	1 focus group	5	0	5
	2 interviews (phone)	2	0	2
Sub total befrienders				**7**
Stakeholders	8 interviews (5 face to face 3 phone)	5	3	8
Total Participants		**58**	**34**	**92**

Table 3.   Demographic characteristics of walking group participants

Walking group	A (n=3)	B (n=23	C (n=14)	D (n=18)	E (n=7)	F (n=12)	TOTAL	%
Gender								
Female	2	15	9	7	5	9	**47**	**61.0**
Male	1	8	5	11	2	3	**30**	**39.0**
Age group								
25-34	0	0	0	0	0	0	**0**	**0**
35-44	0	1	0	0	0	0	**1**	**1.3**
45-54	0	0	0	0	0	0	**0**	**0**
55-64	0	1	0	2	0	0	**3**	**3.9**
65-74	0	11	8	11	2	9	**41**	**53.2**
75-84	1	7	6	5	4	3	**26**	**33.8**
85 and over	2	3	0	0	1	0	**6**	**7.8**
Ethnicity								
White	3	23	13	18	7	12	**76**	**98.7**
Other ethnic group	0	0	1	0	0	0	**1**	**1.3**
Marital status								
Single	0	3	1	1	0	3	**8**	**10.4**
Married	2	13	10	14	6	6	**51**	**66.2**
Divorced/ Separated	0	4	1	1	0	2	**8**	**10.4**
Widowed	1	3	2	2	1	1	**10**	**13.0**