***The walks often give me a reason to get up and get out in the morning rather than hiding*.**

Towards sustainable Community-health enhancing interventions

Abstract

Physical activity (PA) community-based programmes are increasingly put forward to promote active, healthy lifestyles and bring about long-lasting benefits to beneficiaries (Wiltsey Stirman et al., 2012). Programme sustainability refers to the maintenance of an intervention beyond the initial time, resources, or other inputs to support it. A range of factors contribute to sport/PA programme sustainability; however, research often overlooks the critical ingredients to long-lasting interventions (Estabrooks et al., 2011). This study explores the elements that promote, or hinder sustainability of a walking-based intervention addressed to caregivers and care-recipients in Kent, United Kingdom. Drawing on interviews and focus group data with organisers and participants, findings were grouped under three overarching themes: *Benefits on social and mental well-being, factors facilitating programme engagement* and *key implementation considerations*. In discussing these findings in context, we provide implications for the sustainable planning and implementation of future community sport and PA programmes.

Keywords

programme sustainability, physical activity interventions, walking, caregivers

Introduction

It is estimated that approximately 5 million people or 9% of the population in England and Wales are engaged in informal caregiving, while the proportion of people dedicating more hours into caring for others has also increased in recent years (ONS, 2023). Carers UK (2023) suggest that approximately 10.6 million or 1 in 5 adults in the United Kingdom (UK) provide care to others, while females are more likely to do so. Informal caregivers are most likely unpaid and have a personal connection to the person they care for either by being their spouses or relatives. The support caregivers provide to people with disabilities or with chronic conditions enables them to have a better quality of life (Oyebode, 2003). However, this experience has adverse effects for the well-being of Carers (Loi et al., 2014). Carers UK reports that approximately 625,000 Carers experience mental and physical ill-health, because of the physical, and physiological demands and stress associated with caring (Activityalliance.org, 2017). For example, juggling many responsibilities or oftentimes own health conditions alongside caregiving can increase stress, exhaustion, reduce time for social interaction with others and exacerbate feelings of loneliness and isolation (Carers UK, 2023).

Physical exercise is a key component of well-being, as it not only enhances sleep quality, physical stamina and strength (Netz et al., 2005) but can also play a role in preventing mental health problems (Taylor & Pringle, 2022) and increase individuals' 'capacity to do well despite adverse experience' (Gilligan, 2000, p.37). For example, PA can reduce someone's risk of depression by up to 30% (Department of Health, 2011). In addition, PA can increase confidence, feelings of self-worth and facilitate social integration, community connectedness and social cohesion through participation in group settings (Taylor & Pringle, 2022). However, caregivers are less likely to engage in regular, organised, and formal PA or other preventive health behaviours due to lack of time or other associated challenges such as lack of support to

help them cope with the demands of daily caregiving. This perhaps amplifies their sense of isolation and loneliness (Hirano et al., 2011; Loi et al., 2014).

The UK government has recently channelled £20 million of funding and published a strategy towards initiatives to tackle loneliness, describing it as one of the greatest public health challenges of our time. The policy aims to help individuals experiencing loneliness to improve quality of life through participation in a range of community activities and voluntary services by 2023 (HM Government, 2018). To this end, group health promotion interventions are increasingly being used to help caregivers cope with the demands of caregiving by facilitating the adoption of healthy behaviours and lifestyle (Loi et al., 2014). Despite such policy pronouncements, relatively little is known about the socio-managerial challenges faced in the delivery and the effectiveness of community sport/PA interventions along with the factors that could ensure their sustainability (Whitley et al., 2015). The recent loneliness strategy of the UK government (2018) acknowledges the limitations of the existing evidence base and the need to test, iterate and learn to better inform future policy decisions (p.14). As such, evaluation could lead to PA, sport for health and social inclusion projects with more robust and sustained impacts and outcomes that would feed into the design of future policy initiatives (Tacon, 2007).

The longevity of community-based intervention programmes is one of the indicators of their success since they are proposed to establish long-term behavioural change and bring about long-lasting benefits to the communities they are meant to serve (Mancini & Marek, 2004; Wiltsey Stirman et al., 2012). Nonetheless, sustainability is often overlooked in community sport and PA intervention research (Estabrooks et al., 2011). Against this background, this study aims to describe the implementation and explore the elements that facilitate or impede the sustainability of a walking-based intervention addressed to caregivers and care-recipients

in the Kent region of the United Kingdom. Project implementers and participants of the 'Stepping Out with Carers' (SOWC) intervention provided qualitative feedback through interviews and focus group data on various aspects of the project's design, implementation, benefits, and challenges presented and strategies offered to ensure programme sustainability. With this information, we hope that SOWC can provide foundational information for those wishing to plan sustainability from the outset of their community PA programmes. As such, this research adds to the limited academic literature in the area by offering valuable insights for developing and sustaining tailored community sport and PA programmes for specific sedentary populations such as caregivers and care-recipients in this context.

Conceptual Framework

Sustainability

Programme Sustainability refers to the maintenance of a programme beyond the initial funding, resources or input given to develop and support it (Scheirer, 2005). It is a multidimensional concept with several researchers seeking to explore and explain the elements that underpin it. Systematic research on the sustainability and maintenance of PA/sport programs is still in its infancy, and little attempt has been made to identify factors that influence sustainability of programmes beyond the end of the grant period (Blom et al., 2015; Estabrooks et al., 2011; Lindsey, 2008). It also seems that programme termination is counterproductive when the issue that the intervention was established to address remains or recurs (Schulerkof, 2017).

Lindsey (2008) describes sustainability as an amorphous concept and proposed a two-dimensional framework to examine the processes that make sport development programmes sustainable. The first dimension includes four different forms of sustainability: individual,

community, organisational and institutional. The second dimension includes processes issues that impact on programme longevity including project design and implementation factors (i.e. length, effectiveness and available resources to run the programme, the strengths of a programme and leaders' abilities, organisational capacity and viability to maintain programme activities, and the extent to which a programme is integrated into the organisational structure, proactive steps taken to ensure sustainability, which may be beyond leaders' control, extent of community participation in the programme as well as wider contextual influences within the programme's community. Indeed, programmes may be effective in achieving desired outcomes, yet unable to ensure their sustainability.

Wiltsey Stirman et al (2012) propose four broad sustainability elements related to innovation, organisational context, processes, and internal/external organisational capacity. Mancini and Marek (2004) in the context of community intervention programmes for families developed a three-dimensional conceptual framework, the Programme Sustainability Index that encompass seven components of sustainability, which include leadership competence, effective collaborations, understanding the community, strategic funding, programme responsivity, staff involvement and integration and demonstrating programme results. The presence of these elements leads to middle range programme results such as effective sustainability planning, confidence in programme survival, meeting participant needs, and ultimately ensure programme sustainability. Sustainability elements as emphasised by Mancini and Marek (2004) could directly lead to programme sustainability and are within the control of programme leaders and stakeholders, however, contextual forces such as funding cuts or the emergence of other programmes may impact upon the programme's longevity.

Mancini and Marek (2004) note the importance of leadership competence towards sustainable programme outcomes since leaders' development of a vision and aligning staff to this vision is integral in delivering programmes and supporting activities. Witlsey Stirman et al (2012) also emphasised this element as an influence of the broader context towards achieving programme sustainability. Shediac-Rizkallah and Bone (1998) also discussed the role of Programme Champions within an organisation's senior management to drive the organisation towards sustainable outcomes, while Shilbury and Ferkins (2011) emphasise the CEO-Board relationships in enhancing strategic capacity to meet rational management objectives for sport organisations.

Partnerships

Marcini and Marek (2004) also discussed the importance of effective collaborations in their programme sustainability index. Developing and maintaining solid and trusting relationships with community partners is integral to ensuring programme sustainability (Blom et al., 2015; Estabrooks et al., 2011; Ooms et al., 2019). Indeed, this aligns with the leadership competence element since those leaders that value meaningful collaborations are more likely to steer their organisations towards sustainable outcomes (Wiltsey Stirman et al., 2012). Schulenkorf (2017) emphasises that effective collaborations and managerial know-how are critical for sustainable sport for health (SFH) programmes that meet their proposed health outcomes and reduce the likelihood of adverse impacts on the participants.

Nonetheless, Misener and Doherty (2012) note that the nature of organisations determines the extent to which these could engage in forming healthy partnerships that align to their objectives. As the authors explain, organisations operating in the non-profit sector require fundamentally different partners or access to local sport services and resources compared to

those operating in the for-profit sector. Forming trusting and robust partnerships is dependent on the effort made by programme partners to learn about each other, discuss priorities, working perspectives, explore common interests and align partners' goals to the programme objectives. Regardless, if local community involvement in programme conceptualisation and investment in building bridges between programme partners is made early on, this could lead to more thoughtful conversations around programme design, implementation, and sustainability (Whitley et al., 2015). Further, by diversifying partnerships, the longevity of a programme may be ensured (Skinner et al., 2008).

Another area that leads towards programme sustainability is understanding the community that the programme is addressed to or exists within including both participants and the general context surrounding the intervention (Mancini and Marek, 2004). Schulenkorf (2017) notes that contextual understanding leads to devising and implementing more effective and culturally relevant health interventions. Evidently, there is an interaction with other sustainability elements here since Shediac-Rizkallah and Bones (1998) advocate for the use of a collective partnership approach in gaining an understanding of programme beneficiaries to deliver interventions tailored to their needs. Wiltsey Stirman et al. (2012) advocate for maintaining key elements of community intervention programmes once their funding or initial support has subsided and the facilitating role that elements related to partnerships and community understanding have in achieving sustainability. Whitley et al (2015) also suggest that effective sport/PA programmes are those that enable the community and participants to take ownership of their development, implementation, and evaluation. This results in culturally sensitive programmes that embed contextual and community understanding, so that they are appropriate to address local needs. This further facilitates acceptance, support, and credibility of the programme in the eyes of its beneficiaries (Whitley et al, 2015).

Monitoring and Evaluation

Ensuring effective monitoring and evaluation of community programmes is another challenge towards sustainability but it is integral to their longevity (Lindsey, 2008). The difficulty lies in identifying appropriate ways to measure a community intervention's success and ensure that the programme demonstrates appropriate results since oftentimes these are not defined from the outset (Mancini and Marek, 2004). In fact, while process and outcomes related to a programme need to be evaluated, most often than not, there is a lack of suitable research methods employed, and empirical formative and summative evaluations to support the effectiveness of sport and PA interventions (Schulenkorf, 2017). Researchers also point towards the limited engagement of community members in the monitoring and evaluation of programmes addressed to them (Hayhurst & Frisby, 2010). Wiltsey Stirman et al. (2012) echo this by suggesting that achieving measurable programme outcomes depends on elements related to the coordination of the multiple stakeholders involved, decision making processes and implementation. The above suggest that the elements that contribute towards sustainable programmes are intertwined (Mancini & Marek, 2004).

Funding

Scholars note that another important factor in a programme's sustainability is funding for its implementation (Mancini & Marek, 2004; Whitley et al, 2015; Wiltsey Stirman et al., 2012). Securing funding is a challenging process particularly for smaller organisations, as it requires them to consider length of funding period and potential cutbacks, changes in policy focus, realistic cost estimation, nature and cost of activities offered to ensure programme continuity (Shediac-Rizkallah & Bones, 1998). Sustainable funding requires organisations to diversify funding and sources of support through cultivating relationships within their communities to

ensure programme longevity (Skinner et al., 2008). This necessitates adaptability by aligning programme goals to potential partners' mission, values, strategic focus, and capacity, whilst at the same time protecting its integrity (Whitley et al., 2015). Nonetheless, partnership strategies lead to complex patterns of resource dependency (Harris & Houlihan, 2016), and for smaller organisations this may mean a loss of programme control since larger funding agencies often prioritise strategies inspired by a governmentally regulated freedom (Miller & Rose, 2008).

Staffing

Mancini and Marek (2004) emphasise upon the integration and involvement of committed and qualified staff in programme decision-making and implementation to ensure its sustainability. An organisations' culture that fosters broader participation in decision-making and recognises the human resource value in planning, delivery, and evaluation of programmes essentially align staff values to the programme objectives and strengthens sense of belonging. As such positive internal relationships need to be fostered by stakeholders (Estabrooks et al., 2011; Mancini & Marek, 2004). Wiltsey Stirman et al., (2012), on the other hand, believe that staff involvement is an aspect that fits with the concept of capacity rather than organisational culture since human resources attitudes and attributes reflect the stability of the workforce. Indeed, capacity building is essential in reaching programme goals and ensuring sustainability and could be enhanced through leadership development, training, education, and technical assistance addressed to all partners of community-based programmes to enable them to take ownership of the programme (Ooms et al., 2019; Whitley et al., 2015).

Programme responsivity is another identified element towards sustainable community interventions (Mancini and Marek, 2004). Responsivity refers to the degree an intervention programme could be adapted to respond to evolving needs of the recipient community by

considering the programme beneficiaries and the underlying social structures surrounding it (Whitley et al., 2015). Nonetheless, Wiltsey Stirman et al. (2012) consider responsivity as part of a programme's innovation characteristics, which also includes elements related to programme suitability and effectiveness.

Summary

Despite variations in the terminology used by scholars, there seems to be a consensus on the key components that influence programme sustainability. Edwards and Rowe (2019) conclude that sport/PA and health programmes should be empowering to individuals and aligned to community needs, responsive and adaptable to contextual forces to promote their mission, work towards effective partnerships and collaborations to leverage health outcomes to promote organisational sustainability. This study aims to add to the body of knowledge by considering the unique characteristics of a specific walking-based intervention for carers and care-recipients in the Southeast of England and explore the elements that may have contributed towards its sustainability. The section below discusses the context that influenced the design and delivery of this intervention.

Research Context

Interventions for Caregivers

There is an overwhelming consensus in the literature that caregiving is a stressful activity, and as the level of support required by care-recipients increases, the time and opportunities to engage in regular exercise or other health-related activities is reduced (Carers UK, 2023; Hirano et al., 2011; Nankervis et al., 2011).

Several interventions exist that aim to alleviate the stress and burden that carers face from regular caregiving, but these often focus on one of the three components of health; physical, mental, or social (Warburton et al., 2006). The most utilised form of PA in previous interventions addressed to carers was brisk walking (Loi et al., 2014), which has been shown to improve depression, stress, anger, and burden (Marsden et al., 2010). However, the small sample sizes and number of trials used, outcome measures and heterogeneity of interventions across studies limit the generalisability of these findings (Loi et al., 2014). There also seems to be inconsistent evidence between studies to support whether PA alone or its combination with opportunities for social contact contribute to alleviate depression, stress, and burden among carers (Loi et al., 2014). These interventions are often evaluated through short-term follow-ups, thus the evidence to support whether these bring long-lasting benefits is inconclusive (Taylor & Pringle, 2022). Nonetheless, the sense of belonging and social support provided through participation in community exercise settings is seen to bring about positive health benefits (Taylor & Pringle, 2022).

Evidence suggests that carers enjoy the social aspect of group-based PA interventions (Marsden et al., 2010), while they appreciate programmes that are simple, convenient, and inexpensive (Farran et al., 2008), and bring about opportunities to participate together with the beneficiary of their care (Marsden et al., 2010). These settings also offer opportunities for beneficiaries to share common experiences and relate to one another, which may encourage continuous participation (Lamont et al., 2015). However, PA is often seen as an additional load to the busy schedule of carers that further leads to alleviated stress and worry especially if such engagement takes them away from the recipient of their care (Farran et al., 2008). Nonetheless, there are limited interventions to date that examine the benefits of PA on both carers and care-recipients (Dow et al., 2013; Prick et al., 2011). Attention should be paid to the preferences of

carers and carer-recipients into designing effective tailored PA interventions (Cerga-Pashoja et al., 2010).

SOWC

In this study, we focus on a specific walking-based intervention, the SOWC, which was designed to increase PA and leisure opportunities for carers and care-recipients within the Kent region of the UK. Kent, a large county situated in the Southeast of England, is home to approximately 1.6 million residents hailing from diverse socio-economic backgrounds. Notably, the region exhibits a stark contrast in socio-economic status, with some locales ranking among both the most impoverished and most prosperous in the nation. Urban centres, especially in the eastern coastal areas, frequently corresponds with areas of deprivation. Conversely, the county's more rural regions typically display characteristics of affluence and prosperity. This disparity also amplifies health inequalities and the access to sport facilities, resources, support and social services carers may need in this context (Jayatunga et al., 2019).

SOWC was launched in April 2017 for a period of eight months, as a pilot intervention with funding received by Sport England, which is England's non-departmental public body for enhancing community sport participation. As part of its recent policy, to tackle inactivity, Sport England offered funding to projects such as SOWC that could potentially engage inactive individuals or hard-to reach community groups in sport/PA (Sport England, 2016).

To achieve this, SOWC offered participants the opportunity to take part in eight structured walking sessions, scheduled well in advance across the county of Kent. Project implementers included a consortium consisting of Carer Support Organisations, Volunteer Ramblers (a national walking group with divisions across different British regions) and other community

organisations who joined forces to address the perceived gap in leisure provision for caregivers and care-recipients in the area. Representatives from Kent's Ramblers and Carer Support organisations provided one-to one support and encouragement to attendees during the eight walks. Organisers planned transportation and accessibility to the walks by choosing wheelchair-friendly or routes of different lengths to accommodate varying ability levels.

Carers support organisations utilised targeted recruitment strategies to attract participants in the initiative through, for example, adverts in Carer's news magazine, word-of mouth communication, flyers at the premises and social media adverts. Overall, a total of 83 Carers and 83 care-recipients took part in the eight walks supported by 82 Carer Support workers and 82 volunteer Ramblers between April to October 2017. The section below discusses the methods employed to explore and examine the facets that hinder or contribute to SOWC programme sustainability to enhance participants' experiences and its potential in reaching carers and care-recipients to realise sustainable physical, mental, and social benefits. Implications for the sustainable design and implementation of similar future interventions are then highlighted.

Methods

Study Design

A qualitative single, holistic, and exploratory case study design with multiple data sources was used. Case study methodology recognises the importance of the subjective human creation of meaning but does not reject some notion of objectivity (Creswell et al., 2007). Case study researchers assume that one better understands perceptions that individuals or organisations have about their activities within their social context (Stake, 2000). In adopting the case study approach, the research employed a mixture of data sources and data types for triangulation to

provide a complete picture of the phenomenon under study and increase the trustworthiness of the data (Yin, 2013).

Setting and Selection of Participants

Participants included carers and organisers of SOWC. Purposive sampling was employed covering diverse types of roles (Denzin & Lincoln, 2011). This method of sampling facilitated detecting the most relevant and knowledgeable participants. The sample size was 15 participants in total: ten carers, and five representatives of support organisations. Recruitment in qualitative research mainly seeks to include participants who represent the diversity of the population relevant to the study. To be eligible for the study, participants had to be willing to participate and have one of the above roles. Participants were identified through the lead coordinator of the project, who offered her support to the study. Written informed consent was obtained from all the respondents and their identities remained confidential by using pseudonyms. Ethical approval was granted from the authors' institution research ethics committee. The anonymity of all the participants was assured by using an identification number and not including any participant's personal details. The privacy and confidentiality of all the participants was strictly maintained and the interview and focus group recordings secured. The signed consent forms were locked and filed separately from any other study materials that might link data to participants.

Data Collection

The study was conducted during the implementation of the programme and approximately two months after its completion. Data was collected through semi-structured in-depth interviews,

direct observations, and focus group method. The most significant advantage gained by using multiple sources of evidence was triangulation where researchers compare different methods and perspectives to help produce more comprehensive findings (Yin, 2013). First, direct observations of three programme walks were conducted between May and July 2017 resulting in 25 hours of field observation. During these observations, the researchers focused on the nature of the experience, the aspects of the experience that participants enjoyed or were challenged about, the agents' interactions with the participants and the organisation and implementation of the walking schedule. The observations supported the interview data and allowed the examination of the phenomenon under study as it naturally occurred (Merriam, 2009).

Second, 10 semi-structured in-depth interviews were conducted approximately two months after the completion of the programme with ten carers. This approach provided the opportunity to capture participants' experience of taking part at the walks and discuss issues brought up by the participants (Lincoln & Guba, 1985). The interviews occurred at a location mutually agreed upon by both the researcher and the participant, which allowed the participants to be in a comfortable and familiar environment. The lead author piloted the interview with two volunteers to ensure that the questions were well-framed. Interviews were digitally recorded and fieldnotes were also kept capturing the researcher's insights. The average duration of the interviews was 60 minutes. The principal investigator initiated the interview with an informal conversation to establish a relationship with the participants and build trust, followed by an introduction to the study's purpose and ethical considerations, including confidentiality procedures and participants' right to withdraw from the study at any point. Interviews included broad open-ended questions around topics such as the benefits of the intervention on their physical, social and mental well-being, the challenges they faced and their perspectives on the

programme design and implementation. Participants were encouraged to express their experiences in their own words. Additional questions and areas for discussion arose from participant responses. Towards the end of every interview, participants were asked if they wanted to add anything to the discussion. The lead author made notes after each interview for reflection and possible changes to the interview guide.

Finally, one focus group was conducted with representatives from the SOWC organising Committee that included Carer Support Organisations, Kent Ramblers' volunteers who supported the running of the walks, and participants of the walking sessions (i.e. carers). The focus group helped to gain further understanding of the programme design and delivery as well as it offered an alternative perspective on the experiences and outcomes for participants. After a short introduction of all the members of the group, the principal investigator explained the aim and the procedure of the focus group, clarified that the focus group session was being audio-recorded and obtained the written consent of each respondent before starting the group. The researchers emphasized that the purpose of the group was mainly to understand the benefits of the walking-based intervention on caregivers and care-recipients and the elements that promote or hinder the sustainability of the programme. In addition, one member of the research team took fieldnotes of participants' behaviour including body language, laughs, sighing and voice quality. The focus group lasted around two hours and was audio-recorded, while prior written consent was obtained from all the participants.

Data Analysis

The interviews and the focus group were transcribed verbatim and then the transcribed word files were imported into NVivo 12 qualitative data analysis Software. Transcriptions of

interviews, focus group and observations' fieldnotes were coded using thematic analysis (Crabtree & Miller, 2022). Analysis was mainly open-ended by which themes were identified as they emerged. Benefits of the Programme and key implementation considerations were decided through discussion with the whole research team, focusing on findings that were useful for future planners. The rigor of the study was assured through a set of four criteria for assessing qualitative research: credibility, transferability, confirmability and dependability (Guba & Lincoln, 1989). The above criteria were ensured through the methods of audit trail, triangulation, member check and peer review of data analysis (Merriam, 2009). Transcripts were returned to participants for verification.

Findings

Findings indicated three over-arching themes and related subthemes that were developed inductively from the data, and they are presented in the following section: *benefits on social and mental well-being, factors facilitating programme engagement* and *key implementation considerations*. These three themes represent those areas participants identified as crucial to influencing the sustainability of the SOWC intervention and they are discussed below in detail accompanied by exemplar data quotations.

Benefits on social and mental well-being

Mental and physical health benefits

Reiterating existing evidence that emphasises enhanced feelings of self-worth, improved quality of life, psychological wellbeing and reduced stress, burden, and depression for caregivers, as a result of PA (Loi et al., 2014; Taylor & Pringle, 2022), SOWC participants reported feeling more confident going out and doing different things and felt more capable to cope with stress. A respondent summarises this point well by noting:

'*Well, I'm definitely more confident going walking. I mean, I'll attempt a longer walk than I would've done before. Before I worried in case, I wouldn't be able to get there and back, whereas with this, I know that if anything happened, that I got stuck and couldn't get back, that somebody there would help me, get me back somehow. It does help to have other people around you that are perhaps fitter than you*' (Carer A).

Another participant puts it this way:

'Just by walking along you're talking to other people, I believe I'm quite a gregarious person, and so, well we're having lunch and, I've been talking to all these different people, whether they're carers, whether they're not, whether they're part of the organisation, whether they're not, they're just new people, I've met through this, so I've got this stimulation this morning. I've done that physical side, but now I've got this, so it's another boost on the mental stimulation side. It's just brilliant!' (Carer B).

Participants reported feelings of happiness and enjoyment while at the sessions. The impact of the programme in enhancing PA and reducing isolation in the long-term was also evident in the development of friendships and social connections during the walks that last beyond the sessions. As explained by a respondent:

'*We do try to get out a lot more, don't we, since the programme…we wouldn't have done it if we hadn't come to it. I find we get really depressed being in the house all the time, whereas we've got something to look forward to and somewhere to go. I do try to walk to the shops again now, I walk through the park and try and take in a bit, and when I go out on a Monday to do a bit of shopping, I meet up with another lady from the walks, and we go together. And my husband, who's disabled and her husband who is also disabled, tend to spend time together as well when we're doing that, so it means they've got new friends as well'* (Carer C).

Interviewees also highlighted that the programme enabled them to improve their confidence and self-esteem by making them have an '*I can'* attitude. Participants reported gaining confidence by stepping outside their comfort zone through being supported to try new experiences and seek opportunities to maintain an active lifestyle:

'*She's come along to the walks and through the caring with confidence course has given her that self-esteem, and confidence to interact with other people, that she's taken that next step and it was the next chapter of her life'* (Carer D).

The intervention was also found to improve mobility, balance, flexibility, and strength. Participants' perceptions about PA were overall positive. They reported an increased motivation to be active by carrying on with the walking and by being introduced to new ways of engaging in PA as well as by reduced perceived body pain after engaging with the walks. The following quotation vividly captures such a benefit:

'To be honest I wasn't getting out much . . . I was staying in most of the time, but this has brought me confidence to go and do stuff again and feel my body stronger' (Carer E)

Relationship between the care-recipients and their carer

The programme managed to take carers away from their caring role and allowed them the opportunity to spend time with their care-recipient in a more relaxed way than just as caregivers. This was not only facilitated by planning all aspects of transportation and accessibility to the walks, but also during the walks echoing Farran et al (2008) who suggested the need for flexible, inexpensive, and simple interventions for carers. A participant stated:

'We do see that on the walks, the carer does not push the wheelchair, one of the Ramblers would push the wheelchair, which means that the carer can go and chat to someone else on the walk, and you know they can have a shared experience that they don't get back home' (Carer C).

Another participant commented:

'It's about them having a break from their caring role. But beyond that it was also about having the ability to spend time with their cared for in a more relaxed way, which makes them feel more normal, if you like, rather than just the carer and cared for, because you may be a carer but you're also that person's wife or husband, or daughter or son, so, from the carer's perspective, that was the most beneficial thing that came back from it' (Organiser A).

Connectedness

The literature emphasises the limited opportunities for social interaction for carers and care-recipients and the lack of confidence and social isolation these often experience to engage with their communities (Oyebode, 2003). In line with evidence, (Lamont et al., 2015; Loi et al., 2014; Taylor & Pringle, 2022) respondents accounts support the role of PA in facilitating social integration and cohesion since the walks enabled them to participate and feel part of a community by sharing experiences with like-minded individuals:

'*You've then got the same people around you for the next one to two hours, so you get into far more of an in-depth conversation and start learning about those people, their names, their disabilities, what they do for work, what they like doing, where they live. All these sorts of things, so you get more in depth, and then that's where you're more likely to start talking about each other's difficulties with life and how you overcome or incorporate those into life, and then that's it'* (Carer A).

Another participant noted:

'Taking part in it, keeps me connected with the carer groups…. I think it's the social side that you've got a whole bunch of people there that are coming from such an incredibly diverse set of backgrounds, for that one cause, which is just to have a nice walk for an hour, and so there's always new people. Most of the time, at least fifty percent of the people I meet are different, so it's always new conversations, and that's wonderful from my point of view for the mental stimulation' (Carer D).

Another interviewee mentioned:

'*Knowing you're not on your own and that there are other people that are in the same boat and making friends with them. It was lovely, really nice'* (Carer E).

Participation in the programme enabled carers to feel more resilient by forging supportive social connections with people who experience similar issues and facilitated long-term relationships beyond the walks that would potentially have a positive impact in their lives. As two respondents reported:

'They live 5 minutes apart. They'd never met! And so, through one of the walks they did meet up, and then when [..] came along on the Deal walk, [..] did invite them to dinner, and now they are a team! I mean they meet up regularly for coffee, the two women or all four go round to each other's houses. It's a mutually supporting friendship that has just been born out of going on the walk, and that's wonderful' (Organiser B).

'We've made new friends and I think that's done us all good. And just feel better and it makes us want to go out and do things like this more' (Carer F).

Factors facilitating programme engagement

Programme design and implementation

The programme was designed in detail and provided all the necessary information to the participants. The walking sessions were regular, taking place once a month and scheduled well in advance. Changes to the delivery of the walks were kept to a minimum. In addition, the inclusion of refreshments, lunchtime and relieving the mental burden of tasks such as meal preparation for care-recipients were deemed important components of the programme. Participants shared their perspectives concerning the above issues:

'*And then when we got there, we were greeted and had a coffee, the staff, everyone was introduced to everyone else, which was lovely, we were told where we were going, what walk was best for who, explained how long the walks were, where we'd meet back, and then when we got back there was coffee and lunch provided which was lovely. So, we didn't have to worry about preparing food for our cared for. It was just a stress-free day'* (Carer H).

Another Carer added:

'If you're having lunch, it's more in depth, you are going to start getting a feel for them as a person. Sometimes it's good because they are positive about their life, other times it's not so good because they are a victim, whether it's self-inflicted or not, they put themselves in the role of victim. That can be depressing if you have a very positive view of life. So yes, the lunches are not just important from the nourishment and sustenance point of view, but from the mental and social aspect' (Carer I).

Transport provision (mini-buses and taxis) increased the inclusivity of the programme by allowing people with financial, mobility issues or with no access to a car to participate. One participant commented:

'*So, if they were not providing a door-to-door cab, well no, won't be able to. Most of the time, [..] and I will go and we organise with [..] or [..] or whoever has organised the cab, for the cab to then come and pick us up two hours after the walk so we can then go off and do a bit more of an exploration on our own because we are somewhere we wouldn't have otherwise got to*' (Carer E).

Another quote from an organiser illustrates the importance of transport:

'I think fundamental to the success has been the transport. If I'm honest. I don't think it would've been as successful without. Some people haven't got the money, some people haven't got a car, some people have got wheelchairs. This is absolutely fundamental, it's what we spent most of the budget on. It's one less thing to worry about as well' (Organiser C).

Entrance fees in certain locations increased the expenditure. However, organisers were proactive in arranging packages to include entrance fees and refreshments for certain locations in order to cap the cost to a minimum for the participants:

'So, we arrange to have a package somewhere between £10 - £12 per walk, which would allow us to take care of the entrance fees and most of the meal. That made it absolutely doable, and nobody has to worry that they're being exposed as not paying and other people are, it's the most democratic way of doing it' (Organiser D).

Participants were positive about the existence of two walk lengths and the availability of places to sit down and rest for those who needed. This flexible approach where participants can choose the walk that fits into their capabilities also facilitated engagement. As two responders reported:

'The other thing where we supported the carers was that they could all do different distances, so on our recce for each walk we would organise a long walk, say 2 – 3 miles, because you need people to get the exercise, but a much shorter flatter version around the stately home or along the seafront for those that really can't go very far. And even within that we got very adept at making a very slow version of the flat one for people who could hardly move at all, so they didn't feel they were holding people up. And then the longer walk was also split into two, as long as we had enough people to do a really fast bolt and then a slower, so it's that flexibility. For me is fundamental with so many different disabilities, and ability levels, unless you were going to be that flexible, you wouldn't have the success that you have had' (Organiser E).

'I think that was very important because a lot of us couldn't do the longer walk. It made us feel better to know there was somewhere we could stop, and we didn't have to do that whole walk' (Carer J).

Data showed that participants attributed the main success of the programme as being organised for themselves and being leisurely enough to accommodate their pace and unique needs. The following quote highlights this benefit:

'When a carer telephones and they've spoken to me or [..], I always ask if there are any requirements, if they're cared for or in a wheelchair, so we've got an idea of, when they're coming to the walks, what to expect, how many wheelchairs. I'll just take note of that, so we have got that knowledge prior to the walk' (Organiser B).

Selection of locations

The selection of scenic locations, wheelchair accessible sites and booking of transport for those in wheelchairs/mobility vehicles was key to the success of the programme, as confirmed by the interviewees. Lack of this provision would have been a missed opportunity for certain carers to attend with the people who were responsible for. Participants noted during our interviews:

'*I've never been to Herne Bay. Probably won't go again [laughs] but it gave us two hours. the weather wasn't great, but it gave us time to go and explore on our own and otherwise we would never have gotten there so that was really nice*' (Carer E).

'Oh, they were lovely, really nice locations. There was a lot of thought put into it and it was places that we'd not been to before. And we wouldn't have gone if we hadn't gone on these walks' (Carer B).

*'The places we walked were also accessible for the cared for wheelchairs, and we wouldn't have known that if we hadn't been with them. We wouldn't have attempted it because we didn't know a wheelchair would do that. Whereas they planned everything out before us and did it for us' (*Carer G*).*

The role of the organisers and volunteers

The peer-support and encouragement provided by Kent Ramblers and Care Support Volunteers during the walks was integral to the success of the programme. The presence of well-trained staff who were aware of the walks, were directing people and waited with slower walkers was

crucial in increasing the inclusivity of the programme. Organisers and volunteers were upskilled by attending a Dementia awareness course to be able to deal with participants with different disabilities during the walks. This enabled staff to build capacities, sustain their involvement with the programme, and enhanced their sense of ownership of its delivery. Such elements are integral to programme sustainability as reiterated within the literature (Koutrou & Kohe, 2021; Marcini & Marek, 2004; Ooms et al., 2019; Whitley et al., 2015). Two interviewees explained:

'I got an ordinary first aid training course for myself, so I knew that if anything was to happen on the walks that we were arranging that we would be covered as such, so personally I got a lot from that. I learnt how to use the defibrillator, that's something that I didn't know before. Hopefully, you know, that's encouraged me, especially with my brother this year has had a heart attack, so on a personal level that has helped me as well' (Organiser A).

'I think that it was Sport England who decided that their staff needed, their volunteers needed to be more Dementia aware so they could be better supporters or carers of people with Dementia in their various endeavours, so they booked to have an evening training course with the company that I work with' (Organiser C).

Participants were pleased by the attentive, helpful, and friendly attitude of the Ramblers and Care Support Volunteers who created a positive experience. Perceived social support for participants was also increased by organisers and volunteers' awareness of how to deal with certain disabilities such as dementia and the well-planned accessibility for the participants to engage with the programme. Further, committed, and skilled staff who understood participants' needs and could offer words of encouragement were valued by participants. The following quotation illustrates the significance of friendly staff:

'*All the staff were lovely, really good, and nothing was too much trouble. We're still in contact with [..] and [..], and we've made good friends with them. They were friendly, they were helpful, nothing was too much trouble. They really put themselves out for us*' (Carer D).

The lived experiences of the organisers in caring for others as well as in organised walking have also increased the perceived social support (feelings of someone being cared for and knowing people who could help them) that was felt by the participants. Working and interacting with people with lived experiences of caring meant that staff members embodied the cause and participants felt understood by those who were supporting them in their efforts to be active. As mentioned by one interviewee:

'*Well, it's very nice to meet up with people that are of similar sort of, they've got similar sort of problems to what I have*' (Carer A).

Key implementation considerations

Insufficient promotion and communication

Participants stressed the importance of improving the publicity of the walks. Insufficient advertising was regarded as a barrier for the sustainability of the programme. In line with research evidence (Adams et al., 2018; Koutrou & Kohe, 2021; Ooms et al., 2019), all participants thought that an essential component of the effectiveness of such intervention would be a well-organised and targeted promotion:

'I think key to this is not information, but the presentation of the information and I think we're going to need to do something pictorial with photos, the full page, that really makes a difference. I've got plans for a full-page ad of some kind to go in your magazine at the start of your carers newsletters' (Organiser D).

'It is hard, of course it's hard. That's part of my role as the media person to get more, and the film's great that will help get more, help enormously, but perhaps to help get it into local papers as a regular story. I've got a number of ambassadors involved who will Tweet about it' (Organiser E).

Numerous participants in this study criticised organisers for not communicating enough information regarding how the programme would take place as they did not know what to expect on the day of the intervention. Participants reported the need for better communication of the programme's details. Some attendees of the walks stated that they were not aware of the provision of transport, even though arrangements had been made by the organisers. The lack of communication and information was due to a lack of a strategy for the implementation of the walks and a missing project feature during its formulation. Clearer communication with participants would have enhanced the positive impact of the programme. This issue was also discussed during the focus group:

'So, I think there's just been a little bit of communication problems there that hopefully can be resolved later on' (Organiser D).

Lack of funding

From a managerial perspective, it is essential to ensure there are enough resources and sustainable processes in place to maintain an adequate and safe intervention. In fact, most of the participants mentioned the need for additional funding to enhance the sustainability of the programme. Extra funding would enable organisers to arrange for more carers to look after those particularly ill and support carers whose person they cared for could not make the walk due to deteriorating health on the day, therefore inhibiting participation of the carer. Hence, it is imperative for the organisers to not only look at the micro levels when formulating such

programmes, but also to secure financial resources and strategic partnerships to achieve long term engagements (Whitley et al., 2015). The need for more funding was highlighted by two organisers:

'*Look, you've got all these different people with different disabilities, we need the funding to carry on with this kind of projects' (Organiser A)*.

'That's the thing about sustainability, the funding needs to continue or otherwise the things you've said are necessary can't happen really, like transport' (Organiser B).

Individuals' willingness to participate in SOWC intervention was also linked to the experienced and friendly staff of the programme. In congruence with the available literature (Marcini & Marek, 2004; Whitley et al., 2015) participants felt it was imperative to having trusted and qualified practitioners to support individuals with differing needs to be more active in relation to maintaining the continuance of the intervention. The quotation below illustrates the importance placed on training provision for staff and volunteers:

'The next budget, I am going to ask for another funding to do your handling and first aid course, I think that would be really good for us to, whichever of the ramblers who want to do it, to take that on as an aspect, because why not take that on something valuable as that' (Organiser C).

'I think it will be helpful to get more training as we go along. Dementia training was very useful indeed' (Organiser E).

Constraints of programme design

Respondents mentioned that the intention to create long-term commitment and sustain carers engagement after the intervention was not well-integrated in a thorough project design and implementation. Implementing the programme only in spring/summer was also seen as a barrier preventing its sustainability and participants' continued engagement. The programme could have further benefits by the addition of organised winter health activities, which would help participants sustain their engagement with a healthy lifestyle and encourage continuation. Participants reported the benefits of taking part in other indoors winter activities such as crafts making. These activities seem low in physical demand but require individuals to get out of the house and have fun. Additionally, they involve social bonding and are associated with the psychological benefits of interacting with others (Lamont et al., 2015). One organiser stated:

'We thought that an activity that you could do indoors but that is still exhilarating, so there are other things to keep the pot boiling until we come back into action' (Organiser E).

Discussion

This study examined SOWC, a Kent-based, walking intervention and through the views of organisers and participants explored the facets that contributed to or impeded its sustainability and its potential to realise sustainable physical, social, and mental benefits for carers and care-recipients. Themes related to: *Benefits on social and mental well-being, factors facilitating programme engagement*, and *key implementation considerations* represented critical areas that influenced the sustainability of the SOWC intervention. The identified themes and sub-themes resonate with existing research on the sustainability of PA and health promotion programmes particularly targeting sedentary individuals within organised sport movements (Ooms et al., 2019; Taylor & Pringle, 2022).

Reiterating collective emphasis (Mancini & Marek, 2004; Cerga-Pashoja et al., 2010; Schulerkforf, 2017) on building community understanding towards sustainable outcomes, both SOWC organisers and participants referred extensively to the programme design features that recognised their unique preferences (to exercise together with the care-recipient) and needs (e.g. facilitating connectedness, and tackling inactivity and frail wellbeing) and enabled them to experience a range of mental, physical, and social benefits such as feeling part of a community/understood by sharing experiences with like-minded individuals (Hirano et al., 2011; Warburton et al., 2006). Opportunities for social interaction, fun, social support and developing a sense of belonging are important features in the design of a programme that make it sustainable (Marsden et al., 2010; Taylor & Pringle, 2022). Ooms et al (2019) also highlight the need for programmes to align with the needs of the target group and the organisational setting that surrounds the intervention to ensure its long-term sustainability. In this regard, the specific nature of SOWC, targeting carers and care-recipients, and its organisational setting (i.e. run in partnership between various organisations and largely relying on volunteers for its delivery) reveals some further specific factors that may challenge or facilitate the continuation of similar programmes over large periods of time.

There was further acknowledgment that participation in SOWC fostered connectedness with others, interaction and friendships and reduced perceived isolation, while offering opportunities to the carers to have a break from their caring role and spend time with care-recipients in a more relaxed and inclusive way. Echoing Mancini and Marek (2004), demonstrating programme results, benefits, and ensuring that the programme meets the objectives it seeks to achieve, are critical to its sustainability.

In line with existing research, forming trusting, robust and effective collaborations between stakeholders is also important in ensuring effectively designed and implemented interventions that lead to health outcomes and sustainable benefits (Blom et al., 2015; Marcini & Marek, 2004; Schulenkorf, 2017). In this context, the stakeholders of Care Support Organisations, media, and Kent Ramblers joined forces and tapped into the programme design and delivery with their unique capacity and expertise, while at the same time making the effort to understand each other's priorities, these goals collectively aligned to the programme objectives. Similarly, this initial partnership was further diversified by exploring opportunities to collaborate with other stakeholders (e.g., local establishments or taxi companies) to enhance programme implementation and facilitate participant engagement resonating with the available literature (Ooms et al., 2019; Whitley et al., 2015). Participant's reflections are congruent with the notion that strengthened cross-sector collaborations enable resource sharing, knowledge exchange, informal communication, and support (Ooms et al., 2019; Whitley et al., 2015). These opportunities stemming from effective collaborations lead to capacity growth at the individual, community, and organisational levels (Lindsay, 2008). The experiences also expose an inevitable organisational and individual cost (in terms of resource, time, energy, and commitment) that goes into building relationship ties. Nonetheless, these are elements that lead to sustainable programmes (Skinner et al., 2008).

SOWC, whilst ensuring consistent delivery, also responded to the evolving needs of its participants and adapted effectively to context-specific changes such as additional entrance costs to locations, the availability of volunteers, forming new partnerships or decreased financial resources. The thoughtful selection of appropriate, inexpensive and accessible locations facilitated wider participation by carers and care-recipients and were critical to their sustained engagement aligning with Farran et al (2008) propositions. Programme adaptation

was important in both ensuring participant engagement but also its long-term sustainability, which further aligns with existing research on programme sustainability for inactive populations that recognises its relevance (Ooms et al., 2019; Schell et al., 2013). On the other hand, it is essential to identify the components of a programme that are critical to its success before attempting adaptations, as otherwise, these may lead to undesirable outcomes and impede the long-term sustainability of the intervention (Ooms et al., 2019; Wiltsey Stirman et al., 2012).

The success and participant engagement with the project was also attributed to the facilitating role of the organisers and volunteers who possessed access to key sources of human (skills, experiences) and social (contacts and access to social networks) capital. This was evident in various situations where staff and volunteers had to think on their feet and adapt to the evolving needs of increased participant numbers and disabilities present. The efforts made by programme organisers and deliverers to upskill themselves, so that they are well-equipped to accommodate various needs at the walks, along with the personal relevance some of the staff members (carers themselves) saw in project design and implementation allowed them to co-create the programme and take ownership on its delivery. These are critical ingredients in meeting programme goals, enhance the benefits for the participants, and ensuring sustainability (Ooms et al., 2019; Skinner et al., 2008; Whitley et al., 2015).

It is also important to acknowledge the threats to SOWC programme sustainability such as insufficient advertising and promotion of the intervention. Despite some ad-hoc targeted efforts by stakeholders to utilise word-of-mouth initiatives and relevant media outlets of carers associations, these did not form part of a well-thought-out, strategic communication plan developed at the outset as supported by Adams et al., (2018). Indeed, conventional recruitment

methods may not be sufficient to reach sedentary or disadvantaged populations (Koutrou & Kohe, 2021; Ooms et al., 2019). As such, more targeted participant recruitment efforts that demonstrate the benefits of engagement in a fun and non-threatening manner, which are also developed in collaboration with organisations that serve or have a connection with these target groups, may be more efficient in engaging participants and ensure the sustainability of similar programmes (Adams et al., 2018; Koutrou & Kohe, 2021; Ooms et al., 2019).

Lindsey (2008) advocates for sustainability forming an integral part in programme design and implementation. In this case, the lack of an integrated sustainability plan in SOWC design and implementation was a critical aspect impeding its longevity. Equally, funding dependency from Sport England presented risks in ensuring the long-term engagement of carers and programme continuation. Furthermore, other risks to the sustainability of the programme were its seasonality and lack of suitable exit routes for participants to benefit from the newly formed social contacts and opportunities to engage in regular PA in a socially supportive environment all year round. Indeed, regular exercise in group settings can deliver sustained mental and physical benefits for carers such as reduced stress, increased stamina and a sense of belonging (Nae et al., 2015; Taylor & Pringle, 2022). Establishing suitable administrative structures that integrate sustainability objectives from the outset of project formulation and planning, and followed through its implementation and evaluation, along with seeking to diversify collaborations to access wider resources are important for ensuring the benefits for participants of SOWC and other similar programmes are maintained and their overall longevity is ensured (Lindsey, 2008; Mancini & Marek, 2004; Ooms et al., 2019; Whitley et al, 2015; Wiltsey Stirman et al., 2012).

Conclusion

A sport programme/intervention's sustainability is an ongoing process that ought to be considered from the early stages of its conceptualisation and development, and followed through during the implementation, evaluation and continuation phases. At the same time, the implementation context of an intervention influences both directly and indirectly its sustainability and as such need to be taken into consideration (Edwards & Rowe, 2019).

Indeed, as the current qualitative study has shown, the SOWC intervention for carers and care-recipients in Kent included some context-specific elements that perhaps have influenced its sustainability. For example, the facilitating role of the organisers and volunteers who played an integral part in both its formulation and implementation outside of an organised sport or PA setting. This was perhaps borne out of the personal relevance that these found in its delivery and that has influenced its design and implementation since it has led them to develop an in-depth understanding of this target group from the outset, constantly seeking to upskill themselves to respond to and align the programme's aims to meeting participants' unique needs.

Echoing previous research, this study also proposed elements that demonstrate an impact on the sustainability of community sport/PA programmes. These include integrating a clear sustainability plan into their design, building resilience to funding cuts, policy change, or resource dependency, aligning to beneficiary needs, providing opportunities for training, being responsive to contextual forces and developing effective partnerships to ensure health outcomes are being leveraged (Edwards & Rowe, 2019; Ikramullah, 2018; Lindsey, 2008; Marcini & Marek, 2004; Ooms et al., 2019; Whitley et al., 2015). Despite this alignment, future quantitative studies could be conducted to confirm correlations, interrelationships between influencing factors and consistency between the sustainability themes proposed in this research

and others. Furthermore, longitudinal data is needed to track sustainability efforts of SOWC and similar interventions. Using this research as foundation, scholars can continue to examine the elements that underpin sport/PA programme sustainability, while it could aid stakeholders such as health and sport professionals in formulating robust sustainability plans within their PA/sport programmes along with policymakers in informing funding guidance and criteria for supporting similar types of community sport/PA programmes.

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