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'Nobody will put baby in the corner!': A qualitative evaluation of a physical activity intervention to improve mental health

Nicola Peddie PhD MSc BA(hons)[1] | Tony Westbury PhD BSc(hons) FHEA[1] | Austyn Snowden PhD RMN FHEA[2]

[1]School of Sport and Recreation, Edinburgh Napier University, Edinburgh, UK

[2]School of Health and Social Care, Edinburgh Napier University, Edinburgh, UK

Correspondence
Austyn Snowden, School of Health and Social Care, Edinburgh Napier University, Sighthill Campus, Edinburgh EH11 4BN, UK.
Email: a.snowden@napier.ac.uk

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Abstract

Physical activity is beneficial for mental health, but people with mental health issues are less likely to be physically active than the general population. Socially prescribed programmes of activity are rarely adhered to, with high levels of drop out, and the proportion of people who continue after programmes have finished is even smaller. Lasting change therefore needs a fundamental change in behaviour, so an intervention grounded in behaviour change theory may be more likely to succeed. The aim of this original study was to understand the facilitators and barriers to participation and adherence to a supportive, personalised, physical activity programme for patients with mental health conditions. The intervention entailed a 16-week programme of activity, tailored to individual capability, supported by a dedicated 'behaviour change' practitioner trained in motivational interviewing. Fourteen people who had completed the intervention were interviewed in three focus groups in 2018. Data were transcribed verbatim then analysed for barriers and facilitators using Framework Analysis and the Theoretical Domains Framework. Twenty-five overarching themes were identified, which mapped onto 11 domains from the framework. Ten themes were barriers and 15 facilitators. Barriers included stigma, negative self-beliefs and difficulty trusting others. The facilitators reframed these negative attributes. For example, participants described feeling confident as a function of achieving personalised goals and learning something new. The intervention changed the way participants thought and acted. This original intervention has succeeded where many have failed, as it changed the way these participants with mental health conditions thought about physical activity. By reframing it as personally achievable and physically beneficial, participants' attitudes and behaviour changed as well, making it more likely they would sustain physical activity in future. These unique findings are likely to translate internationally due to the simplicity of the intervention, and the potential to improve lives of the most vulnerable.

KEYWORDS

activity, change, exercise, mental health, motivation, physical health

1 | INTRODUCTION

Physical activity (PA) is *'bodily movement produced by skeletal muscles and which requires energy expenditure'* (Caspersen, Powell, & Christenson, 1985). It is essential for maintaining physical health, and can reduce the risk of chronic diseases, such as cardiovascular disease (CVD), type 2 diabetes, hypertension and respiratory illnesses (Naci & Ioannidis, 2013). A growing body of evidence also supports the positive relationship between PA and mental health. Engagement in PA can improve quality of life and reduce isolation by providing opportunities for social interaction and the chance to return to previously enjoyed activities (Crone, Heaney, & Owens, 2009).

From a clinical perspective, PA has been shown to be an effective treatment in populations with clinical depression when compared to no treatment controls (Craft & Perna, 2004; Daley, 2008), and has been shown to be as effective as pharmacology or psychotherapies for reducing severity of depressive symptoms (Cooney et al., 2013). PA can reduce anxiety symptoms and is an effective treatment for people with panic disorder and generalised anxiety disorder (Herring, Lindheimer, & O'Connor, 2013). A review of exercise interventions for people diagnosed with schizophraenia concluded that PA could help to alleviate negative symptoms (Faulkner, Gorczynski, & Arbour-Nicitopoulos, 2013). This increasingly extensive body of evidence of the positive effects of PA on a broad range of mental health conditions has led to the recommendation that PA should be used as an adjunct to usual treatment (Rosenbaum, Tiedemann, Ward, Curtis, & Sherrington, 2015), with the National Institute for Clinical Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN) guidelines recommending structured PA programmes as an intervention for people with mild to moderate mental health conditions.

However, despite these well-established benefits, people diagnosed with mental illnesses are significantly less active than the general population (Vancampfort et al., 2017). This could be attributed to people with mental health conditions often facing more barriers to becoming active than the general population. For example, people with mental health disorders are more likely to suffer from co-morbid health conditions (Bond, Stanton, Wintour, Rosenbaum, & Rebar, 2020) including higher body mass which may limit mobility or increase pain associated with PA (Vancampfort et al., 2015). People with depression also often lack the confidence to engage in PA, which compounded with symptoms of their condition such as low mood, lack of motivation and lack of energy, leads to a vicious cycle of inactivity (Glowacki, Duncan, Gainforth, & Faulkner, 2017). There is encouraging evidence to suggest that people with low mood can be motivated to exercise if given appropriate support (Peddie, Snowden, & Westbury, 2019), but the relationship between motivation, exercise and mental ill-health is not clear (Bond et al., 2020), and this is important to understand because people with long-term mental health conditions such as depression can have a reduced life expectancy of 7–11 years (Chang et al., 2011). As much of this mortality is linked to cardiovascular issues, there is clearly a place for PA to reverse some of this harm.

What is known about this topic

- People with enduring mental health issues die considerably younger than people without
- Much of this morbidity could be addressed by improvements in physical health
- Improving physical health in this population is even more difficult than it is in a general population, but is likely to involve reframing the way physical activity is conceived.

What this paper adds

- Supporting people with mental health conditions to engage in physical activity can help them to change the way they think and feel about physical activity.
- Facilitators of change entail a reframing of previous barriers.
- Reframing is best achieved with peer support and individualised programmes tailored by 'behaviour change' practitioners

Current guidelines suggest that adults should participate in 150 min of moderate to vigorous physical activity a week (Foster, 2019). Large numbers of adults do not meet these recommendations (Scottish Government, 2018). Exercise referral schemes aim to increase physical activity among people who are inactive or sedentary and/or have an existing health condition or other risk factors for disease; however, the evidence suggests that adherence to these types of programmes is low, with the most optimistic measures ranging from 20% to 49% in an adult population (Gidlow, Johnston, Crone, & James, 2005; James et al., 2008; Pavey et al., 2012). In mental health populations, research suggests that they are even less likely to adhere to prescribed PA than the general population (Rosenbaum et al., 2016; Vancampfort et al., 2017). This lack of adherence to PA interventions is a significant issue, because the majority do not stay long enough to see the health benefits of being active.

Allen and Morey (2010) suggested that effective PA interventions should incorporate multiple components and include cognitive behavioural strategies, such as goal setting and self-monitoring of behaviour. This is consistent with studies showing the benefit of including tailored cognitive behavioural techniques alongside PA interventions for mental health populations (Knapen, Vancampfort, Moriën, & Marchal, 2015; Rastad, Martin, & Åsenlöf, 2014; Vancampfort et al., 2017). Furthermore, it makes sense to infer that professional, personalised guidance combined with ongoing support could facilitate long-term behaviour change. Personalisation is a necessary component. Ussher, Stanbury, Cheeseman, and Faulkner (2007) showed that PA interventions designed for individuals with mental health conditions need to be individually tailored to the individual's preferences to improve adherence and produce better outcomes.

Recognising the benefits of PA to both physical and mental health, and the issue of attrition to exercise referral schemes, the

Scottish Association of Mental Health (SAMH) developed the intervention 'Active Living Becomes Achievable' (ALBA). ALBA aimed to improve adherence to PA in individuals with mental health conditions by delivering a behaviour change intervention using a personally tailored cognitive behavioural approach alongside existing exercise referral schemes. ALBA is based on the capability, opportunity and motivation (COM-B) model of behaviour change (Michie, van Stralen, & West, 2011), aiming to equip participants with skills, knowledge and confidence that will help them feel they are able to participate in physical activity on a regular basis.

The ALBA project was funded by the Scottish Government in 2016. Evaluation was a fundamental part of the agreement, so that any learning from the programme could be articulated and transferred in a systematic manner. A significant part of that evaluation was to understand '*what it is like*' to receive the intervention (Cheng & Metcalfe, 2018). Understanding this can help improve subsequent delivery of the intervention and better understand possible contextual factors which influence the implementation (Bauman & Nutbeam, 2013).

2 | AIM/RESEARCH QUESTION

The study aimed to explore participant's experience of taking part in the ALBA intervention, and to identify the barriers and facilitators to participation.

3 | METHOD

3.1 | Analytic plan

The analytic plan consisted of a theoretical model of behaviour change linked to a set of domains the intervention was designed to impact on. The model of behaviour change was the COM-B model (Michie et al., 2011). The domains were articulated by the theoretical domains framework (TDF; Atkins et al., 2017). For a detailed discussion on the links between COM-B and TDF, please see Richardson, Khouja, Sutcliffe, and Thomas (2019). In brief, the TDF is an integrated framework of behaviour change theories that has been used widely in implementation research (Atkins et al., 2017). It consists of 14 domains (Cane, O'Connor, & Michie, 2012) describing cognitive, affective, social and environmental influences on behaviour. In this study, it provided a framework to identify barriers and facilitators to behaviour change, consistent with COM-B model of behaviour change. Table 1 summarises the TDF domains, definitions and their relationship to COM-B.

3.2 | Intervention

The ALBA intervention was a multicomponent intervention based on the COM-B model, designed to equip participants with skills, knowledge and confidence to help them feel able to participate in physical activity on a regular basis. It consisted of the following:

1. Weekly or fortnightly 1:1 hourly meeting with a behaviour change practitioner (BCP) over the course of 16 weeks;
2. Access to the exercise referral programme that was offered by the local leisure centre;
3. An activity tracker and the 'Get Active' app which was designed to increase motivation and facilitate self-monitoring of behaviour; and
4. Access to peer supporters, who have been through the ALBA intervention and peer supporter training. Their role was to offer support outside of the sessions with the BCPs.

In the 1:1 sessions, the BCPs used motivational interviewing techniques alongside the '*Living Life to the Full*' materials (Williams, 2015) to help elicit behaviour change by supporting participants to set goals designed to identify and overcome barriers which prevent them from engaging in physical activity. BCPs were workers in the local gymnasiums. To prepare for the role of delivering the ALBA intervention, the BCPs underwent a training programme which included: Mental Health Awareness and Behaviour Change E-learning, a training package developed by SAMH specifically for delivering ALBA; Applied Suicide Intervention Skills Training (ASIST); Safeguarding; Living Life to the Full and Motivational interviewing.

3.3 | Setting

The intervention was delivered in three regions in Scotland: Fife, West Lothian and North Ayrshire, and was offered through all local authority leisure trusts in these areas. All three regions were composed of a mixture of both urban and rural areas. Fife is a socioeconomically diverse with 19.84% of the data zones according to the SIMD in the 20% most deprived. West Lothian has 15.48% of the data zones in the 20% most deprived. North Ayrshire is the third most deprived local authority in Scotland (Scottish Government, 2020), with 39.78% of the data zones in the 20% most deprived.

3.4 | Data collection: participants, information and consent

Participants: All participants of the focus groups were individuals who had either completed the ALBA intervention or were currently taking part in the intervention.

Inclusion criteria: People aged over 18 who were inactive and have been referred either by their GP or health professional into an exercise referral scheme due to a mild to moderate mental health condition.

Exclusion criteria: Participants were excluded if they were considered high risk due to health reasons (Unstable angina,

TABLE 1 The theoretical domains framework and definitions from Michie et al. (2011)

COM - B	Domain	Definition
Capability	KNOWLEDGE	*An awareness of the existence of something*
	SKILLS	*An ability or proficiency acquired through practice*
	BEHAVIOURAL REGULATION	*Anything aimed at managing or changing objectively observed or measured actions.*
	MEMORY, ATTENTION AND DECISION PROCESSES	*The ability to retain information, focus selectively on aspects of the environment and choose between two alternatives*
Opportunity	ENVIRONMENTAL CONTEXT AND RESOURCES	*Any circumstances of a person's situation that encourages of discourages the development of skills and abilities, independence, social competence and adaptive behaviour*
	SOCIAL INFLUENCES	*Interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours*
Motivation	SOCIAL/PROFESSIONAL ROLE AND IDENTITY	*A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting*
	BELIEFS ABOUT CAPABILITIES	*Acceptance of the truth, reality or validity about talent, ability or facility that a person can put to constructive use*
	BELIEFS ABOUT CONSEQUENCES	*Acceptance of the truth, reality or validity about outcomes of a behaviour in a given situation*
	GOALS	*Mental representations of outcomes or end states that an individual wants to achieve*
	EMOTION	*A complex reaction pattern, involving experiential, behavioural and psychological elements*
	OPTIMISM	*The confidence that things will happen for the best or a desired goal with be obtained*
	INTENTIONS	*A conscious decision to perform a behaviour*
	REINFORCEMENT	*Increasing the probability of a response by arranging a dependent relationship, or contingency between response and stimuli*

Uncontrolled resting BP > 180/100 mmHg, Significant drop in BP during exercise, Tachycardia > 100 bpm, Unstable or acute Heart failure, Uncontrolled acute systemic illness, Unable to maintain seated upright position, place others and themselves at risk) or if their mental health condition was classified as severe and enduring.

Recruitment: Participants were recruited by the BCP who had supported them throughout the intervention.

Consent: At least one week before the focus group, all participants were provided with an information sheet to take home with them, which informed them of the purpose of the focus group and how any data would be used. Informed consent was obtained from all participants on the day of the focus group, prior to the discussion beginning. Participants were also asked to complete a demographics questionnaire.

3.5 | Data collection: process

Focus groups are a type of group interview which uses the communication between participants to generate data (Kitzinger, 1995). Focus groups work best when there is group cohesion, formed through sharing similar cultural backgrounds and social status for example (Acocella, 2012). In this case, all participants would have shared experience of ALBA.

Three focus groups were run, one in each of the three areas where ALBA was in operation. All participants took part in only one of the focus groups. Participation was voluntary, and any costs incurred in attending were reimbursed by SAMH. The focus groups took place between March 2018 and June 2018 and lasted for between 60 and 75 min each. They were facilitated by the lead author and an ALBA project assistant. The facilitators had no prior relationships with the participants and had not been in communication with them prior to the day of the group.

The focus groups were all audio recorded and the same interview guide was used for all three. The interview schedule is available in supplementary file 1. The questions were open-ended and were developed using the Theoretical Domains Framework to ensure discussion a) focused on the participant's experience of taking part in the ALBA intervention and b) could be interpreted using the TDF (Richardson et al., 2019). The focus groups were transcribed verbatim into the qualitative data analysis software NVivo

11, cross-checked against the audio recordings for accuracy and de-identified.

3.6 | ANALYSIS

Framework Analysis (Ritchie & Spencer, 1994) was used to analyse the data. This process broadly followed the principles described by Richardson et al. (2019). The Theoretical Domains Framework was used as the 'framework' against which thematic analysis was carried out (Srivastava & Thomson, 2009). Data were coded and sorted in accordance with the preconstructed themes of the TDF.

In more detail, following anonymisation of the transcripts, a familiarisation process was carried out (Srivastava & Thomson, 2009), following the process detailed by McSherry et al. (2012). NP read and re-read all transcripts, coded these, paying particular attention to statements regarding capability, opportunity and motivation. Codes were then combined into subthemes and allocated, including direct quotes from participants, to one of the 14 domains of the TDF or 'other'. The other two authors (TW & AS) took a random selection of 20% of the transcripts and independently coded those sections using the same 'capability, opportunity and motivation' lens and the 14 domains. All researchers held regular discussions to compare coding (Ward, Furber, Tierney, & Swallow, 2013). To enhance rigour, once the first round of coding was completed, a second cycle was undertaken, focused particularly on elements where the greatest disagreement had arisen. The final iteration was agreed by all three authors, with codes and themes matched to specific domains of the Theoretical Domains Framework (TDF), where appropriate.

4 | RESULTS

A total of 28 (20% of total population) participants were invited to take part in the focus groups and 14 (50%) participated (11 females and 3 males; mean age 46.6; 85% White British). Reasons given for not wishing to attend included anxiety about the group setting, difficulty travelling to the focus group location, work and childcare commitments.

Twenty-five overarching themes were identified, which mapped onto 11 of the 14 domains from the TDF. Ten of the themes were identified as barriers to participating in the intervention and 15 were identified as facilitators (Figure 1). Tables 2 and 3 present examples of finer level of detail, showing the themes and subthemes alongside relevant quotations. The full coding is available on request. An example is in supplementary file 2. Where quotes have been included, participants are referred to with a label only, that is, 'P1', to protect anonymity (Greaney et al., 2014). Space prevents a detailed discussion of all the themes, but a representative selection of results is discussed below under the broad headings of barriers or facilitators, starting with the facilitators.

4.1 | Facilitators

4.1.1 | Learning something new

Participants spoke about learning something new as being positive. As becoming active was new to a lot of the participants, they particularly valued the support they received from leisure trust staff,

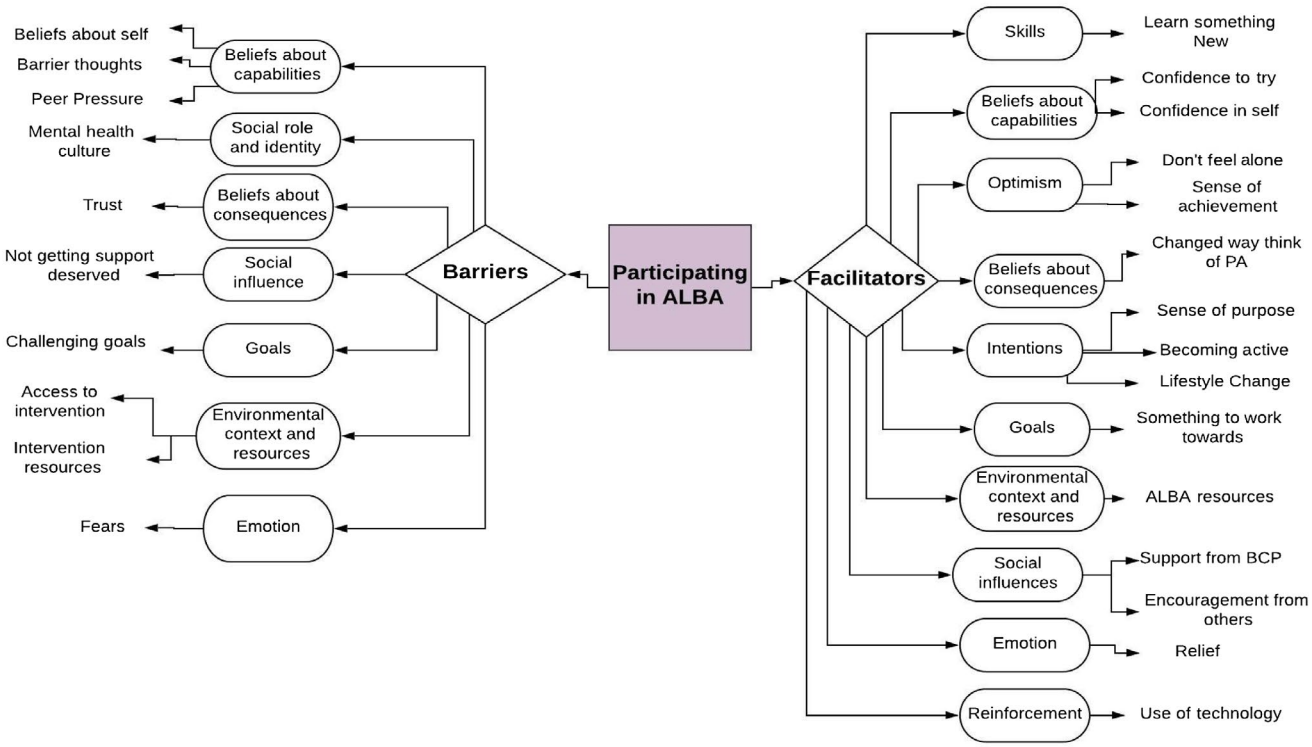

FIGURE 1 Thematic map of barriers and facilitators using theoretical domains [Colour figure can be viewed at wileyonlinelibrary.com]

TABLE 2 Facilitators to participating in ALBA

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Skills	Learning something new	Learning from an expert New opportunities	• Being taught new exercises • Having someone who knew what they were doing • Trying new things • Started swimming • New opportunities • Going to College	*I think the exercises he taught me to do [were good], because obviously I've got difficulty walking…so it was difficult to think about what kind of exercises you could do to get exercise.* - P6 *And the fact that they are prepared to get you to try different things, things you'd never have thought of, boosts your confidence a wee bit more and it makes you feel better about yourself* – P13
Beliefs About Capabilities	Confidence to try Confidence in self	Positive outlook Pacing Positive Self belief	• What you can achieve not what you can't • Stopped saying can't • I can do it if I put my mind to it • Focusing on what you can do not what you can't • Just got to try • You'll get there • Something better than nothing • Telling nagging doubt to go away • If I don't help myself nobody will • Taking it slow • Small steps • It's the journey • Doing things at my own pace • Breaking into chunks • Action planning • Feel better about self • Believe in self • Giving confidence • This is me, if folk don't like it too bad • Doing it for self • Kind to self • Not beating self-up • Not comparing • Could get self out of a slump	*It makes you focus more on what you can do rather than what you can't do, and there's no such word as can't, you can try and if it doesn't work then you just try something else…why should I stay in my living room with my telly on when there's a whole wide world out there that's ready to face, before you would have "oh I can't do that", but now, aye I can do it and I'm going to do it!* – P13 *Just small achievable goals, just smaller, just it doesn't need to be, it's just when you achieve your goal it gives you a lift, it makes you feel like ooh I can do this, even if it's just, I mean I started by going up and down the stairs, em just things just keeping it real and small, it doesn't need to be running a marathon, it can be something small* – P11 *I'd be like "nah that's rubbish" 'cause I couldn't achieve what I used to be able to do, but like [BCP] helped me change my mindset, to be like what you can achieve not what you can't.* – P2 *I think I've got the tools now like to, if I get into like a slump, to like get myself out of it and take the little steps and get myself better and active again* – P8
Optimism	Don't feel alone Sense of achievement		• Not the only one feeling this way • I'm not the only one • Hearing other's stories • Shared experiences • Sharing experiences • Can look back on how far you've come • Thank myself for doing it • Surprised self • Proving people wrong • Doing it for self • Making time for self	*I think that getting our stories out there is the best thing we can do, it's amazing how many folk actually open up once someone starts talking about theirs* – P5 *It opens your mind up to different things, and you're not the only one to feel that way* – P14 *When I'm down here, I've done my gym, done all my gym exercises, I sort of thank myself for doing it* – P10 *I think when I look back to where I was to where I am now, it's far better* – P2
Beliefs About Consequences	Changed way think of PA		• Changed way think of PA • How many steps you take at the shops • Not your typical fit person • Wanting to find something they enjoy	*Cause you can still exercise in the house even if you can't get out, it doesn't need to be walking* – P6

(Continues)

TABLE 2 (Continued)

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Intentions	Sense of purpose Becoming active Lifestyle Change	Reason to get up in the morning Developing a routine	• Getting out the house • Gives you motivation to get out the house • Reason to get up in the morning • Getting into routine • Given structure • Think about being active daily • Became more active • Changed way think of PA • Find ways to exercise that suit • Makes you feel good • Changed way they eat • Became more active • Changed way think of PA • Change in relationships • Doing housework • Lose weight • Getting out of bad habits • Helped with anger • Healthy • Saw improvement • Identifying negative thoughts • Think about being active daily • Biggest step is going to gym	*It's having that, because you know no matter what you know you've got that person you've got to go and see, you can kick yourself out the house, you do, sometimes it takes you saying that to yourself, I will kick my backside to go out this house* – P5 *I didn't do anything until I kinda met [BCP], and then every week gave me that kinda, as you say motivation to get out the house and do it, otherwise I had, if I didn't help myself nobody would that's the mentality I thought I had to take* – P2 *I think it's the consideration that I make daily, whether I'm able to do it or not, it is in my mind, it is something that I should be doing, whether I manage or not, it's not something I forget about* – P1 *Because now I look at, before with the eating I have got like a food plan every week and it's kind of broken up into your like fats, your carbs, your proteins and everything else, and it was very clear that in the beginning, I don't eat meat but I wasn't eating any protein at all, in fact all I ate was cereal and toast and fruit and that was kind of what I ate because I felt, it was like a comfort eating, yeah so to go do exercise, I had to look at what I was putting into me, so yeah it's been quite a- change in lifestyle* – P12 *Yeah, because that's been something that's kinda like affected me quite a bit, as far as sort of relationships have been concerned with like friends and stuff, so some of, the sort of like noticing some of my like trigger points and you know when to like, how to ground yourself and take a step back from like what you think is reality but really it isn't you know, that was really good, and really really thought provoking you know?* – P10
Goals	Something to work towards		• Important to have a goal • Setting Goals • Personal goal • Something to work towards • Hitting Target • Trying to meet goals • Seeing a high step count	*Not for anybody else, I don't care what anybody else thinks is right for me, so it's, that's my goal, to find something that I enjoy* – P12
Environmental Context and Resources	ALBA Resources	Positive resource Expert support	• Easy to understand • Books are simple • Got more out of books second time • Can revisit books • The books • The bathroom mirror • Needed the books to be simple • Can share with partner • Have done them before • Being taught new exercises • Having someone who knew what they were doing • Became more familiar with leisure centre • Gym induction	*It was the first time I actually like kinda got help from anyone, rather than it just being like psychologists being like right read this chapter, cause I knew I wouldn't do it, so it was good having somebody there going through it with you, and cause their simple, you kinda remember rather than big long Freudian paragraphs* – P2 *For me, I'm in a relatively positive place right now, so I find them, I do find them fairly simplistic, but when I'm in a dark place I can't concentrate to the end of the page* – P7 *Even just the likes of having those books, because you can go back to them and read them over and it can just sort of lift you, you know?* – P11 *Well my daughter, the minute I said I was going to the gym, she's like go mother go for it…!*

(Continues)

TABLE 2 (Continued)

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Social Influences	Encouragement from others Support from BCP	Social Support Made me feel like I wanted to be part of community Peer support Supporting sustained change Relationship with BCP Talking and sharing Opening up about MH	• Support from family • Family as motivation • Support from friends • Made me feel like I wanted to be part of community • Stopped isolation • Got me willing to speak to people • Want people to see real you • Meet more people • Buddy gives incentive • Encouraging someone else • Having walking buddy • Meet more people • Want a peer supporter to help confidence • Motivation from other • Doing long-term study • Can be supported beyond 16 weeks • Longer period gives more chance to habit form • Being greeted with a smile • BCP Checking in • Look forward to meeting BCP • Support from BCP • Talking therapy best thing about it • Having someone believe in you • Support from SAMH • No other service like it in area • ALBA gave me motivation • Makes you feel important • Being listened too • Good listener • Somebody to speak too • Someone to speak too that's not family • Opportunity to offload • A weight off your back • Opening up about mental health • Don't hide it anymore • Trying to clear away black clouds of depression • Mental health is individual • Shared experiences • Sharing experiences	*… she's quite fitness… she does a lot of running and marathons and keep fit, I think it was karate, she's quite a fitness freak…so she was really like go for it, that's what you are needing, I'm like alright ok* – P9 *Yeah, it's made me feel that I want to be part of the community, you know as much as just, you know even if being part of the community is just walking up the high street in Dunfermline, listening to your [music] with your headphones* – P3 *But the thing is, it wasn't the most uplifting conversation but it's bizarre though how, well I certainly feel anyway that being able to talk about these negative things with somebody who actually gets it isn't a negative at all, it's reassuring* – P3 *I actually found it quite encouraging and I find it quite motivating, just I had a lot of stuff going on at the time and I just found it that she was very good at listening and understanding, and encouraging, and I would talk quite a lot and she would wait until I would be finished and then she would you know just try and motivate me* – P9 *Even just being greeted with a big smile, just something simple as that, hi how are you doing, you know* – P11 *I look forward to meeting up with [BCP], just to like I don't know, speak to her about what I've done and like her to say well done or whatever* – P8 *I think the fact the somebody is actually sitting listening to what you are saying and taking note of how the individuals feeling, that makes a difference* – P13 *Yeah, it's helped me more, more than talking about it, like I can talk about it now…* *… but getting that out walking to start off with got me willing to speak to people* – P2
Emotion	Relief	Got my life back Reflection on regrets	• Got my life back • Getting back to myself • Got myself into a good place • In a better place • More motivated • Gives hope • Optimism for future • Wish I'd done it sooner • What I was doing was absolutely no help • Facing Fears • There was nothing to worry about • Facing the excuses	*I've got a life now and I don't know what to do with it, I don't know where to go or what to do it's as though I've come out a cave and there's daylight and you're like oh where do I go, what do I do?? but we'll get there, we will we'll get there* – P13 *I think that belief that you can actually do something and telling that nagging doubt to go away* – P5

(Continues)

TABLE 2 (Continued)

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Reinforcement	Use of Technology	Tracker positives	• Tracker was motivating • Trackers help you see good and bad days • Make sure to check tracker • Made more interested in gadgets • Check tracker all the time • Gave me a boost • Comparing steps with colleagues • How many steps you take at shops	*I think it's great, it's quite, you get a shock, I was up at the- my partner was in hospital so I was up and down at that hospital…and em I had the step thing on and I'd done about six and a half em six thousand five hundred steps and I really shocked myself, I was like wow you know* – P9 *I think it's good to see over the week, it also, when you're not having such good days you can't remember which days like I would meet with [BCP] and we'd talk and I'd say look I've been rough but when you start looking at the steps it was quite clear, you know, that it was happening and then the pinks become less and less which is good* – P12 *I've never done as much walking as I've done since I got mine [tracker]* – P8

and how they felt they were being taught by someone who knew what they were doing. Participants also spoke about how taking part in ALBA had opened them up to new opportunities, with many participants discussing how it had subsequently led them to take up other new activities (Table 2).

4.1.2 | Confidence

Participants discussed the effect that taking part in ALBA had on their beliefs about their capabilities, reporting that they had a new sense of confidence in themselves, and their abilities, which had encouraged them to engage and stay with the intervention. A recurring theme was the importance of 'pacing yourself', with participants frequently talking about the importance of going at their own pace, and how breaking down goals made them more achievable.

Participants reported that they felt they had learnt to be kinder to themselves after taking part in ALBA. They felt the intervention had equipped them with the life skills to escape what they called the 'vicious cycle', and how they felt they were more capable of recognising this and as a consequence help themselves overcome any mental health challenges that they may face in the future.

4.1.3 | Don't feel alone

ALBA helped to foster a sense of community, as participants reported that it helped them to feel less alone. They were more able to talk about their mental health and as result they found that others were open about their own mental health. The intervention also helped to foster a sense of optimism for the future, as well as helping participants to feel proud of themselves. Measurement of progress was important, as participants felt that through participating in ALBA, they could see how far they had come. Importantly, the ALBA intervention had helped them to change the way they thought of PA, with some participants reporting that they did not think of themselves as being an active person, but through ALBA they realised that being active did not just mean participating in sport or being 'fit', but encompassed all aspects of activity.

4.1.4 | Sense of purpose

Participants reported that ALBA had given them a new sense of purpose, as they felt attending intervention appointments and engaging in PA helped to give them some structure in their lives. Participants spoke about how the appointments with BCP helped them to feel motivated to get out the house. They now felt like they made more effort to be active and that they thought about their activity more than they ever had before.

4.1.5 | Lifestyle change

A common theme throughout the group discussions was change, with participants describing changes in thinking and how taking part in ALBA had a positive wider impact on other aspects of their life and their behaviour. For example, some felt that taking part in ALBA had helped them better manage their anger and had helped them to improve relationships with people around them. Participants frequently discussed how the intervention had encouraged them to set goals, and the positive benefit that this had on their mental well-being. For the most part, goal setting was discussed as a positive, that made them feel like they had something they were working to achieve, be it a step goal or taking up a new hobby. Participants also discussed how becoming engaged with the intervention had made them feel more socially connected.

4.1.6 | Support from BCP

The participants all put a lot of emphasis on the importance of the interpersonal factors, particularly the 1:1 behaviour change sessions.

TABLE 3 Barriers to participating in ALBA

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Social/ Professional Role and Identity	Mental health culture	Mental Health Stigma Need for MH services	• Mental Health stigma • Mental Health is a second-class illness • Older generations don't talk about MH • Struggle talking about MH • Fear of being labelled • Invisible illness • Don't have words to describe MH • Lack of awareness • People thinking you are lazy • Embarrassment • Feel ashamed • Is it a disability? • Getting access to support • Need for mental health services • Benefits	*I think people just see my label, so I find that really difficult and I think that's what stops me because you do feel like you've got, people don't get what mental health is, they don't, it's" how mental is she"* – P12 *It's, it's… like all hidden illnesses, if you don't see them, they don't think they exist* – P5 *That's kind of one of the things I feel about mental health is that unless, well my brother for example, I've been every bit as bad as my brother, but my brother managed to get access to much more help than me because he got hospitalized* – P3
Beliefs About Capabilities	Beliefs about self Barrier Thoughts Peer pressure	Negative beliefs Guilt Reason not to get up Inner conflict	• Told often enough you start to believe it • Couldn't accept it • Didn't have any self-worth • Feel so uncomfortable in self • Self-conscious in front of friends • Feel guilty • Feel guilty putting self-first • Wasn't getting out of bed • Wanting to hide away • Sitting about the house • Struggle to get out of bed • Wouldn't go out • Scared of going out • It's a mental battle • Battle you have with yourself • Lacked motivation • Nothing stopping me, mental block • Nagging doubts • Caught out by downward spiral • Feel bad time coming • Worry about letting someone down • The pressure of being a peer supporter	*If you get told often enough that you're useless and you're waste of space, then you start to believe it, and your self-confidence gets knocked* – P13 *That's what, I didn't really have [any] self-worth, I didn't feel human in that kinda sense …* – P2 *There is that shame, you feel you ought to be able to get on with things, when you find that you can't you start to wonder is there… is there something really wrong with me? Am I so different? Am I so, I dunno… **less** than everybody else? And it's hard* – P3 *But I feel guilty when I do, cause my mum was the one that was there for us when we were all growing up, and that's my biggest fight, that guilt* – P5 *It's really a fight with me, you know I mean I fully understand that even every day when I get up, it's a real kind of…* *… mental battle just to, you know, put the shoes on and head out you know* – P3 *Before I was like with my days off, I was getting up getting washed, coming down the stairs, putting my feet up on the couch, watching the telly, quite happy. Wouldn't go out the door, em, because I had depression and also because I was heavier, I just couldn't handle like walking through the shopping mall because I thought everybody was looking at me…I was quite happy sitting in my own living room with my telly on, if you'd come in and asked me what I was watching I couldn't have told you* – P13 *I don't really know the ins and outs of how supportive you've got to be, like if you just have to be there, but even then, you could have a bad day and then you're letting someone else down, I don't really like the idea, I like the idea of it don't get me wrong, but I feel I could let somebody down* – P10

(Continues)

TABLE 3 (Continued)

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Beliefs About Consequences	Trust	Opening up Doubt	• Fear of letting down & being let down • Uncertainty about what intervention involved • Didn't see how exercise would help • Didn't feel ready • Doesn't know what makes you feel better	*It can be difficult to put your trust and faith in somebody else because you're scared of being let down because you have been let down so badly before* – P11 *Well I didn't see that, I didn't see how that was going to be part of you know like, I suppose getting better? I didn't really, it never really dawned on me* – P12
Goals	Challenging Goals		• Unrealistic goals • Feel bad not hitting target	*[Y]ou start off feeling really bad everyday if you set [goals] too high* – P1 *I found them really challenging, really challenging, to the point where I would maybe open them up and kind of look through them and then maybe just leave them because I wasn't ready* – P12
Environmental Context and Resources	Access Intervention Resources	Access to intervention Practicality Negative resource Tracker negatives Expert Overwhelming	• People don't know about ALBA • Wasn't referred by doctor • Getting access to support • Need for mental health services • More people should come along • Advertise it more • Meeting in different places • Needing to drive • Meeting in suitable place • Managing to get to appointments • Length of intervention • Missed appointments due to bad spells • Found books challenging • Patronising • Reading and writing • More depth • Suitable for people with disabilities • Didn't like look of tracker • Being tracked by someone • Difficulty pairing tracker with phone • Forget to wear tracker • Lost tracker • Think tracker counting arm movement as steps • Tracker count delayed • Tracker gave rash • Tracker loses time • Tracker not bang on • Tracker not picking up steps • Tracker not waterproof • More compatibility with gym equipment • LT staff too busy • Losing gym support • Bad experience at LT • Miscommunication with staff • Found questionnaires overwhelming • Overwhelming • Overwhelmed by information	*I'd been to my doctors and stuff and that's… that's not really the same and there's nothing really in west Lothian that they can offer you as far as like um like a one on one talking therapy* – P10 *It took a long, long, long, time and it was different places, you know different places all the time so trying to get a room where people weren't coming in or walking through, you know it was incredible* – P12 *The only problem I found with the sixteen weeks is em for me anyway cause as I said life happens, you know and I had more prolonged bad spells than feeling you know like I could be out and about and it's only really in the last two three weeks where I've got into that mindset that I can get out every day… I missed an awful lot of appointments* – P3 *I found the [books] a bit patronising…just the kind of pow and wow, that kind of thing, I think 'reign it in a bit', I'm not saying completely change the format, perhaps make it a bit more adult* – P1 *The first time I put it on, and it was only about twenty four hours or so, then I sort of got used to it, but when I dunno, maybe it's just the thought someone's going to be monitoring me, there was an immediate 'ohh I don't know why I've agreed to do this'* -P7 *I think that the questionnaires, particularly getting the first questionnaire on your very first visit with somebody, I'll just think it's quite sort of um it was just a bit like oh gosh I can't do this, this is just too you know how much exercise I did and how much walking or gardening or how much hoovering I did, and I just found it really really girding, em to take that as an initial step em and [BCP] said that later on she said I can remember that first appointment thinking that woman didn't want to be here em and no I didn't, cause I just I think its cause where you are at that time when you are initially referred as well, you know you just I just thought oh I can't do this* – P6

(Continues)

TABLE 3 (Continued)

Domain	Themes	Subthemes	Specific Codes	Verbatim quotes
Social Influences	Not getting support deserved		• Impact of family • Hard to speak to family • Lack of support from family	*The thing I found hard about the family bit is that, em, how their behaviours can impact upon you, and even if they don't mean it, but you have to have that conversation about you know 'this is how I feel, this is how that affects me', and it's really hard, it's not the most pleasant thing you know because you know, you're really upsetting people by saying you know, you can't do that around me and even though there is no malice meant by it* – P3
Emotion	Fears	Fear of exercise Fear of failure	• Fear of going back to gym • Fear of being laughed at • Scared of exercise • Hate the gym • Going to gym for first time • Worry about relapse • Fear of not sustaining • Making and recognising excuses	*I was really scared because I didn't know em I just didn't know I was capable of it, em always had this kind of fear inside about em kind of can I do it, going to the gym em are people going to laugh at me?* – P11 *It's also about slowly addressing the excuses you use to not do things I'm not feeling well, I'll have a bit, oh I'll not bother today, I'll do it tomorrow* – P7

They reported finding the relationship that formed with their BCP to be very supportive and encouraging, giving them 'something to look forward to'. Participants really valued having somebody who was 'there for them', who they could speak to, who listened to what they were saying, no matter if it was good or bad. Through the experience of taking part in ALBA, participants felt more able to open up about their mental health. The importance of this relationship and the skills needed to make the most of each individual's abilities will be returned to.

4.1.7 | Technology

The discussion about the activity trackers suggested that the participants found them motivating, as they could see when they were achieving their goal. Participants reported that they enjoyed using them, as they enjoyed seeing high step counts, and found it encouraging when they saw they how much activity they had done just going about their day. They also reported that the use of the trackers helped them to monitor their mood as well as their behaviour, as they could look back on how far they had come. In this reflective mode, they expressed relief that they felt they had found something that was helping to improve their mental well-being. Some spoke about how they felt they had got their life back, wishing they had been able to do something like ALBA sooner, as they realised that the intervention had changed the 'vicious cycle':

> I felt as if there was a big sack on my back and every time you tried something, somebody put another rock in to keep you hunched and all that, or you were in a cave and you could see daylight and you had to dig yourself out, and it was like digging with a teaspoon to begin with, but then you kinda moved up to a shovel, cause you can see the light now, which just makes an awful difference! It's like 'nobody will keep me down. Nobody will put baby in the corner!' – *P13*

4.2 | Barriers

4.2.1 | Stigma

Participants spoke at length about the stigma they felt existed around mental health issues which had prevented them speaking about their mental health before. Some felt that there was a lack of awareness at the Leisure Centres about mental health, which put them off attending. Some talked of having an invisible illness. They perceived their mental ill-health as not being recognised, and as a result they felt they struggled to get access to support and services that they needed, including benefits in some cases.

4.2.2 | Beliefs about self

Negative self-beliefs were frequently discussed as being barriers for both engaging with the intervention and in PA in general. Participants spoke about how low mood and negative thoughts about themselves had made them feel so uncomfortable in themselves that they did not want to engage with others. Participants also spoke a lot about a sense of guilt they felt for putting themselves first and how this had stopped them from acting or seeking help in the past.

4.2.3 | Trust

A recurring theme was the issue of trust, with the majority reporting that they were apprehensive about putting their trust in the BCPs. This acted as a barrier to participating in the intervention, as participants felt that they were afraid to open up to someone, due to

previous bad experiences. They were also sceptical about how becoming more active would improve their mental health. They found aspects of the intervention challenging, and at times they found that they had set goals that were too difficult to achieve. If they set a goal that was unattainable at the time, then this had a negative effect on how they felt about themselves. Occasionally they found that the intervention material made them face issues and feelings that they did not feel they were prepared to face.

4.2.4 | Access

Participants reported several barriers that had prevented them from accessing the ALBA intervention. Some said that they had not heard about the intervention before. Issues around access included the settings in which the intervention was delivered. The intervention was initially planned to be implemented within the local leisure centres, intended in part to help participants become familiar with the centres. However, in practice, this was not always appropriate as there were often limited availability of private rooms and public spaces were not always suitable.

4.2.5 | Intervention resources

Participants also commented on the evaluation process. Particularly at their first appointment, nearly all felt that filling in the questionnaires required for the baseline measurement was very overwhelming and they found them very challenging, as it required both concentration and to think about how their mental health had been.

4.2.6 | Social influence

Finally, some participants explained that they had complicated relationships with family and friends, making them hesitant to share that they were participating in the ALBA intervention, as they were concerned about judgement or lack of support. For some these difficult relationships were a source of anxiety or depression. Feelings of fear were a common barrier to PA discussed during the groups, with many agreeing that prior to taking part in the intervention they felt scared of going to the gym and exercising. They feared others would laugh or stare at them for going to the gym. Participants also described a 'fear of failure', concern about starting an activity and not being able to keep it up. Participants in the past had made 'excuses' so that they did not have to do the activity.

5 | DISCUSSION

On the whole, the facilitators outweighed the barriers, and most of the barriers consisted of reflections on life before ALBA. These barriers did not apply following the intervention. For example, participants discussed not wanting to go out of the house prior to ALBA, but not afterwards. Likewise, they would never have been seen in a gym before, but spoke of being more comfortable in the present. It is important to recognise that these barriers need to be overcome, but the clear message is that engaging with ALBA had helped them do so.

In relation to the theoretical domains framework, it would appear that individual beliefs about personal capabilities were both a barrier and a facilitator to participating in ALBA, as were beliefs about consequences, social influences, goals, environmental context and resources. This is consistent with Glowacki et al. (2017) who found the most common barriers to PA in people with depression were also the most common facilitators: capability, context, consequences. What changed was the *nature* of the belief. As participants achieved their personal goals they felt more capable, and so their beliefs about the other factors associated with activity shifted too (Festinger, 1957). In other words, the theoretical domains should be considered as lying on a continuum. None are inherently positive or negative. They are instead a useful method of understanding and communicating how a particular intervention might work or not depending on its likelihood to invoke personal change; moving from the negative to the positive.

5.1 | Therapeutic relationship

Social influence was a prominent facilitator of engagement in ALBA, as it is in the wider literature (deJonge, Omran, Faulkner, & Sabiston, 2020; Teychenne et al., 2020). Due to the face-to-face nature of the delivery of the ALBA intervention, there was the opportunity to develop a relationship between the participant and the practitioner. This was central to the discussions in all of the groups, which suggested that the relationship between the participants and the BCP influenced engagement with ALBA. It appears to be one of the biggest strengths of the ALBA intervention. It is well known that enjoyment, mastery of skills/goals, autonomous motivation, choice, social interaction and a sense of belonging all contribute positively to engagement with physical activity (Teychenne et al., 2020), and these are all elements of ALBA, but the role of individual BCP was singled out as a major factor in adherence. It has been argued in psychotherapy literature that the therapeutic alliance which develops between practitioner and client is more important than any specific technique or approach (Horvath, Del Re, Flückiger, & Symonds, 2011), with evidence suggesting that the quality of the alliance is a consistent predictor of treatment success. Stronger alliances improve trust and hence cooperation. Participants are unlikely to agree to therapeutic tasks or enact health actions without it (Wampold & Imel, 2015), although the role and function of social interaction during exercise is less clear (Kandola, Ashdown-Franks, Hendrikse, Sabiston, & Stubbs, 2019).

Another important element was the warmth and empathy conveyed by the BCP, which helped the participants to feel comfortable opening up about their mental health. Expressing empathy is an

integral part of most psychotherapies. According to Rogers (1975), underlying the principle of empathy is acceptance, and an understanding of the client's emotions. Wampold and Imel (2015) found that rating of therapist's empathy is often correlated with a positive outcome. Participants from the focus group valued having somebody who listened to them without judgement. This 'unconditional positive regard' is a well-known Rogerian principle (Amadi, 2013). Helping people to be able to talk about what is on their mind, whatever that may be, is a central tenet of expert spiritual care (Snowden et al., 2018), so the importance of an empathic BCP should not be underestimated here.

In ALBA, this helpful therapeutic environment had a positive impact on other aspects of the framework, for example, making exercise more enjoyable. It is well known that where exercise is enjoyable and achievable, it is much more likely to be autonomously sustained (White et al., 2018). Participants discussed how meeting with the BCP helped to provide structure and routine in their lives, which helped to give them a sense of purpose. This 'virtuous circle' of positive reinforcement (Stanislaus, 2016) is the opposite of the 'vicious circle', where low self-esteem reinforces negative beliefs about poor performance that reinforce low self-esteem and so on (Baron & Kenny, 1986; Steca et al., 2017; Wäschle, Allgaier, Lachner, Fink, & Nückles, 2014). Positive beliefs about capabilities increased self-efficacy, which facilitated engagement in ALBA, making PA enjoyable and so on.

Such findings have been explained in the exercise literature by Self-Determination Theory (SDT; Deci & Ryan, 1985). For example, White et al. (2018) used the theory to explain the improvement in well-being seen in the adolescents with mental health issues in their study. Akin to the virtuous circle (Steca et al., 2017), SDT proposes that steady increases in self-efficacy and self-esteem can be achieved through achieving self-directed goals. The simple state of enjoyment should never be undervalued as part of this process (Lambert et al., 2018). As highlighted by Glowacki et al. (2017), emotion is a particularly important domain within mental health populations, but is often neglected in the literature. Previous research into adherence to PA has often found enjoyment to be a key determinant (Malik, Williams, Weston, & Barker, 2018; Raedeke, 2007), whereas 'low mood' or fatigue are frequently found to be barriers to PA, particularly in individuals with poor mental health (Firth et al., 2016). ALBA worked because participants were valued, listened to and encouraged to see active living not only as achievable but also enjoyable (Teychenne et al., 2020).

5.2 | Limitations

Participation in the focus groups was low. A frequently cited reason for not wishing to take part in the focus groups was due to anxiety about the group setting. Participants in qualitative research often feel uncertainty or anxiety about participating, but often decide to take part for the sake of others who would benefit from the research (Dennis, 2014). It is understandable that the idea of the group setting was off putting to some in this particular study, and individual interviews could have been offered to participants who wished to share their experience but were uncomfortable attending a focus group.

Another limitation of this study was the potential for bias. The participants who attended the focus groups were individuals who had completed the intervention or were still actively taking part. The focus group discussions reflected a mostly positive view of the ALBA intervention as the individuals who had participated had actively engaged with the intervention and had been able to overcome their barriers. An additional limitation was that the focus groups were only conducted at one time point, so can only represent a snapshot of a single time point. With greater resources, the groups would have been returned to.

Possibly the most serious limitation was theoretical. To obtain funding, evaluation methods had to be articulated earlier on in the research process that would otherwise be the case. As a consequence, the theoretical underpinning was 'fixed' from the start and could therefore be seen as a form of conceptual bias. Having said this, the TDF model proved very useful in explaining the findings here. It was also good for checking for any data falling outside the model.

6 | CONCLUSION

This original intervention has succeeded in an area where many others have tried and failed. Helping people to change the way they think about activity has been a difficult problem, and so any intervention that appears to have achieved this is worthy of attention. While it is certainly true that the intervention required a lot of investment, particularly in training the trainers, ALBA nevertheless succeeded in changing the way these participants with mental health problems thought about physical activity. By reframing it as not just physically beneficial but personally achievable, participants' attitudes and behaviour changed as well, making it more likely they would sustain physical activity in future. While it is clear that larger multicentre studies would help formalise the intervention further, there is sufficient information in this paper for local community teams to get together with mental health service users to consider adopting and evaluating their own versions of structured support to make active living become achievable for all.

ETHICAL APPROVAL

Ethical approval for this project was granted by the NRES Committee for West of Scotland on 09 January 2017 (REC ref 16/WS/0246) and from Edinburgh Napier School of Applied Sciences Ethics committee.

ORCID

Austyn Snowden https://orcid.org/0000-0001-9321-622X

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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