



# Exploring mental health benefits of physical activity using a social marketing approach in community settings

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# Executive Summary

## Project aims

This project was designed as a scoping exercise within two segmented population groups to identify ways of marketing physical activity for its mental health benefits. The aims were threefold:

- Explore the perceptions within two segmented groups relating to mental health and associated benefits of physical activity and exercise.
- Identify barriers associated with physical activity participation.
- Identify ways of 'selling' physical activity for its mental health benefits.

## Key outcomes

Focus groups highlighted a number of issues within each population group.

### *Group 1: Adults living in a deprived community*

1. Health was significant to participants, particularly the health of children and family. Physical activity interventions should emphasise the general health benefits for children and families. Family support is important factor for positive mental health.
2. The term 'mental health' should be avoided in marketing to promote physical activity for its mental health benefits given the negative connotations associated with the word 'mental'. Participants came up with alternative phrases and could see the mental health benefits of physical activity:

*"Build your confidence"      "Have a laugh with your family"*

*"Jumping for joy"      "Get up and out"      "Make new friends"*

*"Come and join the fun"      "Something for the family to do"*

*"Physically fit. Mentally well"      "Active minds, better health"*

*"Exercise doesn't have to be hard"      "Improve your life"*

*"An active mind takes the stress out of your life"*

3. Participants stressed the need for low cost family activities.
4. Local access to facilities, public spaces and opportunities for physical activity was very important.
5. The physical benefits of physical activity were the main motivators for participants to undertake physical activity, rather than the psychological benefits.

*Group 2: Older adults*

1. Social aspects of physical activity was very important to this age group. Interventions aimed at this population group should include group-based activities and market the social benefits of participating.  
*“we meet people we didn’t know, it creates a community”*
2. Maintaining independence in later life was a major concern for this population group.
3. The mental health benefits of physical activity were more important to participants than physical health benefits. Maintaining a good level of cognitive function was key; and a good way to promote physical activity.  
*“[it] gets you out of your depressions”*  
*“exercise makes you more alert”*  
*“relaxing afterwards, you feel better”*  
*“you’ve got company, you see different people”*  
*“we meet people we didn’t know, it creates a community”*  
*“you feel pleased with yourself for making the effort”*
4. The majority of participants associate ‘exercise’ with more intense physical activities (e.g., gyms); terminology used in marketing should be considered.
5. Local access to opportunities for physical activity was important.

## Conclusions

It is clear that perceptions of these two populations were different with regards to their perceptions of the benefits of physical activity and key issues relating to participation. In general, both groups were more aware of the physical benefits of physical activity than the psychological benefits. The term “mental health” was perceived to be limited to a relatively narrow range of factors – mostly negative. Participants tended to focus on the individual and interpersonal level, rather than the wider context of “community” or “neighbourhood”. However, through engagement in the focus groups participants could move to a position where they acknowledged positive mental benefits of physical activity.

Further development of this work should include;

- Exploring perceptions from different market segments e.g. working professionals, BME groups and younger people.
- Further exploration of the social and cultural context for differing perceptions to mental health benefits of physical activity
- Pre-testing marketing approaches on these different segments
- Physical activity programmes should consider measuring mental health outcomes for participants.

# Section 1: Background

## Physical activity and mental health

Evidence supporting the psychological benefits of regular physical activity for the general population is extensive<sup>1</sup> with those leading physically active lifestyles being less likely to experience mental health problems during the course of their life<sup>2</sup>. However, research has shown that previously sedentary individuals can reduce their risk of mental health problems by taking up physical activity<sup>3,4,5</sup>. An extensive review examining the relationship between physical and mental health reported that, generally, those exercising more regularly were reported to have better mental health outcomes<sup>6</sup>. Scully et al. (1998) added support indicating overwhelming support for the positive effect of exercise on psychological well-being<sup>7</sup>. With few exceptions<sup>8</sup>, the majority of research indicates that physical activity has preventative, as well as therapeutic benefits for promoting positive mental health<sup>9</sup>.

A qualitative investigation, using focus groups, examined the mental health benefits conferred as a result of various improvements perceived by people referred for exercise<sup>10</sup>. Alongside the reported mental health benefits, social and cultural context was an important dimension to emerge from the study. For participants this included aspects relating to their social network, the culture of the scheme, and also the physical environment (e.g., being outside). These attributes were instrumental in helping participants to facilitate their own self-acceptance and consequently, to perceive both physical and mental health benefits of participation in physical activity.

Following on from the 'positive steps' and 'Social Marketing & Mental Health' work within the West Midlands<sup>11</sup> this project aimed to explore the promotion of physical activity focusing on mental health benefits. This scoping project was designed to improve current understanding of how to promote physical activity within two segmented

population groups with whom lower physical activity levels and poorer health outcomes are often associated; adults living in deprived communities and older people.

### Why take a social marketing approach?

Social marketing is a 'systematic process that uses a range of marketing concepts and techniques to address short, medium and long-term issues with

clearly identified and target goals'<sup>12</sup>.

Social marketing is 'driven by people's wants, needs, and a deep insight about what will and will not help them'<sup>13</sup>.

National benchmarking criteria for social marketing have been developed (see box 1) which aim to optimise the use of social marketing techniques<sup>14</sup>.

Box 1: National social marketing benchmark criteria	
<b>CUSTOMER ORIENTATION</b>	<i>'Customer in the round'</i> Develops a robust understanding of the audience, based on good market and consumer research, combining data from different sources
<b>BEHAVIOUR</b>	Has a clear focus on behaviour, based on a strong behavioural analysis, with specific behaviour goals
<b>THEORY</b>	Is behavioural theory-based and informed. Drawing from an integrated theory framework
<b>INSIGHT</b>	Based on developing a deeper 'insight' approach – focusing on what 'moves and motivates'
<b>EXCHANGE</b>	Incorporates an 'exchange' analysis. Understanding what the person has to give to get the benefits proposed
<b>COMPETITION</b>	Incorporates a 'competition' analysis to understand what competes for the time and attention of the audience
<b>SEGMENTATION</b>	Uses a developed segmentation approach (not just targeting). Avoiding blanket approaches
<b>METHODS MIX</b>	Identifies an appropriate 'mix of methods'
French, Blair-Stevens (2006) adapted from Andreasen (2002)	



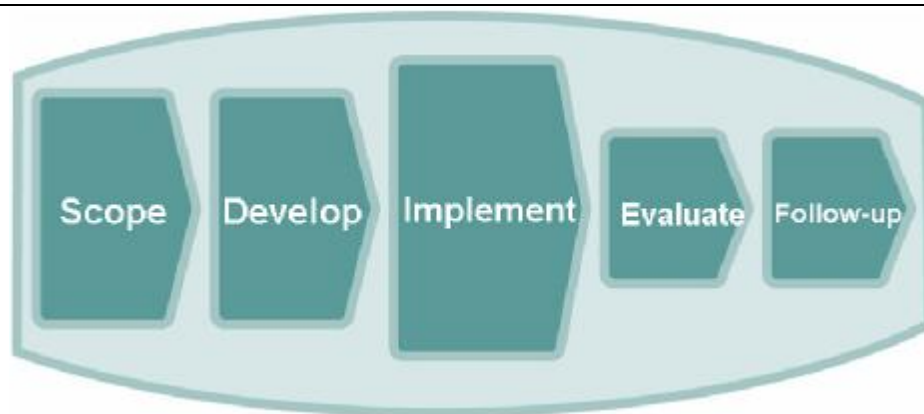
The use of social marketing within UK health promotion is relatively new<sup>11</sup>, however, the Department of Health<sup>15</sup> recommend that social marketing should be used to make health harming behaviours less attractive and promote behaviour that improves health. The marketing of mental health was also identified as a priority by National Institute for Mental Health in England<sup>16</sup>.

Gordon, McDermott, Stead, Angus and Hastings<sup>17</sup> in their review found that social marketing could be effective in increasing physical activity levels, knowledge with regard to the benefits of participation and the risks associated with inactivity. In cases where there were no significant behavioural changes

(e.g., increase physical activity), studies often demonstrated a change in attitude (e.g., stage of behaviour change), indicating progress towards the ultimate aim of behaviour change.

The National Social Marketing Centre have proposed a 'total process planning' model (Box 2) highlighting the five key stages of a social marketing initiative, and the importance of completing each stage before moving onto the next. The total process planning model places much of its emphasis on the early stages.

Box 2: Total process planning model



Taken from: National Social Marketing Centre

<http://www.nsms.org.uk/public/default.aspx?pageID=10&menuID=2>

## Social marketing and mental health – positive steps

Positive steps towards mental health have been identified (Box 3) and have become the centre of recent mental health campaigns (e.g., Sainsbury Centre for Mental Health). A review suggests that there is evidence to support these messages, and by changing behaviour to incorporate these positive steps, individuals are able to promote their own and others mental health<sup>11,18</sup>.

### Box 3: positive steps for mental health

Exercise

Diet

Alcohol

Learning

Creativity

Spirituality

Talking

Valuing yourself and others

Social support

Asking for help

Getting involved and making a contribution

Contact with nature

Relaxing/taking a break

This scoping study focuses on the 'physical activity' step for mental health, although as the findings highlight, it is closely related to 'social support', and links with 'getting involved'. Using social marketing as a means of promoting behaviour change has been advocated<sup>15</sup> with particular reference to mental health<sup>11</sup>. The present work links to next steps identified from the Social Marketing & Mental Health event for the West Midlands and North West. This work has informed the development of interventions to improve mental health through physical activity promotion in specific population segments and forms the basis for follow-up work in this area.

# Section 2: Project design

## Project aims:

This project was designed as a scoping exercise within two segmented population groups to identify ways of marketing physical activity for its mental health benefits. The aims were threefold:

- Explore the perceptions within two segmented groups relating to mental health and associated benefits of physical activity and exercise.
- Identify barriers associated with physical activity participation.
- Identify ways of 'selling' physical activity for its mental health benefits.

Two measurement tools were also piloted.

- The Warwick and Edinburgh Mental Wellbeing Scale (WEMWBS)<sup>19</sup>
- Single-item physical activity question (taken from Outdoor Health Questionnaire (OHQ))

The project was conducted in two phases. Initially, focus groups were conducted within both segmented groups (adults living within a deprived community and older adults). Both sedentary and physically active participants were targeted to obtain a range of opinions with regard to the mental health benefits of physical activity, and to identify ways of selling physical activity. Secondly, questionnaires were distributed to those taking part in physical activity programmes to assess mental well-being, in addition to physical activity levels. Any evaluation of interventions implemented would need to include monitoring changes in the outcomes of interest; for example, perceived mental well-being and physical activity level. The National Centre for Social Marketing 10-point checklist states that '*measurable behavioural goals have been set and form the bottom line for evaluation*'. This scoping project, therefore examined the use of the OHQ physical activity question and WEMWBS as requested by CSIP. The WEMWBS measures positive mental wellbeing and is a new tool currently being developed<sup>19</sup>.

## A scoping exercise:

A social marketing approach to behaviour change involves a number of different stages or processes. The National Social Marketing benchmark criteria (Box 1) were developed to ensure that interventions pertaining to the social marketing approach shared common objectives. The 'people driven' focus of social marketing<sup>13</sup> means that much emphasis is often placed in the early stages (e.g., the Total Process Planning Model (Box 2)). The first stage 'scoping', emphasises the importance of 'customer orientation' from the National Social Marketing benchmark criteria. Understanding the target population group is essential; gaining an in depth 'insight' into their opinions and experiences to understand how they view physical activity and mental health will inform the development of appropriate interventions for that population group.

This project has been designed to carry out this initial scoping within two segmented population groups to enable recommendations for future intervention (see section 4).

## Participants:

A review of the effectiveness of social marketing interventions for physical activity found that few studies had targeted low income groups and older people<sup>20</sup>. This project, therefore, aimed to target these two segmented population groups; Group 1 comprised of adults living within a deprived community (39.4±10.8 yrs old) and Group 2 consisted of older adults (70.2±6.6 yrs old). Stoke-on-Trent and the surrounding area was considered an appropriate geographical target given the widespread levels of deprivation<sup>21</sup>, high rates of morbidity and mortality<sup>22</sup>, and low levels of sport/active recreation<sup>23</sup> and physical activity<sup>24</sup>.

Focus groups were used to explore the opinions and experiences of both sedentary and physically active individuals within the two population groups.

*Group 1: adults within a deprived community*

The widespread deprivation of Stoke-on-Trent and associated high rates of morbidity/mortality and low levels of physical activity, makes this area of the West Midlands an appropriate target for interventions aimed at promoting health through increasing physical activity. Situated just outside Stoke-on-Trent, the housing estate from which Group 1 participants were recruited shared many of the characteristics associated with deprivation<sup>21</sup> with participants living in the bottom 10% nationally<sup>21</sup> Refer to Table 2 for participant characteristics.

*Group 2: older adults*

The number of older adults in the UK is increasing, with estimates that 20% of residents will be aged 65 or older by 2020<sup>25</sup>. Despite increasing longevity and relative prosperity of older people (compared with recent history), there is evidence that many older people are experiencing a low quality of life and wellbeing<sup>26</sup>. The *UK Inquiry into Mental Health and Well-being in Later Life*<sup>27</sup> reported that forty per cent of older people attending GP surgeries, and 60%

of those living in residential institutions have 'poor mental health'.

Physical activity levels tend to decline with age<sup>28</sup>. Recent NICE guidance recognised that maintenance of physical activity in later life is central to improving physical and mental health<sup>29</sup>. The potential benefits identified for this population group are wide ranging and inter-related; improvements in general health and physical functional capacity, such as maintenance of or improved mobility, helps to maintain independence, which in turn has been linked with a reduced risk of depression and other mental health problems<sup>30</sup>.

Therefore, older people are clearly an appropriate target for physical activity promotion. In Stoke-on-Trent, examination of the Sport England market segments has identified an over-representation of the less affluent older segments: C15Local 'Old Boys'; C16 Later Life Ladies; D17 Comfortable Retired Couples; D19 Retirement Home Singles<sup>31</sup>. Refer to Table 3 for participant characteristics. (Refer to Appendix 4 for summary of Sport England Market segments).

## Data collection:

The main method of data collection was focus groups. Focus groups have been demonstrated as a good forum for generating discussion (Wilkinson, 2003). Semi-structured guide questions were used (Appendix 1). As this was a pilot project to ascertain the opinions and perceptions of the targeted segmented population groups, focus groups were deemed an appropriate method.

The Warwick and Edinburgh Mental Wellbeing Scale (WEMWBS) was one of the two measurement tools piloted (Appendix 2). It has been subject to some validation in Scotland, but at the time of writing, there were no normative data for English adults. The single item physical activity question taken from the Outdoor Health Questionnaire

(developed by the British Heart Foundation and Natural England<sup>a</sup>) was used given the ease of administration (Appendix 2). At the time of writing this tool was undergoing validation in the UK (data yet not available). Physical activity is a behaviour that is notoriously difficult to measure and the often preferred objective methods of measuring activity behaviour, such as accelerometry, was not possible given the time and resource constraints. From the self-report physical activity measurement tools available, the brevity and ease of the single item was favoured over more cumbersome and complex questionnaires (e.g., IPAQ) and those that require interview administration (e.g. 7-day recall).

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<sup>a</sup><http://www.whi.org.uk/popup.asp?thetype=4&thefile=uploads/documents/2537/OHP%20guidance%20Oct%2008%20-%20track%20changes%20deleted.doc>

# Section 3: Project findings

## Part 1: The Social Marketing scoping exercise

Part 1 of this report examines the findings from focus groups conducted within the two segmented population groups of 'adults living within a deprived community' and 'older adults' (refer to Appendix 1 for the focus group guidance questions). In total five focus groups were conducted (Table 1).

### Group 1: Adults living within a deprived community

Two focus groups were conducted with sedentary adults living on the Haregate estate in Stoke-on-Trent (Table 2). The 17 participants (10 female and 7 male)

were recruited from a range of specified post-codes within Haregate estate. All participants also completed the WEMWBS and physical activity survey. The mean sample age was  $38.1 \pm 10.8$  years old (range 21.1-53.7 yrs).

High levels of deprivation within the Haregate estate were reflected in 85% of participants living in areas that fall within the bottom 10% for national rankings<sup>21</sup>, and the remainder living in the bottom 40%. Consistent with deprivation, overall sample physical activity were low with 87.5% of male participants

Table 1. Focus groups

Segmented population	Number of participants	Gender
Adults from deprived community (33.9±9.4 yrs)	10	female
Adults from deprived community (48.7±5.2 yrs)	7	male
Older adults (77.7±5.4 yrs)	4	female
Older adults (67.0±5.6 yrs)	5	Male (4) Female (1)
Older adults (69.4±6.1 yrs)	16	Male (4) Female (12)

Table 2. Group 1 sample characteristics

	Total	Male	Female	Incomplete data (n)
Number of participants	18	8 (44.4%)	10 (55.6%)	0
Age (yr)				
Mean	39.4±10.8	48.7±5.2	33.9±9.4	0
Range	22.0-55.0	43.0-55.0	22.0-5.0	
Deprivation (IMD 2007)				4
Most deprived	12 (66.7%)	3 (75.0%)	9 (90.0%)	
Quintile 2	2 (11.1%)	1 (25.0%)	1 (10.0%)	
Quintile 3	-	-	-	
Quintile 4	-	-	-	
Least deprived	-	-	-	
Baseline PA: days/week of 30 min MVPA				1
0	2 (11.1%)	2 (25.0%)	-	
1	1 (5.6%)	-	1 (10.0%)	
2	2 (11.1%)	1 (12.5%)	1 (10.0%)	
3	4 (22.2%)	2 (25.0%)	2 (20.0%)	
4	2 (11.1%)	1 (12.5%)	1 (10.0%)	
5	3 (16.7%)	1 (12.5%)	2 (20.0%)	
6	-	-	-	
7	3 (16.7%)	-	3 (31.7%)	
Meet PA recommendations	6 (33.4%)	1 (12.5%)	5 (50.0%)	
WEMWBS Summary score (min=14; max=70)				0
Mean (±SD)	45.1± 10.4	46.4 ± 10.0	44.1 ± 11.1	
Median	45.0	49.0	42.0	
Range	27-64.0	33.0-64.0	27.0-60.0	

reporting activity levels below recommended levels (n=7), although half of the female participants claimed to be active at recommended levels (n=5; 50%). The median score for WEMWBS was 45.0 (range 27.0-64.0). Again, this is below those reported for equivalent age groups in the Scottish validation study of the WEMWBS measure for whom median scores were 50 to 51<sup>19</sup>.

Initially, the focus groups examined the terms 'health' and 'mental health' and what these meant to participations. All

participants felt that health was important, although there was a much stronger emphasis placed on their child's (children's) health than their own:

*"You don't think about it. You just think about the kids, not about yourself"*  
(Debbie)

Participants linked being healthy to keeping fit. They were able to make the connection between the two, and realised that it was something that should be a top priority.



The term 'mental health' had only negative connotations for participants initially, being linked with "depression", "mental illness", "drink and drugs problems" and with people they termed "nutters". When prompted to think of positive aspects of mental health, the family focus was again reflected through participants relating the importance of 'being mentally well' with the ability to look after their children and family.

*"If you are not looking after yourself you are not there to look after your children properly"*  
(John)

Although participants were able to relate to positive mental health, the terminology that brought out these associations centred on well-being. Using the word the 'mental' or 'mental health' was directly associated with 'mental health problems' or 'mental illness'.

*"It's your general wellbeing"* (Rachel)

A link was also made between mental and physical health, and it was acknowledged that both were necessary to function:

*"It is all connected, you can't do anything if you are not in good mental and physical health"* (Jack)

When asked how they could maintain a positive mental health, participants suggested; "keeping yourself busy,

*"positive thinking", "reading", "having hobbies and interests" and "exercise".*

Regular exercise and physical activities were associated with positive mental health

impact, feeling better, feeling less stressed, and with "a sense of achievement". Participants strongly agreed that exercise was a way of "perking you up" and "getting you out of the house" (where one will inevitably eat and smoke more) into a healthier place both physically and mentally. In

*"Your kids are more important than yourself"*  
(Kirsty)

particular, male participants spoke of their busy lives and time schedules, from which going out for walks or a run could give them some personal space or *“time out from the kids”*.

Once the participants were questioned about their personal attitudes to physical activities, it was apparent that all recognised the benefits of exercise/physical activities, but only a small number were regularly active. Most reported that they were not as active as they would like to have been. For most, the main motivators to being

more physically active were losing weight and improving health, i.e. the physical health benefits. However, when asked about the benefits of taking part in physical activity, participants highlighted a range for both physical and mental health (Box 4).

Participants described how they felt sometimes when unable to participate in any activities that they believed would improve their mental health (Box 5).

A number of barriers to increasing physical activity levels were discussed, which centred on time, cost and motivation. The time and financial constraints of work and/or family life in particular seemed to dictate the type of physical activities that would be appropriate for this population group. It emerged that only activities that were flexible and free or subsidised would appeal, particularly to those with large families.

*“It is frustrating. You want to do things but you just don’t have the time” (Sally)*

**Box 4: physical and mental health benefits of exercise**

*“Being fit”.*

*“Keeps your weight down”*

*“It’s just how you feel yourself when you’ve done a bit of exercise; your mind is perhaps a bit more alive, a bit sharper”*

*“You feel like you’ve achieved something, it gives you a little boost”*

*“If you go on your own it gives you space from your problems”*

*“It takes your mind off everyday pressure”*

Box 5: Feelings associated with non-participation

*"very lazy because you are feeling down"*

*"If you sit about and you do nothing, you are in a rut, you are doing the same thing over and over again and it gets you down, doesn't it?"*

*"And every day can be the same. You have to pull yourself out and do something"*

*"No will to live"*

*"Frustration"*

*"You feel drained"*

*"You feel lethargic"*

*"Lots of things get on your nerves"*

*"By the time I finish my day and I get back, and then I've got to do the kids' tea and put them to bed, I don't have really much time, and by the time you have done that you are too knackered and you want to go to bed" (Nicola)*

*"I am lazy!" (Debbie)*

There was, however, some variation by gender in the type of physical activity that participants felt that they would like to do given the opportunity; males were more interested in walking, running, swimming, cycling and football, whereas

females identified exercise classes and dancing as more enjoyable.

### How to sell the mental health benefits of physical activity

#### *What type of activity?*

Participants were encouraged to consider the types of physical activity that they would be able to incorporate into their lives, and how they would like to see it marketed. There was strong agreement amongst participants that family orientated physical activity would be most appropriate.

Creating an activity suitable for children was considered important, either separate from adults *"If the kids could do their bit and adults do something else"*, or an activity for all ages *"Something for the family to do"*. The timing of the intervention would need the flexibility to cater for both school and working hours.

#### *How much should it cost?*

Cost was something that all participants were concerned about. Although participants did not specify an acceptable cost, it was frequently mentioned, *"How much is it going to cost?"*. Charging for activities would, therefore, have an impact on whether they would commit themselves to use the intervention. Cost

*"You should be able to do stuff with your children, because children get bored sitting at home all the time....and it is nice to do things with your children as well as do things by yourself" (Linda)*

Participants also believed that activities should not be competitive. Emphasis was placed on activities in which people can set their own pace and style of exercise. Participants agreed that if physical activity were provided the activity would need to be *"professional to some extent"* and *"organised"*, yet still to be *"fun"* and to provide a *"variety"* of activities.

would have to be minimised, with the possibility of free provision for children. Participants recognised that charging for activities would be dependent on the type of activities, but agreed that it would need to be less than the typical cost of using the gym and should not involve initial joining or annual membership fees.

*Where would it take place?*

The most appropriate locations were community-based physical activities and events e.g. local community centre and pub. The community centre was favoured by the female participants, but not the males who described it as *“run down”* and *“not adequate”*. The male participants felt that the pub was a more central community meeting point and had more space, therefore allowing for more possibilities.

*Where and how would it be advertised?*

Methods of advertising for a physical activity intervention included using the local press, local radio, leaving leaflets in local shops, handing them to children at school and encouraging word of mouth recommendation. Out of all the options, local shops a Co-Op and chip shop on the estate were identified as the best places to advertise.

Participants believed that people tended to ignore the shocking stories and images

related to health issues, such as those used in national smoking cessation and drinking driving campaigns. They felt that exposure to health problems and health damaging behaviours on a daily basis at the doctor’s surgery, in hospitals, on television and through other media, has made people immune to such shock tactics.

*“When you see these pictures of like a heart or stuff like that of people who are smoking, it still doesn’t encourage you to stop smoking. They just don’t pay attention to it” (William)*

Conversely, positive case studies demonstrating the key benefits of physical activity for mental health were thought more inspirational e.g. *“self - confidence, feeling sexier, feeling proud of myself”*. Importantly, these positive stories should not be patronising by telling people what to do/what not to do e.g. stop smoking, or eat healthy.

*“(Shocking stories) don’t grab enough attention”  
(Johanna)*

*“self-confidence, feeling sexier, feeling proud of myself” (Sarah)*

### Terminology

Participants were asked to think about the type of words or phrases that they would like to see advertising the intervention. Participants found this challenging, but they did make some suggestions (Box 6).

It was clear that the term 'mental health' had immediate negative connotations ("loonies on drink and drugs", "depression", "anxiety"). Therefore, using this term in relation to the proposed physical activity intervention could be off putting for many:

*"I am not coming here because I am depressed!"  
(Alice)*

It was suggested that using different words and terms with more positive associations would be better, more acceptable and easier for people to relate to their meaning:

*"Confidence booster"  
"stress relief" "occupied  
mind"*

*What benefits are envisaged?*

When discussing the potential impact of a family orientated physical activity intervention, participants identified a number of benefits (Box 7).

#### Box 6: Phrases participants suggested for advertising

*"Come and join the fun"*

*"Get up and out"*

*"Build your confidence"*

*"Make new friends"*

*"Active minds, better health"*

*"An active mind takes the  
stress out of your life"*

*"Something for the family to do"*

*"Physically fit. Mentally well"*

*"Exercise doesn't have to be hard"*

*"Have a laugh with your family"*

*"Jumping for joy"*

*"Improve your life"*

Box 7: Potential benefits from undertaking physical activity

Community:

*"It should bring community together"*

*"There probably would be less trouble (e.g. crime, drugs)"*

Health:

*"Keeping you active"*

*"It could make this estate a healthier place"*

*"Refreshed" "Lively" "Happy"*

*"Feeling good about yourself"*

Social:

*"To meet your friends"*

*"All the families will get to know the other families"*

Personal:

*"Proud of what you have achieved"*

*"Taking yourself out of yourself" If you have been bored at home, you have gone and done something, you are taking your mind of it basically"*

*"It gives you something to focus on. If you're enjoying whatever it is, you look forward to doing it again"*

The focus groups with male and female residents of a deprived Staffordshire housing estate provided valuable insights into ways to 'sell' physical activity on its

mental health benefits. A number of recommendations have been made on the basis of these emergent themes (Section 4).

## Older adults

Three focus groups were conducted with active older adults attending physical activity groups in either Stoke-on-Trent or Stafford areas (n=25). Seventeen out of the 25 participants were female, with a sample mean age of 68.1±5.6 years (range 58.0-78.0 yrs). Data from the IMD 2007 indicated that 22% of participants

lived in areas within bottom 40% for national rankings and almost half fell within the least deprived quintile (44.4%). Over three-quarters of participants reported being active below recommended levels (77.7%). The median score for WEMWBS was 55.0 (range 46-70), greater than the 51 to 52 reported for equivalent age groups by Tennant et al<sup>19</sup>.

Table 3. Group 2 sample characteristics

	Total	Male	Female	Incomplete data (n)
Number of participants	25	8 (32.0%)	17 (68.0%)	0
Age (yr)				
Mean	70.2 ± 6.6	67.9 ± 7.1	71.4±6.3	0
Range	58.0-84.0	58.0-81.0	59.0-84.0	
Deprivation (IMD 2007)				0
Most deprived	4 (16.0%)	3 (37.5%)	1 (5.9%)	
Quintile 2	-	-	-	
Quintile 3	4 (16.0%)	1 (12.5%)	3 (17.6%)	
Quintile 4	7 (28.0%)	2 (25.0%)	5 (29.4%)	
Least deprived	10 (40.0%)	2 (25.0%)	8 (47.1%)	
Baseline PA: days/week of 30 min MVPA				0
0	1 (4.0%)	-	1 (5.9%)	
1	3 (12.0%)	1 (12.5%)	2 (11.8%)	
2	3 (12.0%)	2 (25.0%)	1 (5.9%)	
3	4 (24.0%)	1 (12.5%)	3 (17.6%)	
4	6 (15.7%)	3 (37.5%)	3 (17.6%)	
5	1 (4.0%)	-	1 (5.9%)	
6	2 (8.0%)	-	2 (11.8%)	
7	5 (20.0%)	1 (12.5%)	4 (23.5%)	
Meet PA recommendations	8 (32.0%)	1 (12.5%)	7 (41.2%)	
WEMWBS Summary score (min=14; max=70)				0
Mean (±SD)	53.8 ± 8.4	51.9±10.0	54.8±7.7	
Median	53.0	50.0	54.0	
Range	37.0-70.0	37.0-66.0	39-70	



The term 'health' was discussed by participants to understand what it meant to them. Participants were keen to express the importance of health *"without health you have nothing"*, and emphasis was often placed on health in relation to aging: "you need to keep yourself healthy as you age so you don't feel so old...through your diet, exercise, don't smoke, don't drink".

*and healthy"*. Generally participants saw mental health as *"mind agility, keeping the grey cells going"* or as *"feeling comfortable in your own skin, even as it wrinkles"*. In general it was felt that *"retired people today have a much more positive attitude"* to their lives and *"have much more disposable income and are fitter than previous generations"*.

*"feeling comfortable in your own skin even as it wrinkles"*  
(Mary)

Health was seen as a key factor for maintaining independence in later life, a major concern to most participants. Stories and examples of people who had lost their independence were often cited, again highlighting its importance. When asked about 'mental health' some participants were initially drawn to discussing mental health problems and issues such as dementia, depression and loss of cognitive function or as a *"freedom from anxiety or grief"*. Participants also seemed concerned that (particularly in the case of dementia) it could affect people they described as *"fit*

All participants were able to identify both physical and mental health benefits of physical activity *"I'm more mobile"*. The mental health benefits centred on and were closely linked to the social benefits of the group *"the social interaction here helps keep me going"* *"we have a laugh"* *"you feel good and relaxed after and feel better because you've made the effort to come"*.

*"feeling better about yourself"* (Edner)

Box 8: Psychological and social benefits of physical activity

*"being in a [physical activity group] gets you out of your depressions"*

*"exercise makes you more alert"*

*"relaxing afterwards, you feel better"*

*"you've got company, you see different people"*

*"we meet people we didn't know, it creates a community"*

*"you feel pleased with yourself for making the effort"*

When asked about the general benefits of being physically active participants focused on psychological and social factors (Box 8).

Physical benefits were discussed, but in many cases were of secondary importance:

*"I've lost a lot of weight"*

*"I can walk better now"*

*"it's helped my arthritis"*

A few participants highlighted some concerns about physical activity, although most acknowledged that if you *"make sure you are within your own limits then you are not in danger"*. Some concerns relating to physical activity were also seen as potential barriers to those who are not active:

*"I have known some very fit people that have died recently. That doesn't fit in with all the theory of doing lots of exercise" (Angela)*

A number of other barriers were also identified by participants. Some were practical, but most barriers were related to undertaking activities alone or the desire to participate (Box 9).

Attending a group alone was seen as the biggest potential barrier *"you just wouldn't go on your own"* and something that should be addressed. If people were given support then they would be more likely to attend: *"people need the right encouragement, it can make a big difference"*.

Box 9: Perceived barriers to physical activity

*"you can't do it unless you are fit enough"*

*"I wanted to go swimming but the busses don't run there and I don't drive, so I couldn't go"*

*"it's a big step if you're used to being on your own, it's a big step to go and meet people"*

*"can't be bothered"*

*"low motivation"*

*"Worried about wearing a leotard or the right clothing"*

*"you don't feel as able as you get older"*

*"my brain tell me I want to run, my body says I have to walk"*

*"there are a lot of people that want to do something, but find it hard on their own"*

*"people think they are too old to do it"*

*"if you've been part of a couple all your life and then you're not anymore, it can be hard"*

*"poor physical health can stop you from doing stuff"*

How to sell the mental health benefits of physical activity

*What type of activity?*

Participants emphasised the importance of group based activity *"you can walk alone, but it's not nearly as much fun as in a group"*. Although joining a group was thought to be difficult for some people, this was considered most appropriate as the social aspect of the activity was the most important. This

also relates to the importance of social contact for mental wellbeing in later life.

It was thought that for some people, meeting others would encourage them to continue *"if you weren't meeting people at a certain time and place, then you just wouldn't go"*. The most important thing was that the group *"must be made to suit the people that it's aimed at"*, that is tailored towards older adults.

When asked to specify the type of group participants were less uncertain: *"there isn't going to be one answer because everyone has different capabilities and likes"*. The following activities were most regularly suggested: *"Dancing", "older persons water aerobics", "movement to music", "walking", "gentle group exercise"*

Consideration should also be given to the person leading the group *"I wouldn't want a 20 year old man leading it"*. For already active individuals, it was felt that an older person would be most appropriate *"they wouldn't notice our lumps and bumps jiggling round as much as others might"*.

#### *How much should it cost?*

Cost was not a major issue for most participants (although fewer of them lived in areas of relative deprivation). As long as it was *"within your own budget"* it was thought to be appropriate. A number of participants did suggest that a group they were currently attending was ideal as it only cost £1 per session.

#### *Where would it take place?*

The physical activity group would need to be local as participants thought that

travel could become a barrier to attendance; location in relation to bus routes and the possibility of lift sharing schemes were considered important. Village halls or community centres were generally proposed as being a good place to hold a group.

Another suggestion relating to the group was that it should be established during the summer months. People would be much more comfortable leaving home or starting a group in good weather, by the time the weather gets bad in the winter they would have already got into a routine of going.

There was consensus that a group on a weekday morning would suit the majority of people in this population group *"then you're finished with it and you can do your own thing" "definitely not in the evening"*. Meal times were often set into a routine. Therefore, a group that fits around these times would also be more likely to promote attendance *"before you get the lunch ready is the best time" "but not too early otherwise you'd have to rush breakfast"*.

*Where and how would it be advertised?*  
In terms of advertising an exercise group, participants felt that the local paper, church newsletters, libraries, local radio or doctors' surgeries were all appropriate means of reaching the target population. It was felt that people would not trust or listen to government messages, but are much more likely to listen to the advice of GPs for other health professionals.

The use of pictures rather than just telling people to exercise was also perceived as a good idea: *"you've got to show old people what they can do, use pictures and things, not just tell them to go"*. Showing images of older people doing a range of different activities was identified as motivational and something that might encourage uptake.

For those who were active, although they enjoyed the benefits they associated with the groups, they felt it was important *"not to start preaching to those that are happy doing nothing"*.

### *Terminology*

When asking participants how they viewed the terms 'physical activity' and 'exercise' they were perceived to be

different. "Physical activity" was seen as *"everyday things"* like *"gardening, walking and housework"*. Alternatively, "exercise" was perceived as *"a gym with all the machines, I'd hate that"* or *"a class like aerobics"*. Some participants felt that the word 'exercise' would put older adults off as they would associate it with younger, fitter people.



*"young dolly birds who are lovely and trim seeing me being the size I am and not being able to do the exercises properly" (Janice)*



Some said physical activity and exercise were *"the same"* and others felt that exercise was something they enjoy: *"I do exercises everyday on my machine at home, to fetch the weight off I put on when I retired" (Arthur)*.

When asked what sort of words or phrases should be used when advertising activity groups, participants suggested *"emphasising the social side of it"*. There was also consensus that the fun aspect was key; *"when you're retired everything you do has got to be fun"*, *"tell them it's good fun!"*. It was felt that the group should be promoted as a social group *"people wouldn't like it if it was pushed as exercise"*; *"it's the social that's better"*; *"the exercise is secondary"*. These comments highlight the importance that this population group attach to socialising.

Other suggested phrases or slogans were such as; *"fun walk"*, *"walking back to happiness"*, *"improving your mental alertness"*, *"it's a laugh"*.

#### *What benefits are envisaged?*

The mental health benefits of being physically active were clearly recognised by participants and directly linked to the social interaction associated with participation at the exercise group.

Those who were already active were able to discuss their feelings following exercise, whereas participants who were relatively inactive envisaged primarily social/psychological, rather than physical benefits (Box 10).

#### Box 10: Envisaged benefits of physical activity

*"if you are feeling a bit down you can come on a walk then it changes, you have a laugh"*

*"when we first started going to this walking group I said "oh, I don't think we need to go with all these other people, we can just do it on our own" but then after two or three goes at it you feel like you belong...it's a matter of belonging"*

*"I go on the walks for a laugh"*

*"you've got to treat everything as a laugh, that is what you'd get"*

*"I can go three or four days without seeing anybody...it can make you withdraw into yourself...exercise would change that"*

## Part 2: Piloting of Warwick and Edinburgh Mental Health Scale and physical activity measures

### Baseline data

The WEMWBS and physical activity questionnaires were primarily piloted in older people (although administered to all focus groups participants). In total there were 160 respondents at baseline, although missing data from some questionnaire fields resulted in complete data on fewer participants (numbers vary with outcomes; Appendix 3). Data were collected from participants of ten different over-50s exercise groups in the Stafford/Stone areas. Numbers of respondents per group (at baseline) ranged from 3 to 33.

At baseline participants were predominantly female (76%), with ages ranging from 54.5 to 88.4 years. Using participant postcodes, scores for deprivation<sup>21</sup> indicated a relatively affluent population, with over half living in areas within the least deprived 40% of national rankings (Figure 1). Baseline data on physical activity levels and 'positive mental health' (based on the WEMWBS)

suggested relatively high activity levels and mental health at or above average (Table 4 and Appendix 3). Over half reported being active at or above recommended levels<sup>b</sup> and over one-third reported undertaking the recommended 30 minutes moderate-vigorous activity everyday (35%).

Data from the WEMWBS questionnaire produced summary scores were similar to those reported in Scottish Health Education Population Survey (HEPS) survey<sup>19</sup>. The overall median value of 53.0 (range 30-70) reported here is slightly higher than those reported for two of the equivalent age ranges in the Scottish sample (Table 4).

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<sup>b</sup> 30 minutes of activity of at least moderate-vigorous intensity (MVPA) on 5 or more days per week

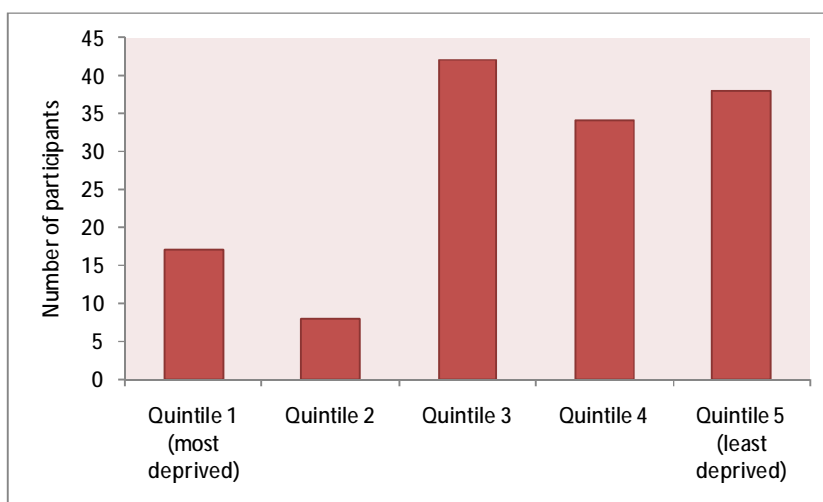


Figure 1.  
Deprivation levels  
of respondents  
(IMD 2007)

Table 4. Median WEMWBS summary scores by age category for study sample vs. HEPS study population

	Sample		HEPS survey	
	N	Median WEMWBS	N	Median WEMWBS
Age <65 yrs	34	54.5	334	52.0
Age 65-74 yrs	57	56.0	274	52.0
Age 75+ yrs	60	49.5	61	51.0

### Follow-up data

Out of the 160 respondents at baseline, complete three-month follow-up data were available for 53. This was in part due to a degree of unavoidable staggering in baseline data collection (i.e. some new baseline data collected during follow-up visits). This relatively low follow-up reduces the power of any statistical pre-post intervention comparison. Descriptively, there was little difference in terms of physical

activity levels and the WEMWBS scores between baseline and follow-up.

Figure 2 illustrates the difference in WEMWBS score. Paired sample t-test analysis revealed no significant difference in mean scores at baseline versus follow-up ( $55.12 \pm 8.3$  vs.  $55.44 \pm 8.1$ ;  $t=-.347$ ,  $p=0.730$ ).



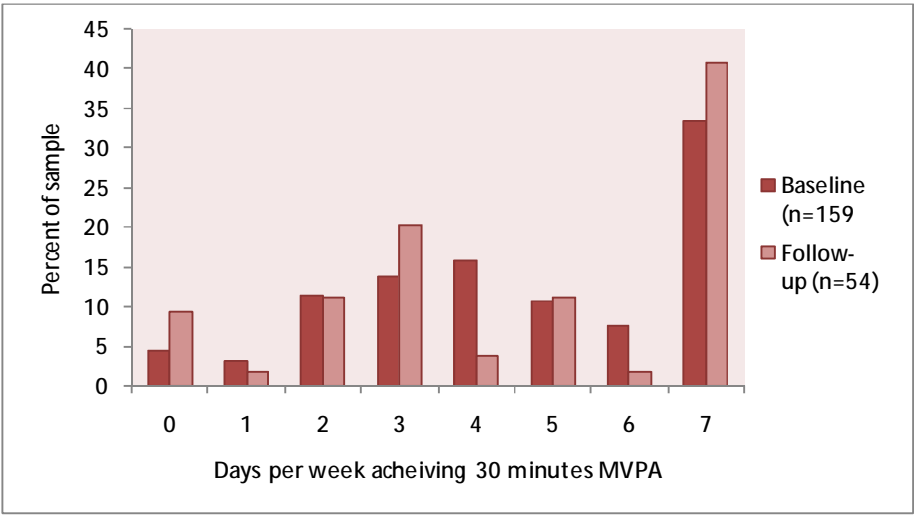


Figure 2. Baseline vs. follow-up physical activity levels

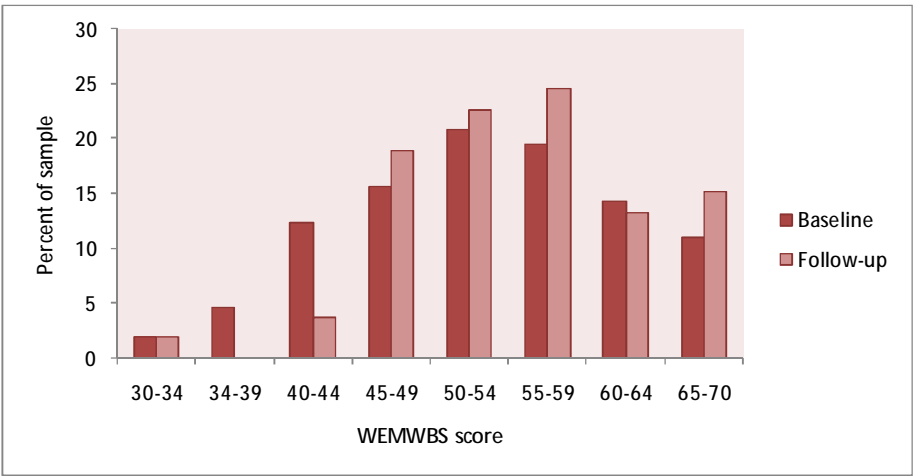


Figure 3. Baseline vs. follow-up WEMWBS scores

Data in Table 5 (and figure 3) show that the majority of participants reported no change in physical activity levels; the majority reported same levels at baseline and follow-up, with approximately equal numbers reporting increases and decreases. This is a likely consequence of attendance at the exercise group prior

to baseline data collection, supported by the large proportion of respondents reported high activity at baseline.

Table 5. Pre-post comparison for self-reported physical activity participation (days per week of 30 min MVPA) (results from Wilcoxon rank test; n=54)

Change in physical activity	N	%	Test statistic	p-value
Increased days MVPA	12	22.2	Z= .654	.513
Decreased days MVPA	13	24.1		
No change	29	53.7		

Before reaching conclusions based on the project findings it is important to recognise the study limitations.

## Study limitations

### *Focus groups*

Although a fundamental part of the social marketing approach, there are some limitations associated with use of focus groups. First, the need to segment groups, for example, by age and gender, presented some difficulties in recruitment by narrowing the potential target population of an already 'hard-to-reach' group. This was particularly true for group 1 (deprived community) for whom a financial incentive was necessary to promote participation.

Second, there is an inherent limitation of group discussions that more vocal individuals can dominate discussions and

limit the range of opinions expressed.

This was not an obvious problem in any of the focus groups conducted, but should be considered. Third, the logistics of participant recruitment and conducting focus groups in older people meant that segmentation by gender was difficult. Potential gender differences in opinion were thus not as well represented.

### *WEMWBS*

The WEMWBS questionnaire is relatively new and only subject to one validation study to date<sup>19</sup>. The purpose of the present research was not validation, but to obtain some feedback on practical issues in completing the questionnaire.

Although compact, the tabular appearance and number of items on a single page made it difficult for some

older respondents to follow individual items across the page, leading to errors in completion. For this population group, greater separation of questions would be recommended.

Interview-administration was necessary in a number of cases, such as when respondents had forgotten reading glasses or were unable to complete the questionnaire themselves. In this context some of the content was more

sensitive. Views from the questionnaire administrator are expressed in Box 11.

The scoring of the items also created a ceiling effect, reducing the sensitivity of the measure in discriminating between those at the high end of the scale.

Use of the recently developed (and not yet fully validated) reduced 7-item scale could be more appropriate (Box 12). The

#### Box 11: Issues with WEMWBS in older people

§ On occasions it was necessary to interview-administer the WEMWBS questionnaire as participants requested support with its completion. This usually took place in the presence of other group members. The possibility that others could overhear participants could have influenced responses.

§ Some questionnaire items prompted emotive responses from participants. For example, one participant reflected on the death of their husband. The question 'I've been feeling loved' drew her attention to his death. This was similar for several other participants who lived alone.

§ Some participants whose independence was limited felt that the item 'I've been dealing with problems well' was not applicable to them (i.e., they do not have to deal with any problems).

§ The item 'I've been interested in new things' was irrelevant for many participants. Within this population group, maintenance of existing activities and independence is likely to be a more appropriate indicator well-being.

**Box 12. 7-item WEMWBS**

- 1 - I've been feeling optimistic about the future
- 2 - I've been feeling useful
- 3 - I've been feeling relaxed
- 4 - I've been dealing with problems well
- 5 - I've been thinking clearly
- 6 - I've been feeling close to other people
- 7 - I've been able to make up my own mind about things

omission of certain items and reduction in the number of questions to be scored in the same scale should help to reduce errors in completion within this population group.

*Physical activity measure*

As a surveillance measure the physical activity question is attractive given its ease of administration, brevity and analysis. However, a relatively crude single item measure is inevitably limited in what information can be obtained and its sensitivity to classify individuals appropriately. Again, use within a sample of older people presented some issues.

The examples of moderate intensity activity were modified as they were not appropriate for the target age group.

The question was changed:

From: *In the past week, on how many days have you accumulated at least 30 minutes of moderate intensity physical activity such as brisk walking, cycling, sport, exercise, and active recreation? (Do not include physical activity that may be part of your job or usual role activities.)*

To: *In the past week, on how many days have you accumulated at least 30 minutes of moderate intensity physical activity such as walking, gardening, housework or any activity that gets you out of breath?*

Some were confused by the options for completion, believing that the options for 'number of days' (0-7) represented the 'days of the week', ticking several boxes according (e.g. ticking 1, 3 and 5 to represent activity on Monday Wednesday and Friday). Although the relevant data could be obtained in such cases, this highlights an area to be considered.

Without comparison against other measures it is not possible to judge the validity of the question. However, it is likely that there was considerable over-reporting in the present samples given

the number reporting 30 minutes of MVPA every day. The outcome from the validation study will help inform this discussion and perhaps suggest a means to avoid such problems or tailor to different population groups.

### *Resources*

Finally, there were inevitable limitations of the approach taken as a result of the available time and resources. Given the relatively short project duration (6

months), it was designed as a pilot study and was limited to two segmented population groups to identify appropriate next steps and guide future work in this area. This was, therefore, a scoping exercise; the first important steps of a social marketing project to lead into pretesting and similar scoping in different population segments.

Despite these limitations some useful information has been collected from important target populations.

# Section 4: Recommendations and conclusions

Adults living within a deprived community:

It is apparent that the term 'mental health' immediately leads to negative associations ("loonies on drink and drugs"; "depression; anxiety; stress and nerves") and therefore using this term in relation to the physical activity could be off putting for many:

*"I am not coming here because I am depressed!"*. Therefore, it is suggested that using different words and terms with more positive associations would be more effective: *"Confidence booster"*, *"Stress relief"*, *"Occupied mind"*

The main motivators for physical activity participation were the potential physical health benefits (e.g., losing weight, looking better). Future research should investigate further the impact of these competing messages and where the 'mental health' message will fit in.

Family is an important concept for this population group and is good for mental health; therefore physical activity that is appropriate for families is recommended.

Physical activity interventions and opportunities should be advertised locally, at shops or pubs.

Older adults:

Using the term 'physical activity' rather than 'exercise' would be preferable as some individuals had concerns about what 'exercise' would entail.

Placing emphasis on advertising physical activity as a social group would be more likely to encourage attendance. Socialising and having a laugh were particularly important for this population group, as was the importance of maintaining independence in later life. All of which are important factors for good mental health in this age group.

A group that takes place on a mid-morning on a week day was regularly suggested as the most convenient time. Participants often referred to their “usual routines”. Changing a routine was perceived to be difficult. Physical activity could be “sold” for its “mental health” benefits within this population group.

In both segmented population groups, participants were open to undertaking physical activity for its ‘mental health’ benefit. However, those living within the deprived community appeared more concerned about competing physical health benefits. Further investigation is required when considering product placement. Box 13 summaries these key concepts.

### Social marketing: the next phase

This project involved an initial scoping exercise to gain an in depth customer insight into undertaking physical activity for mental health benefit. The next phases should involve different market segments and the pre-testing of intervention proposals based on findings from the scoping work. This would link to the ‘development’ stage of the Total Process Planning model (box 2). The development of any intervention should continue to involve the opinions of segmented population groups to ensure suitability, prior to implementation.

Physical activity programmes considering measuring participants’ mental health should explore the use of existing scales and their appropriateness for the specific context and programme aims (e.g., WEMWBS 7 Item scale; SF-12).

Box 13: Key aspects to consider	
Group 1: Adults living within a deprived community	Group 2: Older adults
<ul style="list-style-type: none"> <li>• Family</li> <li>• Cost</li> <li>• Physical benefits</li> <li>• Location</li> <li>• Terminology</li> </ul>	<ul style="list-style-type: none"> <li>• Social</li> <li>• Independence</li> <li>• Maintain cognitive function</li> <li>• Location</li> <li>• Terminology</li> </ul>

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## Appendix 1

### Semi-structured focus group guide questions

Warm up (5 minutes)

#### INTRODUCTION & WARM UP – 10 MINUTES

- § Moderator will inform respondents that:
- § The research is anonymous and confidential.
- § False names will be used in the report and the report will only be used for the study for which it is intended and not for wider publication.
- § We are all individuals and may not share the same opinions, habits, practices, feelings as each other. You are not being judged on what you say. There are no right or wrong answers, just honest opinions.
- § The session is recorded (and observed). The tapes are securely retained by the research company and then destroyed in line with data protection.
- § You do not have to answer any questions or undertake any exercises that you feel uncomfortable with.
- § Please turn off mobile phones for the duration of the discussion.
- § “Tonight we are discussing, health, well-being and physical activity”
- § Each respondent is to introduce themselves to the group with their first name, age, family details, job, hobbies & interests.

#### HEALTH & MENTAL HEALTH – SPONTANEOUS ASSOCIATION – 20 MINUTES

Objective: Focus their mind on topic of health, and more specifically mental health, and attitudes and practices to maintaining good mental health.

- § Flip Chart

§ Health:

§ Moderator will invite the group to discuss Health.

§ Spontaneous association - brainstorm the word Health – “call out everything that springs to mind when you see this word”.

§ How important is being in good health to you?

§ What steps do you take to maintain good health? –spontaneous response - what else?, what else?, anything else? (If any ‘programmes/initiatives’, [e.g. gym membership, slimming clubs] are referred to encourage stories of how they became aware of these and what motivated them to join, key influencers etc.)

§ Mental Health:

§ Now, turning our minds to a specific aspect of health, mental health...

§ Moderator will invite the group to discuss mental health.

§ Spontaneous association - brainstorm the term Mental Health – “call out everything that springs to mind when you see this term”.

§ Moderator is to note all comments and probe for the rationale behind their response.

§ If ‘mental health’ links to negativity, probe: what terms would you use to describe mental health in a positive way?

§ How important is being in good mental health to you?

§ What steps do you take to maintain good mental health? –spontaneous response - what else?, what else?, anything else? (If any ‘programmes/initiatives’, [e.g. gym membership, slimming clubs] are referred to encourage stories of how they became aware of these and what motivated them to join, key influencers etc.)

**PHYSICAL ACTIVITY & MENTAL HEALTH - SPONTANEOUS ASSOCIATION AND BARRIERS & ENABLERS – 30 MINUTES**

Objective: Focus their mind on topic of physical activity, and more specifically their perception of whether being physically active maintains good mental health.

§ Exercise/Physical Activity:

- § Moderator will invite the group to discuss exercise/physical activity.
- § Spontaneous association - brainstorm the word Exercise – “call out everything that springs to mind when you see this word”.
- § In your opinion, what is the difference between Exercise and Physical Activity?
- § Thinking about your lifestyle, what factors determine how much exercise/physical activity you get and how active you are?
- § Assess attitudes to physical activity and current activities: How do you feel about exercise/physical activity? Identify barriers/enablers: Is it something you want to do more of but feel you can't? (e.g. lack of time/money/energy) OR is it something you avoid, OR is it something you actively engage in?
- § If desire to, but can't – encourage each individual to tell their story - specifically why not? – how do you feel about that? – what do you feel you are missing out on by not being more physically active? – how could this situation be overcome?
- § If avoiding – encourage each individual to tell their story - specifically why is this the case? - How could this attitude/behaviour be overcome?
- § If actively engaging – encourage each individual to tell their story - why?; where?; when?; who with?; how often?; what venues/times?; for how long? why did you start?: – what are the specific benefits of exercise /physical activity for you?
- § To the whole group:
- § What types of exercise/physical activities do you most enjoy? – LIST – why?
- § And what types of exercise/physical activities are not enjoyable for you (whether physically or mentally)? – LIST – why not?
- § Flip Chart:
- § Suspending thoughts on whether you take part in physical activities or not, as a group, list all of the benefits for an individual to engage in regular physical activity – LIST.
- § Moderator: if 'mental health/well-being' is mentioned probe fully into the specific mental health benefits of physical activity, and encourage stories of instances and examples from their experience to illustrate this.
- § Moderator: If 'mental health/well-being' is not mentioned probe as to why not – in your opinion is there a link between physical activity and mental health or not? – if so, what is this and how do you know?; if not, why not?

- § Do you know what the government guidelines are for the amount of daily physical activity we adults should aim for to maintain good physical and mental health? – assess level of awareness – for those who are aware – what is this daily amount?; how do you know this?; what types of activities does the government have in mind?; do you yourself aim for this? – why/why not?
- § To the group: Moderator: state '30 minutes of moderately intense physical activity per day' - how do you personally feel about this? – assess any barriers they have to this level of physical activity and how these could be overcome.

### *MESSAGES TO 'SELL' THE MENTAL HEALTH BENEFITS OF PHYSICAL ACTIVITY - 20 MINUTES*

Objective: To encourage the group to 'sell' the mental health benefits of physical activity in the most motivational and inspirational manner using their own words/terms.

- § One of the key reasons I have been asked to conduct this research is to gain your opinion of a new service for Haregate, which has the aim of increasing members of the community's positive mental health through physical activity.
- § Flip Chart:
- § *How do you feel about the prospect of Haregate getting more physically active, fitter and healthier? – probe fully into the benefits this would bring them personally and the community as a whole.*
- § Imagine you are the team responsible for designing a locally based service aimed at people like yourselves to encourage them to be more active, so as to increase mental health and well being.
- § Which messages/words/terms/offerings within the service would be most attractive to you? – why?
- § And which messages/words/terms/offerings should be avoided? – why?
- § If not mentioned spontaneously probe into their perception of the term 'mental health', the images in their minds, and its relevance to the service.
- § Imagine the service as a person, what should it's character be? – e.g. fun?, professional?, medical?, sporty?
- § How should it make you feel?

- § Where should it be located?; At what times of day?; By whom?; mixed/single gender sessions?; what types of activities would motivate and interest you?
- § In your opinion, what are the key benefits you would gain from joining this particular physically active programme? - In what ways is it unique from others? (If not mentioned spontaneously: probe – Haregate specific) – how attractive is that to you?
- § As a group imagine you have been set the task of attracting members of the community to the service, create some motivational statements to say why you/they should partake.
- § Would your involvement in it affect or impact on other members of your family/friends or not? – why?/why not?
- § If this were currently available how attracted are you yourselves to try it - why?/why not?
- § What is the best way for you to learn about it? – e.g. Local press; doctor’s surgery?
- § What would you expect to pay for involvement?
- § Would paying for it have an affect on your willingness to take part or not?
- § If you were designing the service what would you suggest to make it as attractive as possible so that it would engage and connect with you? – call out the key words, pictures or terms that would draw you in.
- § What overall story should it tell? E.g. inspirational stories about improved mental health through physical activity or shocking stories about living with physical inactivity – which is most likely to grab your attention and prompt a change of behaviour?
- § What name would you give the service? – why?

## Appendix 2

### Questionnaire components

#### A. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

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## B. Physical activity measure

### Physical activity:

In the past week, on how many days have you accumulated at least 30 minutes of moderate intensity physical activity such as brisk walking, cycling, sport, exercise, and active recreation? (Do not include physical activity that may be part of your job or usual role activities.)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2	3	4	5	6	7

## Appendix 3

### Summary of sample characteristics at baseline

	Total	Male	Female	Incomplete data (n)
Number of participants	158	38 (24.1%)	120 (75.9%)	2
Age (yr)				2
Mean	70.8 ± 7.3	70.1 ± 6.9	71.0 ± 7.4	
Range	54.5-88.4	58.4-81.8	54.5-88.4	
Deprivation (IMD 2007)				19
Most deprived	17 (12.1%)	3 (9.7%)	14 (12.7%)	
Quintile 2	8 (5.7%)	3 (9.7%)	5 (4.5%)	
Quintile 3	42 (29.8%)	12 (38.7%)	30 (27.3%)	
Quintile 4	34 (25.5%)	8 (25.8%)	28 (25.5%)	
Least deprived	38 (27.0%)	5 (16.1%)	33 (30.0%)	
Baseline PA: days/week of 30 min MVPA				1
0	7 (4.4%)	5 (13.2%)	2 (1.7%)	
1	5 (3.1%)	2 (5.3%)	3 (2.5%)	
2	18 (11.3%)	5 (13.2%)	13 (10.8%)	
3	22 (13.8%)	1 (2.6%)	21 (17.5%)	

## Appendix 4

### Sport England market segments

Segment	Descriptor	Segment	Descriptor
<b>A01</b>	Competitive Male Urbanites	<b>C11</b>	Comfortable Mid-Life Males
<b>A02</b>	Sports Team Drinkers	<b>C12</b>	Empty Nest Career Ladies
<b>A03</b>	Fitness Class Friends	<b>C13</b>	Early Retirement Couples
<b>A04</b>	Supportive Singles	<b>C14</b>	Older Working Women
<b>B05</b>	Career Focused Females	<b>C15</b>	Local 'Old Boys'
<b>B06</b>	Settling Down Males	<b>C16</b>	Later Life Ladies
<b>B07</b>	Stay at Home Mums	<b>D17</b>	Comfortable Retired Couples
<b>B08</b>	Middle England Mums	<b>D18</b>	Twilight Year Gents
<b>B09</b>	Pub League Team Mates	<b>D19</b>	Retirement Home Singles
<b>B10</b>	Stretched Single Mums		