Background and aims

‘Get Doncaster Moving’ aims to help Doncaster’s communities become healthier and more vibrant, by increasing participation in physical activity and sport. In late 2017 Sport England selected 12 locations around England to become Local Delivery Pilots. Their aim is to explore how stubborn participation and physical inactivity patterns can be addressed in a place-based way with a clear focus on delivering sustainable behaviour change for individuals. As part of this work, Get Doncaster Moving is working with the Behavioural Science Consortium to explore current physical activity levels and to understand why people are more, or less active within different communities in Doncaster. For the first phase of this work we have conducted a survey to explore physical activity in communities identified by Get Doncaster Moving, including communities in which there were high proportions of people on low incomes and households with children and families.

In phase 2 we will explore barriers to physical activities in more depth by training community explorers to undertake interviews with members of their community about physical activity; and in phase 3 we will use the understanding gained from phases 1 and 2 to inform the development of interventions to increase physical activity co-designed with members of those communities.

The aims of the survey were:

1. To investigate levels of physical activity in eight Doncaster communities.
2. To assess the barriers and facilitators for physical activity within those communities.
Survey design

We assessed physical activity using the short form of the Active Lives survey* which measures the activity levels of people and uses this to classify them as being active, fairly active or inactive. We also measured sedentary behaviour using items from the International Physical Activity Questionnaire (IPAQ) and asked about children’s activity outside of school, and about how people travelled to work or their place of study.

To assess key barriers and facilitators to physical activity we used a psychological model designed to assess people’s capabilities, opportunities and motivations (the “COM-B model”). This helped us to develop the survey to find out about which different factors are barriers or facilitators to physical activity for different people.

We also asked questions about age, gender, ethnicity, physical or mental health conditions, education, employment.

The COM-B model says that being physically active depends on

1. Having the physical skills and stamina to be physically active (physical capability)
2. Knowing about the importance of physical activity, and being able to make decisions and plans to be physically active (psychological capability)
3. Having sufficient time and the necessary resources to be physically active (environmental opportunity)
4. Having enough support from other people to be physically active (social opportunity)
5. Wanting to be physically active (reflective motivation)
6. Having routines and habits to be physically active (automatic motivation)

*www.sportengland.org/research/active-lives-survey
Method

We conducted the survey face-to-face using a door-knocking approach in each of eight Doncaster communities:

In total we recruited 1,120 participants across these eight locations and made sure that we surveyed people with different ages, genders, ethnicities and disabilities.

Interviewers explained the purpose of the research and gained informed consent before asking the survey questions and recording the responses.
Physical activity across the sample

The results showed that levels of activity in the eight Doncaster communities were much lower than previous research had shown for Doncaster as a whole and for England more broadly.

Physical activity varied by age (older people are less active than younger people), gender (women are less active than men), education (people with higher levels of educational qualification are more active than those with less) and employment (employed people were more active than those who were unemployed, retired or looking after children).

<table>
<thead>
<tr>
<th>Physical Activity Classification</th>
<th>Amount of moderate intensity physical activity per week</th>
<th>Doncaster Communities in this survey</th>
<th>Sport England Data for Doncaster as a whole</th>
<th>Sport England Data for England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>0-29 minutes</td>
<td>57.7%</td>
<td>29.1%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Fairly Active</td>
<td>30-149 minutes</td>
<td>11.7%</td>
<td>11.9%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Active</td>
<td>150+ minutes</td>
<td>30.6%</td>
<td>59.0%</td>
<td>62.3%</td>
</tr>
</tbody>
</table>

(Definitions of physical activity from Sport England)

1Sport England Active Lives Survey 2017
2Sport England Active Lives Survey 2018
All of the Capability, Opportunity and Motivation (COM) factors showed the same pattern across the different levels of physical activity i.e. that those who were inactive rated all of the factors lower on the scales indicating that these were barriers to physical activity for them. Those who were fairly active and active rated the factors higher on the scales indicating that these were less of a barrier or a facilitator for physical activity for them.

The average Capability, Opportunity and Motivation ratings by physical activity classification

<table>
<thead>
<tr>
<th>Barrier/Facilitator</th>
<th>Inactive Average rating</th>
<th>Fairly Active Average rating</th>
<th>Active Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having the physical skills and stamina to be physically active (physical capability)</td>
<td>5.40</td>
<td>6.68</td>
<td>8.71</td>
</tr>
<tr>
<td>Knowing about the importance of physical activity, and being able to make decisions and plans to be physically active (psychological capability)</td>
<td>7.81</td>
<td>8.18</td>
<td>9.22</td>
</tr>
<tr>
<td>Having sufficient time and the necessary resources to be physically active (environmental opportunity)</td>
<td>5.53</td>
<td>6.44</td>
<td>7.95</td>
</tr>
<tr>
<td>Having enough support from other people to be physically active (social opportunity)</td>
<td>5.45</td>
<td>6.50</td>
<td>7.94</td>
</tr>
<tr>
<td>Wanting to be physically active (reflective motivation)</td>
<td>4.52</td>
<td>6.12</td>
<td>8.24</td>
</tr>
<tr>
<td>Having routines and habits to be physically active (automatic motivation)</td>
<td>3.30</td>
<td>4.68</td>
<td>7.69</td>
</tr>
</tbody>
</table>

This data is presented graphically on the following page:
The average Capability, Opportunity and Motivation ratings by physical activity
### Activity levels by demographics

<table>
<thead>
<tr>
<th>Age</th>
<th>Inactive</th>
<th>Fairly Active</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-34</td>
<td>51%</td>
<td>11%</td>
<td>38%</td>
</tr>
<tr>
<td>35-64</td>
<td>57%</td>
<td>12%</td>
<td>31%</td>
</tr>
<tr>
<td>65+</td>
<td>69%</td>
<td>13%</td>
<td>18%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Inactive</th>
<th>Fairly Active</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>53%</td>
<td>13%</td>
<td>34%</td>
</tr>
<tr>
<td>Female</td>
<td>62%</td>
<td>10%</td>
<td>28%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment</th>
<th>Inactive</th>
<th>Fairly Active</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed (Working or Education/student)</td>
<td>45%</td>
<td>12%</td>
<td>43%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>72%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td>Retired / Caring for home</td>
<td>65%</td>
<td>12%</td>
<td>23%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Inactive</th>
<th>Fairly Active</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>No qualification or qualifications lower than GCSE A*-C or NVQ level 2</td>
<td>67%</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>GCSE A*-C or NVQ level 2 qualifications</td>
<td>55%</td>
<td>13%</td>
<td>32%</td>
</tr>
<tr>
<td>A-levels or equivalent</td>
<td>45%</td>
<td>10%</td>
<td>45%</td>
</tr>
<tr>
<td>Degree or other higher qualification</td>
<td>40%</td>
<td>11%</td>
<td>49%</td>
</tr>
</tbody>
</table>
**Balby**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Activity Level</th>
<th>Minutes per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>64%</td>
<td></td>
<td>&lt;30 mins/week</td>
</tr>
<tr>
<td>Fairly Active</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>25%</td>
<td></td>
<td>150+ mins/week</td>
</tr>
</tbody>
</table>

Key barriers to physical activity for inactive people were:
- Not having routines or habits (automatic motivation)
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Having less support from others (social opportunity)

- People sat for an average of 343 minutes on a non-working day
- People did light walking for an average of 491 minutes per week
- 41% actively travelled to work or study (cycled or walked) for an average of 19 minutes a day
- Children were active for an average of 79 minutes a week outside of school

**Balby Bridge**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Activity Level</th>
<th>Minutes per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>71%</td>
<td></td>
<td>&lt;30 mins/week</td>
</tr>
<tr>
<td>Fairly Active</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>21%</td>
<td></td>
<td>150+ mins/week</td>
</tr>
</tbody>
</table>

Key barriers to physical activity for inactive people were:
- Not having routines or habits (automatic motivation)
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Having less physical skills and stamina to be active (physical capability)

- People sat for an average of 437 minutes on a non-working day
- People did light walking for an average of 438 minutes per week
- 52% actively travelled to work or study (cycled or walked) for an average of 27 minutes a day
- Children were active for an average of 31 minutes a week outside of school

*Each finding has been ranked so that it can be compared across the other communities. Those findings which have a yellow background are ranked the highest, orange in the middle, and red the worst.*
Key barriers to physical activity for inactive people were:
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Not having routines or habits (automatic motivation)
- Having less physical skills and stamina to be active (physical capability)
- Having less time and/or fewer resources to be active (environmental opportunity)

People sat for an average of 374 minutes on a non-working day
People did light walking for an average of 517 minutes per week
33% actively travelled to work or study (cycled or walked) for an average of 20 minutes a day
Children were active for an average of 174 minutes a week outside of school

Each finding has been ranked so that it can be compared across the other communities. Those findings which have a yellow background are ranked the highest, orange in the middle, and red the worst.
Edlington

- 65% Inactive < 30 mins/week
- 11% Fairly Active
- 24% Active 150+ mins/week

Key barriers to physical activity for inactive people were:
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Not having routines or habits (automatic motivation)
- Having less physical skills and stamina to be active (physical capability)

People sat for an average of 364 minutes on a non-working day
People did light walking for an average of 536 minutes per week
34% actively travelled to work or study (cycled or walked) for an average of 19 minutes a day
Children were active for an average of 162 minutes a week outside of school

Intake

- 40% Inactive < 30 mins/week
- 10% Fairly Active 30-149 mins/week
- 50% Active 150+ mins/week

Key barriers to physical activity for inactive people were:
- Not having routines or habits (automatic motivation)
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Having less physical skills and stamina to be active (physical capability)

People sat for an average of 321 minutes on a non-working day
People did light walking for an average of 689 minutes per week
34% actively travelled to work or study (cycled or walked) for an average of 17 minutes a day
Children were active for an average of 207 minutes a week outside of school

Each finding has been ranked so that it can be compared across the other communities. Those findings which have a yellow background are ranked the highest, orange in the middle, and red the worst.
Stainforth

48% Inactive
<30 mins/week

9% Fairly Active
150+ mins/week

43% Active

Key barriers to physical activity for inactive people were:
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Not having routines or habits (automatic motivation)
- Having less physical skills and stamina to be active (physical capability)

People sat for an average of 274 minutes on a non-working day

People did light walking for an average of 410 minutes per week

62% actively travelled to work or study (cycled or walked) for an average of 9 minutes a day

Children were active for an average of 261 minutes a week outside of school

Wheatley

55% Inactive
<30 mins/week

15% Fairly Active

30% Active

Key barriers to physical activity for inactive people were:
- Not having routines or habits (automatic motivation)
- Not wanting to be active/Having less desire to be active (reflective motivation)
- Having less time and/or fewer resources to be active (environmental opportunity)

People sat for an average of 338 minutes on a non-working day

People did light walking for an average of 437 minutes per week

38% actively travelled to work or study (cycled or walked) for an average of 21 minutes a day

Children were active for an average of 84 minutes a week outside of school

Each finding has been ranked so that it can be compared across the other communities. Those findings which have a yellow background are ranked the highest, orange in the middle, and red the worst.
What does this tell us?

Physical activity levels are below national averages
Physical activity rates in these Doncaster communities are very low compared to national figures and compared to previous figures for Doncaster overall, with the majority doing fewer than 30 minutes a week (57.7% compared to 29.1% for Doncaster as whole and 25.2% for England). This suggests that the communities previously identified in research are appropriate targets for change.

Individual factors play a part
There were differences in physical activity by gender, age, education level, and employment status suggesting that interventions will need to consider these different groups and their needs and experiences.

Possibilities for positive change
Participants who were more physically active reported higher levels of capability, opportunity and motivation than those who were less active. This suggests that interventions should consider how to make positive changes across these three factors.

Common barriers to physical activity for inactive people
Automatic motivation, that is, not having habits and routines for physical activity was one of the main barriers to physical activity for people who were inactive in all eight of the communities. Reflective motivation i.e. not wanting to be physically active was a main barrier for in the seven of the communities and Physical capability i.e. not having the skills and stamina to be active was a main barrier for six of the eight communities.

Local community context is important
There are differences between the communities in terms of levels of physical activity and also the key barriers to physical activity for those who are inactive. This suggests that the local community context needs to be considered in intervention development and there is unlikely to be a one-size fits all solution.

Wide variations in physical activity among children
There is wide variation in the amount of physical activity children are doing outside of school. Although we did not explore the amount of physical activity that children are doing within school it is likely that overall many children are not meeting recommendations to be active for at least 60 minutes a day from 31 minutes in Balby Bridge to 261 minutes in Stainforth.
Next steps

We need to explore the experiences of people living in these communities in greater depth to enable us to understand peoples’ views towards physical activity and how the barriers and facilitators identified in this survey impact on their ability to be active. Understanding these factors within the community context is important.

In order to explore these issues the next phase of our work will involve the training of community explorers to undertake in-depth interviews with members of the relevant communities. Community explorers will be members of these local communities who have an interest in working to understand the issues and support change to benefit their communities. Their involvement will help us to identify the key issues impacting on physical activity within the communities, and also to explore the assets within each of the communities that might provide the opportunities and means for change.

The later phases of our work will then take these findings and use them to identify a range of potential interventions and services to help improve physical inactivity levels within each community using a co-design approach.
Authors

Behavioural Science Consortium: Madelynne Arden, Martin Lamb, Laura Kilby (Sheffield Hallam University) and Christopher Armitage (Manchester University).

We would like to thank Qa research who undertook the door to door survey in Doncaster, Peter Fearnley who provided administrative support, and all the survey respondents who gave their time to take part.