



Public Attitudes to Physical Activity in Glasgow

Report for
Glasgow Centre for Population Health

January 2011

Registered Name: EKOS Ltd

Registered Office: St. George's Studios, 93-97 St. George's Road, Glasgow, G3 6JA

Telephone: 0141 353 1994

Web: www.ekos-consultants.co.uk

Contents

1.	Introduction	1
2.	Research Method and Limitations	2
3.	Context	5
4.	Self-Reported Levels of Physical Activity	9
5.	Attitudes and Feelings of Control	13
6.	Motivation and Barriers	17
7.	Focus Group Findings	20
8.	Conclusions	22
	Appendix A: References	24

1. Introduction

- 1.1 Scotland's poor record on health is well established. The country's performance on a range of health related indicators from smoking rates and obesity to the incidence of physical and mental health problems such as heart disease, cancer and anxiety paint a consistently challenging picture of poor health and health inequalities.
- 1.2 Evidence also suggests that many of these public health issues are particularly acute in Glasgow. For example, recent research found significantly higher mortality rates in Glasgow compared to similarly deprived cities elsewhere in the UK, suggesting an as yet unexplained 'Glasgow effect' (GCPH Briefing Paper, 2010).
- 1.3 The reasons for this are complex and multifaceted, encompassing factors such as diet, education, socio-economic conditions and lifestyle issues. In particular, the impact of physical activity on health outcomes is now widely recognised as a key public health issue, and there is also growing evidence of the links between physical activity and mental well being (e.g. NHS Health Scotland, 2008).
- 1.4 However, recent survey data (NHS Scotland, 2009) indicate that the majority of Scottish adults still do not meet minimum recommended levels of physical activity, and that health inequalities persist.
- 1.5 In light of Scotland's enduringly poor health record and the important preventative role of physical activity in physical and mental health, there is growing interest in understanding the reasons for low levels of physical activity and in identifying appropriate policy responses.
- 1.6 With these issues in mind, the Glasgow Centre for Population Health (GCPH) commissioned research into the attitudes, barriers, and motivations towards physical activity among the adult population of Glasgow. In particular, the study sought to:
 - explore perceptions, attitudes and experiences of people within Glasgow towards taking physical activity;
 - explore levels of motivation towards physical activity and the barriers and inhibitors that influence decisions to become active, and sustain activity;
 - explore the reasons for, and outcomes of, other health-promoting activity undertaken by members of the public, such as stopping smoking or losing weight, in relation to similar considerations concerning physical activity; and
 - understand more about the role of the Commonwealth Games in affecting personal motivation concerning physical activity.
- 1.7 This report provides a summary of the research and its main findings.

2. Research Method and Limitations

2.1 The study was carried out from October 2009 to March 2010, and comprised three main elements, as follows.

Initial Scoping Interviews

2.2 The first stage of the study involved a series of scoping interviews and group discussions to help in the initial development of the research plan. This was with a view to:

- defining the parameters of the research, including how to define physical activity;
- advising on the selection of the target audience; and
- scoping out the key themes and topics for further inquiry.

2.3 Fifteen individual interviews and two group discussions were undertaken as part of this initial scoping exercise. These discussions helped set the scene for the research study and provided a useful insight into existing research and literature on physical activity. The discussions specifically informed the content of the in-home survey questionnaire, and identified potential target groups for the follow-up focus group discussions.

In-Home Interviews

2.4 A central component of the study method was in-home interviews with a stratified sample of 750 residents in three areas of the city undertaken during December 2009.

Areas chosen

2.5 To ensure that the research provided suitable breadth and depth of information from a range of people across the population of Glasgow, three areas/city wards were chosen for inclusion in the study. These were:

- **Craigton** – city ward 4, part of the then South West Glasgow Community Health and Care Partnership area (CHCP).¹ It comprises a mainly residential suburb where 61% of the housing is owner occupied and 33% is social housing. It has a population of 30,396.
- **Linn** – city ward 1, peripheral area in the then South East CHCP area. It comprises four areas including Cathcart, Croftfoot, Castlemilk, and Carmunnock. Around 53% of the housing is owner occupied and 41% is social housing. It has a population of 28,523.

¹ Arrangements between NHS Greater Glasgow and Clyde and Glasgow City Council concerning integrated health and social care have changed since the study

- **Springburn** – city ward 17, inner city district in the north of the city, part of what was then North Glasgow CHCP. Around 25% of the housing is owner occupied and 70% is social housing. It has a population of 26,936.
- 2.6 It is important to note that the survey is not representative of the population of Glasgow. The areas selected, however, reflect a scale in terms of deprivation – from Springburn (most deprived) to Linn (lesser deprived) to Craigton (least deprived).
- 2.7 Local area statistics from city ward profiles and Glasgow Centre for Population Health's (GCPH) recent community health and wellbeing profiles² allowed the research team to review characteristics, wellbeing, and the range of service provision in Glasgow's geography.
- 2.8 250 interviews were conducted in each of the three areas. A random sample of households was generated for each area. To ensure a representative sample of residents, a quota was developed using local population statistics. This quota included variables such as age, gender, and employment status, and provides a statistically robust output within the wards for the total number of interviews conducted.

Survey Content

- 2.9 The survey covered a range of topics including:
- profiling and health information about respondents;
 - physical activity undertaken in the past week;
 - attitudes to physical activity;
 - self-perception (self-worth);
 - motivations towards physical activity;
 - barriers towards physical activity;
 - influence of sporting events; and
 - other health behaviours.

Survey Analysis

- 2.10 The data from the in-home survey were analysed using the statistical package SPSS. The data were also subject to significance testing using chi-square and t-tests. These tests were undertaken to establish the extent to which observed effects in the data were statistically significant (i.e. rather than being due to random variation).

² See www.gcph.co.uk

Focus Groups

- 2.11 The household interviews were followed-up by focus group sessions, to fill gaps or to extend our understanding of population groups with certain factors in common (e.g. older people, black and minority ethnic communities, young people, etc). A total of 13 sessions were undertaken between January to March 2010 and the total number of attendees was 129.
- 2.12 As well as groups with common factors, three geographic groups were drawn from the survey areas. These were self-referred from those in the in-home interviews who indicated that they would be interested in taking part in a follow-up group discussion, as well as residents who saw the promotional posters put up in local venues to publicise the session.

Methodological Issues and Limitations

- 2.13 It is important to note a number of issues and limitations with the study method, as follows:
- the survey collected self-report data from members of the Glasgow population and responses may be subject to respondent bias and self-presentation effects, as highlighted later;
 - although the three areas did represent a spectrum of deprivation, the socio-economic differences are arguably not as marked as they might have been had other areas been chosen. However, much of the East End of Glasgow was considered to have been over-surveyed as a result of work connected to the Commonwealth Games, and Glasgow geography is such that affluent areas often sit next door to areas of severe deprivation (e.g. Bearsden and Drumchapel). This makes the identification of clearly different areas at ward level problematic; and
 - the timing of the primary data collection may have resulted in a 'seasonal effect' particularly with issues relating to the weather (e.g. as a barrier to physical activity). This is highlighted later; and
 - the research team experienced a number of difficulties with attendance at the focus group sessions. For example, in one case a group of mothers were accompanied by their toddlers, making effective discussion problematic and in another only one person attended. As a result, the focus group data are less consistent and less useful than had been hoped.
- 2.14 These issues should be borne in mind when interpreting the results of the research.
- 2.15 Finally, the study generated a considerable volume of quantitative and qualitative data. Rather than present all of the analyses, we have instead focussed on the most salient issues identified through the initial analysis process. This does not preclude further, specific analyses in future.

3. Context

3.1 This section provides a brief overview of the context for the study, focussing on:

- key messages from past research; and
- policy priorities.

Previous Research

3.3 Previous research provides clear evidence to demonstrate that not enough people in Scotland take sufficient physical exercise.

3.4 Current guidelines recommend that adults should accumulate at least 30 minutes of moderate activity on most days of the week (moderate activity is any activity that makes you feel slightly out of breath, breathing heavier than usual, feeling warm and slightly sweaty). According to the latest survey evidence (Scottish Government, 2009) only 39% of adults in Scotland meet these guidelines – 45% of men and 33% of women.

3.5 Within this, certain groups and areas have been identified as priorities for action, including:

- men over 45 years;
- women (of all ages);
- older people;
- reducing the gap between younger men's levels of activities and older women; and
- those living in the most deprived areas.

3.6 However, it is also important to consider why levels of physical activity are so persistently low.

3.7 A national study of attitudes to physical activity was conducted by the (then) Scottish Executive in 2006, and relevant headline findings include:

- attitudes towards physical activity were generally positive, with good levels of awareness of the physical and mental benefits of physical activity;
- those that undertook exercise at least weekly generally reported health benefits as the reason, including mental health;
- the main identified barriers to physical activity were time and health status. Health issues obviously increase with age, and those aged 25-44 were most concerned to be able to fit activity around their lifestyles (childcare etc);

- those living in deprived areas were less likely to exercise, and were less strongly convinced of the benefits of exercise. Although time and health were again the biggest barriers, they were also more likely to cite lack of motivation and external factors such as the accessibility, availability and quality of facilities; and
 - gender effects were also evident. Men's participation in physical activity was found to drop between the ages of 16-35 years, and women that reduced their activity were more likely to say that this was due to lack of time as a result of family responsibilities. A significant minority of women reported finding sport unappealing and were generally more attracted to non-competitive forms of physical activity than men.
- 3.8 Therefore, while general attitudes towards physical activity are positive, and people understand the health benefits, participation rates remain low. Time and health are obvious factors, and there are clear effects of age, gender and socioeconomic status.
- 3.9 In relation to the socioeconomic effects, there is evidence to suggest that class-associated norms and culture affect ideas about, and uptake of physical activity (e.g. Lindston et al, 2001; Blaxter, 1997). One argument is that working class people perceive physical activity to be part of everyday (working) life while the middle classes are more likely to see exercise as leisure activity, perhaps because they are less likely to be involved in manual labour.
- 3.10 There is also evidence to suggest that those in more deprived areas are more likely to perceive environmental barriers to physical activity such as the accessibility and availability of facilities, costs and environmental characteristics (Kamphuis et al, 2007). Similarly, Day (2008) found that older people are more affected by the environment than other groups.
- 3.11 Importantly, there is also evidence to suggest that levels of physical activity may also be linked to individuals' perceived degree of control – those that feel less in control are less likely to be active. For example, in a study of obese and overweight parents (mainly mothers) Withall et al (2009) found a consistent theme around perceived helplessness, with subjects feeling that they had little control over their size, genetics and metabolism as well as external factors such as time and childcare. In the study, participants also reported high levels of physical activity as well as strong optimism about their situation, effectively rationalising the status quo and downgrading the need for change.
- 3.12 This is a complex picture in which many different factors, both internal and external to the individual, appear to affect different groups in various ways. This presents obvious policy challenges, not least in developing a coherent yet manageable approach that can encourage and support more people to engage in a healthy level of physical activity.

Policy Context

- 3.13 There is a rich history of policy focus on these issues in Scotland, and work on physical activity is spread across a range of policy agendas. The recent report by the Ministerial Taskforce on Health Inequalities – *Equally Well* (Scottish Government, 2008)ⁱ - has also drawn attention to the importance of physical activity within early childhood experiences, active living, greenspace, and environment, transport and planning policies.
- 3.14 The main policy document is the Strategy for Physical Activity (Scottish Executive, 2003) which sets out the vision that “*people in Scotland will enjoy the benefits of having a physically active life*” and established a target of 50% of adults meeting minimum recommended levels of physical activity by 2022. It promotes the health benefits of moderate intensity physical activity or “active living” (e.g. walking or cycling to school/work etc) reflecting the issues around embedding activity within everyday life. The Strategy review stated that it remains essential to influence Scotland’s inactive population (NHS Scotland, 2009).
- 3.15 Obesity is also a major, and closely related, issue for health policy. The Obesity Route Map (Scottish Government, 2010), which supersedes the Healthy Eating, Active Living Plan (Scottish Government, 2008), reports that the position is expected to worsen - adult obesity is predicted to exceed 40% by 2030 - a growing challenge of premature mortality and ill-health.
- 3.16 This is a particular issue for Glasgow. The Scottish Health Survey (Scottish Executive, 2005) revealed that over 60% of Glaswegian adults were overweight or obese. Through the Healthy Weight Action Plan (Glasgow City Council, 2009) action is being taken to improve the health and well-being of the city’s population by 2012. Priority areas include increasing the walkability and cyclability of the built environment, targeting interventions to those most at risk, and raising awareness/fostering culture change: making healthy choices, easy choices.
- 3.17 In addition to physical health benefits, there is also increasing interest in the impact of physical activity on mental health - a growing evidence base that indicates positive outcomes, including preventive effects (Whitelaw et al 2008) and recognition that physical activity can aid the recovery journey. *Equally Well* (Scottish Government, 2008) recommends increasing the prescription of greenspace use by GPs/clinical practitioners, and the Scottish Association for Mental Health strategy *Get Active* (SAMH, 2009) aims to develop a national programme focusing on the mental health benefits of physical activity.
- 3.18 These policy approaches all take a broad view of physical activity and of the range of issues that need to be addressed if Scotland (and Glasgow) is to become a more active population. In particular, they recognise both the physical and mental health benefits of physical activity, and also the inequalities that persist across groups of society. However, the research evidence suggests that getting more people more active will require both better understanding of the reasons that people do not take enough exercise, and a multifaceted approach to addressing the barriers.

- 3.19 The current study seeks to explore these issues across three areas of Glasgow. In particular, it examines self-reported levels of physical activity as well as attitudes and motivations and how these vary by age, gender and socioeconomic status.
- 3.20 According to the Scottish Executive, physical activity does not need to be strenuous to have significant benefits on people's health and general wellbeing. It is recommended that adults should accumulate (build up) at least 30 minutes of moderate activity on most days of the week (Scottish Executive, 2003).
- 3.21 In line with the research literature and the prevailing policy emphasis, we have adopted a broad definition of physical activity, as follows:

All forms of physical activity are of interest, such as housework, gardening, walking, cycling, swimming, play, dance, sport and exercise.

4. Self-Reported Levels of Physical Activity

4.1 The following sections describe the main survey findings as they relate to respondents' self reported levels of physical activity, and where they take exercise. Where differences between groups of respondents are reported, these were found to be statistically significant effects.

Levels of Physical Activity

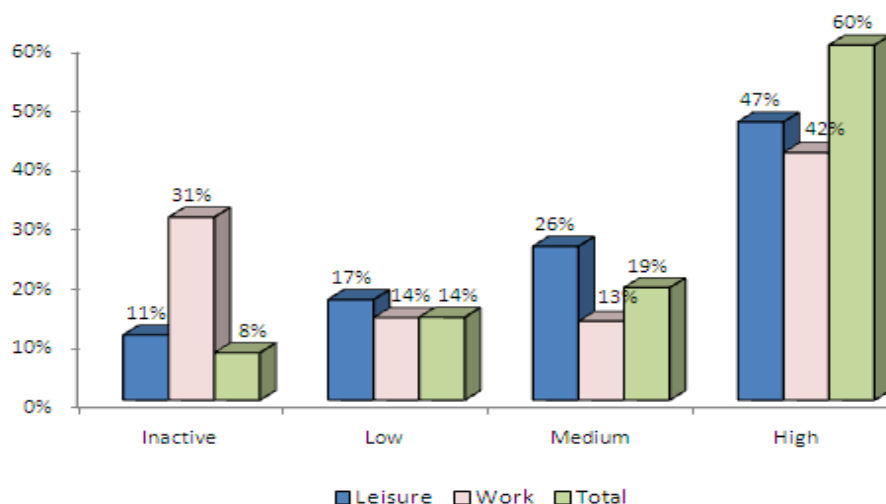
4.2 The survey analysis used the following categorisations to group respondents' level of physical activity³:

- inactive - no activity;
- low - fewer than 150 minutes activity a week;
- medium - between 150 and 300 minutes a week; and
- high - more than 300 minutes a week.

4.3 This categorisation is based on new UK draft physical activity guidelines (US Department of Health and Human Services, 2008)ⁱⁱ and allows for inactive behaviour to be captured.

4.4 The majority of respondents in the survey (79%) reported a level of physical activity that met or exceeded the proposed new UK physical activity guidelines of at least 150 minutes a week, with a higher level of activity undertaken during leisure time than at work.

Figure 4.1: Self-reported levels of physical activity undertaken in last week



Base = 750 (leisure); 330 (work); 750 (total).

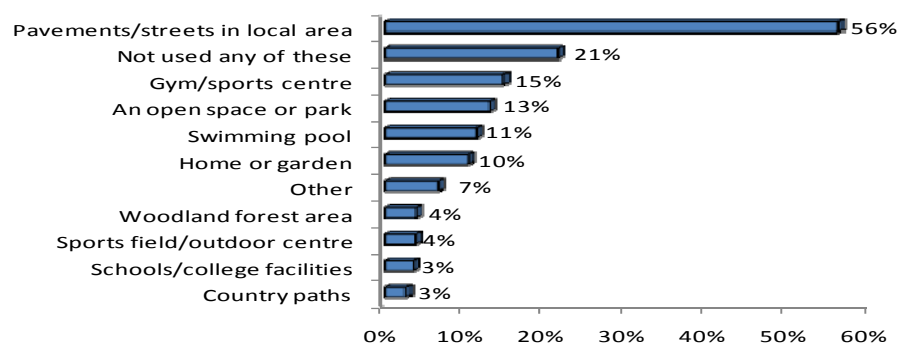
³ US Department of Health and Human Services, 2008 *Physical Activity Guidelines for Americans, Be Active, Healthy, Happy!*, 2008.

- 4.5 These levels of self reported activity are notably higher than those found in previous research (e.g. Scottish Government, 2009), suggesting a self-presentation effect in which respondents' are seeking to present a picture of themselves as more active than they really are.
- 4.6 The high levels of reported activity may also reflect the broad definition of physical activity adopted for the study (e.g. to include housework, gardening, etc). Indeed, this is partly supported by the finding that the most frequently identified setting for activity was the pavements and streets in the local area (see below).
- 4.7 As expected, younger people reported higher levels of physical activity than older people, and those that were sick, disabled or retired were more likely to report lower levels of activity than other groups. There were no significant differences between women and men in the level of reported activity.
- 4.8 Again consistent with previous research, respondents in the least deprived area (Craigton) were more likely to report higher levels of activity than those in the other areas, a difference that was again statistically significant. It is worth noting that those in the Craigton area were also more positive about their current health state⁴. Similarly, those in more deprived areas were less likely to report activity in their leisure time, a finding that is consistent with the class effects found in previous research (see Section 3).

Settings for Physical Activity

- 4.9 Respondents were also asked about the settings in which they undertook physical activity and their level of satisfaction with these settings.
- 4.10 In keeping with the broad definition of physical activity, the most frequently mentioned setting was local pavements and streets (56% of respondents). More formal settings such as sports centres, swimming pools and sports fields were used by less than 15% of respondents.

Figure 4.2: Local settings for undertaking physical activity in last week

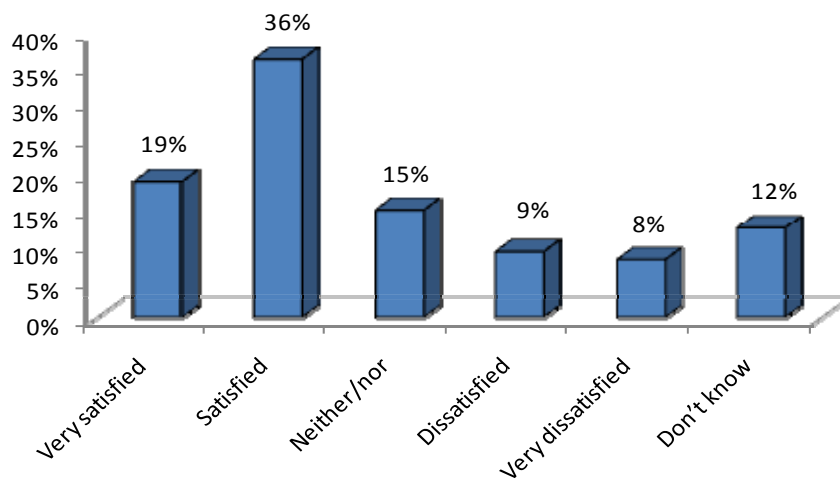


Base = 750

⁴ The study used the EuroQol EQ-5D as a measure for health status.

- 4.11 The analysis found interesting gender effects here, with women more likely to report using local pavements, streets and the home/garden and men more likely to report use of sports facilities. Given the broad definition of physical activity being used, it may well be that women are here reporting walking undertaken to carry out daily tasks such as shopping.
- 4.12 Those in the high and medium activity groups were also more likely to report using *both* formal and informal settings, while those in the low activity groups were more likely to report using informal settings only. Similarly, those in full time employment were more likely than other groups to use gyms and sports centres.
- 4.13 Over half of the survey respondents (55%) reported being very or fairly satisfied with opportunities for undertaking physical activity in their local area. Just under a fifth (17%) of respondents were dissatisfied. Figure 4.3 presents the findings.

Figure 4.3: Satisfaction with local opportunities for undertaking physical activity



Base = 720

- 4.14 The evidence also suggest an effect of deprivation in relation to individuals' levels of satisfaction with the setting in which they undertake physical activity. The highest levels of reported satisfaction were found in the Linn (62%) and Craigton (59%) samples. Springburn, the most deprived, was lower at 46%.
- 4.15 Evidence from the focus group discussions suggests that the Craigton area was considered to be particularly well served, "*plenty for adults and children to do*", and has a good mix of indoor and outdoor facilities (as was Linn). Springburn was considered to be less well served. A further issue raised was around the promotion of opportunities, "*groups need to advertise more what is on in the area*" (female, Springburn).

- 4.16 This link between physical activity and place is consistent with other studies. For example, Panter and Jones (2008) found that environmental influences affect physical activity levels, as people who perceived their environment as poor were less likely to undertake regular physical activity than people in less deprived areas, while nearness to facilities was not a key factor in encouraging uptake. Similarly, Ecob and Macintyre (2000) found that people in more deprived areas viewed their environment as restricting their opportunities for physical activity due to perceptions of safety and cost.

Key messages

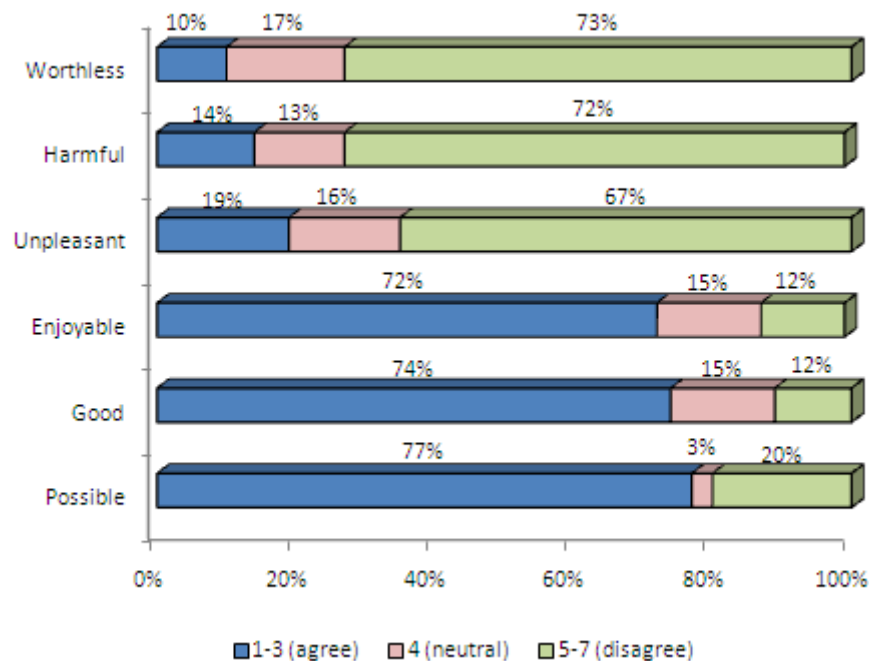
- 4.16 Although the levels of physical activity reported by survey respondents almost certainly overestimate the actual extent of activity, many of the general patterns in the data confirm previous research in that:
- reported levels of physical activity decline with age and poor health;
 - those in more deprived areas report lower levels of physical activity, and less activity within their leisure time – physical activity was more often reported as part of everyday activities (e.g. housework, walking etc);
 - most reported activity takes place in informal settings, particularly amongst women and those that are less active. Use of more formal settings such as sports centres and gyms is more common among men and those in full time employment; and
 - although general levels of satisfaction with settings for physical activity were high, those in more deprived areas were less likely to be satisfied, possibly reflecting a lower quantity and quality of provision.

5. Attitudes and Feelings of Control

Attitudes towards Physical Activity

- 5.1 Attitudes towards physical activity were mainly positive, with evidence of high levels of awareness of the positive benefits of physical activity. Respondents were asked to rate, on a seven-point scale, the extent to which building up physical activity was worthless/valuable; harmful/beneficial; unpleasant/pleasant; enjoyable/unenjoyable; good/bad and possible/not possible. The findings are summarised in Figure 5.1, below.

Figure 5.1: Views on building up levels of physical activity



Base = 750

- 5.2 These findings were echoed in the focus group feedback in which there was again strong evidence of high levels of awareness of the positive benefits of physical activity and even of specific promotional campaigns.
- 5.3 This broadly positive pattern of responses supports the findings of the national study of public attitudes to physical activity referenced earlier (Scottish Executive, 2006). While physical activity was viewed as a “good thing”, there are clearly a range of factors that impact on actually doing it.
- 5.4 Further analysis showed that men reported slightly more positive attitudes than women, and that attitudes become less positive with age, findings that are statistically significant.

- 5.5 The analysis also found that those in the high and medium activity groups were more likely to report positive attitudes towards physical activity than those in the low or inactive groups. Similarly, the data suggest an effect of deprivation with those in the most deprived area reporting less positive attitudes than those in the two other areas.

The relationship between attitudes and behaviour

- 5.6 However, positive attitudes are a necessary but not sufficient condition for behavioural change. The theory of planned behaviour seeks to provide a theoretical framework for understanding the link between attitudes and behaviour. First developed by social psychologist Icek Ajzen in 1985 (Ajzen, 1985), the theory of planned behaviour proposes that behavioural intention (motivation) can be predicted by the individual's attitude towards a certain behaviour, the extent of the influence they attach to significant others (subjective norms) and degree of control that they perceive they have over the behaviour.
- 5.7 According to the theory, behavioural intention will be higher if an individual has a positive attitude toward the behaviour, think that their significant other(s) want them to perform the behaviour and they have confidence in their ability to carry it out.
- 5.8 This framework provided a structure for a series of questions in the survey that sought to explore respondents' views on the influence of other people on their intention and behaviour in relation to physical activity. The key findings were that:
- most (59%) believed that people whose opinions they valued would approve of them meeting minimum recommended levels of physical activity – only 9% felt that these people would not approve;
 - similarly, more than half (57%) reported that it was likely that people would expect them to meet the minimum recommendations for physical activity, although 22% felt this unlikely; and
 - although 39% reported that they were influenced (a lot or some) by the level of physical activity undertaken by family members (and 36% for friends) a larger proportion reported that they were not influenced (45% for each). 80% reported not being influenced by the level of physical activity of others (e.g. work colleagues).
- 5.9 What this seems to suggest is that while most recognise the views of significant others, the level of influence attached to these views is mixed. There were also some important differences across the various respondent groups:
- men were more likely to report that people would “approve” and “expect” them to meet minimum recommended levels of activity;
 - younger people were also more likely to report that others would “approve” and “expect” them to meet the minimum guidelines;

- the high activity group were more likely to report that others would “approve” and both high and medium groups more likely to report that others would “expect”; and
- those in the most deprived area were less likely to report a strong influence of subjective norms.

5.10 Turning now to the final component in the theory of planned behaviour – perceived control – 71% of the survey sample were confident that they could undertake the recommended level of physical activity if they wanted, and 82% agreed that it was mainly up to them whether or not they did so. Therefore, the reported levels of perceived control appear to be high. Again, however, some notable differences were observed:

- men were more likely than women to be confident in their ability to achieve the recommended level of physical activity;
- there is an affect of age, with younger people more likely to express confidence and control; and
- high and medium activity groups were more likely to be positive about their ability to achieve the recommended activity levels.

5.11 There were no significant differences across the three geographic areas.

5.12 If the theory of planned behaviour holds good, and there is strong evidence to suggest that it does, then we should expect those with the highest levels of physical activity to express positive attitudes, strong influence of subjective norms and strong levels of perceived control over their behaviour.

5.13 The evidence from the in-home survey confirms this assertion in that those that were more likely to express positive attitudes, strong influence of subjective norms and high levels of perceived control were:

- men;
- younger people; and
- those in the high (and even medium) activity groups.

5.14 All of these groups are known to have higher levels of physical activity, as demonstrated either in the self report data collected in the current survey or in past research.

5.15 Where the data are somewhat more equivocal is in relation to deprivation. Although those in the most deprived area reported less positive attitudes to physical activity and less influence of subjective norms, differences in levels of perceived control were not found to be statistically significant.

5.16 However, there was evidence to suggest that those in the most deprived area had lower scores on some measures of self-esteem. For example, those in the most deprived area were more likely than those in the least deprived area to agree with

the statements “at times I think I am no good at all” and “I wish I could have more respect for myself”.

- 5.17 It is also worth noting that those in the high and medium activity groups were more likely to score positively across the range of self-perception statements.
- 5.18 Unpicking these effects is problematic. On the one hand, we might have expected to observe lower levels of perceived control among those in the most deprived area, and this was not the case. It is of course possible that many of these subjects did feel that it was within their control to be more active, but simply did not want to do so. This was a view expressed in one of the focus groups.
- 5.19 The low levels of self-esteem and the possible relationship between self-esteem and level of activity is also interesting, although it must be noted that the analysis does not identify the direction of causality between these two variables. In other words, while it may be that those with low self-esteem are less motivated to take exercise, it may also be that those that take little exercise suffer lower self-esteem.
- 5.20 Making sense of these findings is problematic, although two broad conclusions are suggested, as follows:
- those that take more physical activity are (mainly) those that have more positive attitudes, report a strong influence of subjective norms and have higher levels of perceived behavioural control; and
 - there is a relationship between self-esteem and the level of physical activity, although further research would be required to establish the specific direction and dynamics of that relationship, and to account for the influence of other factors e.g. environment, health status etc.

6. Motivation and Barriers

Motivation to undertake physical activity

- 6.1 Past research has shown that people report a wide range of motivations for undertaking physical activity, including to improve physical and mental well being, to look better, to relax and for enjoyment.
- 6.2 The in-home survey gathered data on the factors that individuals felt most important in motivating them to undertake more physical activity. From a pre-defined list of response options, the factors that individuals considered **most** important in motivating them to undertake physical activity (i.e. rated very/fairly important) were:
- to stay in good health (78%, 590 responses);
 - to get fit (75%, 566 responses);
 - to make you feel good/better (71%, 535 responses);
 - for enjoyment (71%, 534 responses); and
 - to feel good about yourself (70%, 522 responses).
- 6.3 The factors considered **least** important (rated not very/not at all important) were:
- to travel to work by foot or bicycle (48%, 359 responses);
 - to be part of a team (33%, 245 responses);
 - to look better (30%, 227 responses);
 - to have time to yourself (30%, 222 responses); and
 - to try new things (26%, 195 responses).
- 6.4 There were no significant differences between men and women in the survey with regards to the main motivating factors. However, younger people tended to rate the top five factors (above) as more important than older people. The high and medium activity groups were more likely than those in the low and inactive groups to report health, fitness and enjoyment as motivators. This was also true of those in the least deprived area compared to the others.
- 6.5 Respondents were also asked to identify from a pre-defined list of options, the factors that would encourage them to do more physical activity, and also to say which was the most important.
- 6.6 The most common response was “none of these things” (33%), and 50% of the sample identified this as the most important factor, suggesting either that they were already sufficiently motivated or that nothing would encourage them to do more physical activity.

- 6.7 The most frequent responses after this were cheaper admission prices to sports venues, better information on what was available locally, help to get motivated, and activity that could be done at home. It is worth noting that many of the things that attract investment such as better facilities, improved transport links and family membership deals were not generally considered important.
- 6.8 The main gender difference was around childcare, a factor that women rated more important. There were no notable (or significant) age differences in the factors that would encourage more activity, but when the data were examined by activity group some findings did emerge.
- 6.9 Both the high and inactive groups were more likely to identify “none of these things” as the most important factor, although this is probably for different reasons. Those in the high activity group may feel that they already take enough exercise and do not need any further encouragement while those in the inactive group may be more resistant to changing their behaviour. It is striking that 62% of the inactive group reported that none of the identified factors would encourage them to do more.
- 6.10 Inactive adults were more likely to indicate that the various motivating factors proposed were “*not important*”. As described, this group had a less favourable attitude towards physical activity, lower levels of self-efficacy, and a lack of confidence in their ability to meet the recommended levels of physical activity - culminating in a lack of motivation. This is consistent with previous research that found a sense of control and recognition of the benefits of physical activity were key to positive behaviour change (Cousins, 2003).

Table 6.1: Factors to encourage activity

	Inactive	Low	Medium	High
None of these things	62%	27%	31%	32%
Cheaper prices	19%	8%	23%	21%
Fit it in around usual routine	14%	15%	16%	23%
information on what is available	14%	18%	14%	12%
Do something at home	10%	12%	10%	12%
Help to get motivated	5%	7%	8%	17%

n = Inactive (58), Low (104), Medium (140), High (448).

- 6.11 There were also some important differences in the kinds of activity in which people would like to engage. Competitive sports were generally low down the list compared to individual recreational sports (e.g. swimming, jogging) and active travel⁵, although men were more likely than women to identify competitive sports as something they would like to do more.

⁵ Active Travel refers to an approach to travel and transport that focuses on physical activity (e.g. walking and cycling) as opposed to motorised means.

- 6.12 Those in the inactive group were more likely to identify 'lower impact' activities such as active travel than the high or medium activity level groups, and the same effect was evident among those in the most deprived area. Sporting activities (individual and group) also hold greater appeal for younger people.
- 6.13 This is again a complex picture. At the level of the whole survey population, the findings broadly confirm past research in that people are generally aware of the positive benefits of exercise and will therefore tend to identify these as good reasons for doing more. The extent to which this awareness translates into behaviour is of course, another matter, and just because people say that they would like to do more exercise to stay healthy or look better does not mean that they will.
- 6.14 What is perhaps more challenging is the finding that such a high proportion of those that are already inactive did not identify anything that would motivate them to do more.

Barriers

- 6.15 The main barriers to undertaking physical activity were identified as being:
- time (39%);
 - weather (28%);
 - cost of activities (25%);
 - family commitments (22%);
 - safety (21%); and
 - tiredness (20%).
- 6.16 Many of these barriers are consistent with past research (see Section 3) although it is notable that health does not feature here as it does in previous findings. It is also worth noting that the survey took place in the winter months and there may therefore be a seasonal effect in that weather may not have been so strongly identified as a barrier had data collection taken place in the summer.
- 6.17 There were no gender differences in the reported barriers to physical activity, and age differences largely related to personal circumstances e.g. those of working age were more likely than older people to identify time and family commitments as barriers.
- 6.18 Those in the most deprived area were less likely to consider safety a barrier, but were more likely to identify cost than those in the other areas, a finding that is intuitively plausible.

7. Focus Group Findings

- 7.1 This section provides a brief summary of the key issues identified through the focus group discussion. As noted in Section 2, this aspect of the research was less fruitful than hoped, so these findings must be interpreted with the appropriate caveats in mind.
- 7.2 Focus group discussions were held with a variety of groups to gain further insights on attitudes and motivations towards physical activity. The groups included: residents involved with walking groups, two groups of unemployed people, local residents in each of the three in-home survey areas, young girls, older people, parents (including lone parents), mental health service users, those from a black and minority ethnic background, and those with a learning disability (and their carers). In total 13 focus groups were held.

Perceptions, attitudes, and experiences towards taking physical activity

- 7.3 Across the groups there was a generally positive attitude to physical activity. There was however little consistent knowledge about appropriate levels of exercise. While 30 minutes a day, five times a week was common, people also suggested that it was 1/1.5 hours 2/3 times a week, 10,000 steps a day, 20 minutes, as long as it raises heart rate, or that cumulative small walks over the day was just as good. The five-a-day fruit and vegetable mantra was however known by most groups.
- 7.4 Participants also demonstrated an understanding of the other impacts of physical activity in relation to stress and mental health. The social component of physical activity, meeting with friends or walking in a group was often raised.
- 7.5 People's experiences of physical activity mainly centred around walking, either in their local area or in an organised group, or the use of local sports centres/health clubs. The use of gyms/sports centre facilities was more common across the younger age group (five-a-side classes etc.), and older groups were more interested in walking, although there was some use of swimming pools and recreational sports e.g. bowls and fishing.

Motivations and barriers towards physical activity

- 7.6 The central motivators across the groups were to keep fit/ stay in good health and to meet with friends and family. The importance of social interaction covered both making new friends and exercising with friends as a way of keeping motivated. The role of physical activity as a family activity, particularly with younger children was often mentioned.
- 7.7 The motivation around health had a range of drivers - physical/medical and mental. There was a spread of responses around getting and keeping healthy, tackling specific medical issues, heart problems and diabetes. Mental well-being was also a theme with mention of building confidence and feeling good about yourself.
- 7.8 In terms of barriers and inhibitors, a range of personal and structural issues were raised. For some of the participants who made use (or would like to make use) of local gyms and swimming pools, there were issues around embarrassment, body

image and concerns about the cost of 'proper' clothing. While this was mentioned more often by women it was also identified clearly by one of the men, '*...feel slightly uncomfortable about my body, everyone tends to be fit, I would prefer to lose a bit of weight first*'. People talked about being embarrassed to be seen running outdoors, and self conscious in communal changing facilities.

- 7.9 Four more 'structural' issues arose - cost, reduction of local services, organisation of local services, and environmental issues such as lighting and safety. Cost issues covered both cost of travel and entry costs to the centres as well as purchasing the right clothes and equipment - "*physical activity is not really a top priority when you are on benefits and have got other things to pay for*".
- 7.10 There was concern about local facilities e.g. community centres, tenants' halls being phased out or closed down. The organisation of service provision was a topic that was widely mentioned, mainly around the need for services to support families. There were requests for better timing of services to allow parents to make use of services at the same time as their children. The need for childcare and crèche provision to fit the needs of families in terms of opening hours was also highlighted.
- 7.11 Safety was also an issue across the age range. Lighting, both quality of street lighting and lack of lighting in parks, was mentioned as was the state of pavements and paths.
- 7.12 Support for beginning and maintaining activity is a theme drawn from across the groups. The conversation, view and approach from those respondents who were members of walking clubs or in organised community centres was markedly different, more confident and was placed in a developmental frame – "*can do this*", "*will go on to try that*". Those respondents who were not yet active typically saw more barriers than opportunities.

8. Conclusions

8.1 The study set out to develop an understanding of the perceptions, experiences attitudes and motivations towards physical activity of people within Glasgow. The data are complex and findings sometimes conflicting, but a number of broad conclusions can be drawn:

General conclusions

- the study found a high level of self-reported physical activity – higher than in past research – and is almost certainly an over-estimation of the actual level of physical activity. The majority of this activity took place in informal settings rather than formal sports facilities;
- attitudes to physical activity are generally positive, and people have a high degree of awareness of the positive benefits of exercise in all its forms. Indeed, the self-presentation bias in the self reported levels of physical activity also suggests that people are not only aware that physical activity is a 'good thing', but also seek to present themselves in a positive light as people that engage in this good thing;
- positive attitudes to exercise are a necessary but not sufficient condition for undertaking exercise. The data appear to confirm the theory of planned behaviour in that those that undertake more physical activity tend to have positive attitudes, place greater importance on the influence of significant others and express a high degree of personal control over their actions. Whether these three conditions are sufficient to encourage action would require further specific research;
- there appears also to be a relationship between self esteem and physical activity, although the direction of causality is not clear. Low self esteem may be a de-motivating factor but, equally, lack of exercise may contribute to lower self esteem. Indeed, it may be that both effects are true. Again, further research is required to unpick these issues;
- the main factors motivating people to undertake physical activity relate to health, fitness, well being and enjoyment, although the least active are less likely to consider these important;
- in terms of things that would encourage people to do more, the data are somewhat challenging - the most frequently identified response was 'none of these things', particular for those that were very active and those that were inactive. For the inactive this might indicate a real resistance to changing their behaviour; and
- individual recreational sports and active travel are the kinds of activity that most would like to undertake, albeit with some differences relating to gender (men are keener on competitive sports). Those that are currently inactive are also more likely to voice a preference for low impact activities.

Specific conclusions

- 8.2 In addition to the general conclusions above, the more detailed analysis allows a number of more specific conclusions to be identified:
- in terms of the levels of activity, the study found (in line with past research), younger people and those in less deprived areas are more likely to report higher levels of physical activity;
 - there is also an effect of deprivation on attitudes to physical activity with those in more deprived areas reporting less positive attitudes. Similarly those that reported higher levels of physical activity also reported more positive attitudes;
 - levels of self esteem were lower amongst those in the most deprived area, again suggesting a link to physical activity;
 - overall, those in the most disadvantaged situations (geographically, age, health were more likely to undertake less activity, in fewer settings, and hold a stronger view that external factors (social and environmental) needed attention;
 - there are some fine grained issues that may influence future policy and action. For example, women tend to place greater importance on child friendly activities (and childcare) and cost is a barrier for those in more deprived areas. All groups appear interested in activity that can be easily accommodated in daily life; and
 - environmental factors such as better transport links and improved facilities did not emerge as factors that would encourage more people to undertake more physical activity.
- 8.3 This is an undoubtedly complex picture. Self-report data can be difficult to interpret, particularly as people may have learned the script that physical activity is a good thing and to be perceived as inactive is to be seen as lazy.
- 8.4 For effective policy making, this is a particular challenge, as the reasons for why people do or do not engage in sufficient levels of physical activity are clearly very complex. At the very least, the evidence does suggest that awareness raising has been effective, but only in raising awareness. It has clearly not led to significant behavioural change.
- 8.5 Work to change attitudes remains important, but again may not be sufficient to encourage appropriate behaviour. Instead, a more nuanced approach may be required that links physical activity to mental well being in a way that help boost self-esteem while motivating people to do more.

Appendix A: References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior*. Berlin, Heidelberg, New York: Springer-Verlag.
- Blaxter, M. (1997), *Whose fault is it? People's own conceptions of the reasons for health inequalities*, *Social Science and Medicine*, 44 (6), 747 – 756.
- Calnan, M; Williams, S. (1991), *Style of life and the salience of health: an exploratory study of health related practices in households from differing socio-economic circumstances*, *Sociology of Health and Illness*, 13 (4), 506 - 529.
- Catto S, Gibbs D, Mitchell R. *Are people in Scotland becoming more active? Combined results from Scotland's routine national surveys* (NHS Health Scotland), 2009.
- Cousins, S. O'B. (2003), *Grounding theory in self-referent thinking: conceptualizing motivation for older adult physical activity*, *Psychology of Sport and Exercise*, 4, 81 - 100.
- Day, R. 2008. 'Local environments and older people's health : dimensions from a comparative qualitative study in Scotland', *Health and Place*, 14, 299 – 312.
- Ecob, R; Macintyre, S. (2000), *Small area variations in health related behaviours; do these depend on the behaviour itself, its measurement, or on personal characteristics?*, *Health and Place*, 6, 261 – 274.
- Glasgow City Council (2009), *Healthy Weight Action Plan 2009-2012*, Glasgow City Council, Glasgow.
- Glasgow Centre for Population Health (2010) *Investigating a 'Glasgow Effect': why do equally deprived UK cities experience different health outcomes?* Briefing Paper 25, Glasgow.
- Kamphuis, C B M; van Lenthe, F J; Giskes, K et al, 2007, 'Perceived environmental determinants of physical activity and fruit and vegetable consumption among high and low socioeconomic groups in the Netherlands', *Health and Place*, 13, 493 – 503.
- Lindstrom, M; Hanson, B S; Ostergren, P-O, 2001, 'Socioeconomic differences in leisure-time physical activity : the role of social participation and social capital in shaping health related behaviour', *Social Science and Medicine*, 52, 441 – 451.
- NHS Health Scotland (2009), *Five-year review of Let's Make Scotland More Active - A strategy for physical activity*, NHS Health Scotland, Edinburgh.
- Panter, J R; Jones, A P. (2008), 'Associations between physical activity, perceptions of the neighbourhood environment and access to facilities in an English city', *Social Science and Medicine*, 67, 1917 - 1923.
- SAMH (2009), *Get Active - positive steps for mental health - SAMH Physical Activity and Sports National Programme*, SAMH, Edinburgh.
- Scottish Executive (2003), *Let's Make Scotland More Active: A strategy for physical activity*, Scottish Executive, Edinburgh.

Scottish Executive (2005), *The Scottish Health Survey 2003, Summary of Key Findings*, Scottish Executive, Edinburgh.

Scottish Executive (2006), *Sport, Exercise and Physical Activity: Public Participation, Barriers and Attitudes*, Scottish Executive, Edinburgh.

Scottish Government (2008), *Equally Well: report of the Ministerial Taskforce on Health Inequalities*, Scottish Government, Edinburgh.

Scottish Government (2008), *Healthy Eating, Active Living: An action plan to improve diet, increase physical activity, and tackle obesity (2008-2011)*, Scottish Government, Edinburgh.

Scottish Government (2009), *The Scottish Health Survey 2008*, Scottish Government, Edinburgh.

Scottish Government (2010), *Preventing Overweight and Obesity in Scotland, A Route Map Towards Healthy Weight*, Scottish Government, Edinburgh.

US Department of Health and Human Services, *2008 Physical Activity Guidelines for Americans, Be Active, Healthy, Happy!*, 2008.

Whitelaw, Swift, Goodwin, and Clark (2008), *Physical Activity and Mental Health: the role of physical activity in promoting mental well-being and preventing mental health problems*, NHS Health Scotland, Edinburgh.

Withall J; Jago, R; Cross, J. 2009. 'Families' and health professionals' perceptions of influences on diet, activity and obesity in a low-income community', *Health and Place*, 15, 1078 – 1085.
