

**Physical activity and  
black and minority ethnic groups:  
a qualitative study of South Asian people  
living in Scotland**

October 2008

Ruth Jepson, University of Stirling  
Ghizala Avan, University of Stirling  
Alison Bowes, University of Stirling  
Fiona Harris, University of Edinburgh  
Roma Robertson, University of Edinburgh  
Aziz Sheikh, University of Edinburgh

Published by NHS Health Scotland,  
Woodburn House, Canaan Lane, Edinburgh, EH10 4SG  
© NHS Health Scotland 2008



**The opinions expressed in this publication are those of the author/s and  
do not necessarily reflect those of Health Scotland**

## Table of Contents

Acknowledgements .....	i
Summary .....	ii
Overview of background/context .....	ii
Aims and methods .....	ii
Findings .....	ii
Conclusions and recommendations .....	v
1. Introduction .....	1
1.1 Background .....	1
1.1 Aims .....	1
1.2 Objectives .....	2
2. Methods .....	2
2.2. Scoping of the qualitative and quantitative literature .....	2
2.3. Qualitative study .....	4
2.3.1. Recruitment and sampling of focus groups .....	5
2.3.2. Recruitment and sampling for individual interviews with key informants .....	7
2.3.3. Ethical issues and obtaining informed consent .....	7
2.3.4. Format of the focus groups and data collection .....	8
2.3.5. Format of the interviews and data collection .....	9
2.3.6. Data protection and confidentiality .....	9
2.3.7. Data analysis .....	9
3. Results of scoping the qualitative and quantitative literature .....	11
4. Results of the qualitative study .....	12
4.1. Attitudes and beliefs: physical activity and exercise .....	12
4.1.1. Attitudes of older people (parents of the participants) .....	14
4.1.2. Attitudes towards children's physical activity .....	15
4.2. Attitudes and beliefs: the relationship between physical activity and health .....	15
4.3. Types of activities people from South Asia were most likely to engage in .....	16
4.3.1. Activities that men were most likely to participate in .....	16
4.3.2. Activities that women were most likely to participate in .....	16
4.3.3. Activities that children were most likely to participate in .....	17
4.3.4. Activities that families were most likely to participate in .....	17
4.3.5. Activities people from South Asia were less likely to engage in .....	18
4.3.6. Activities and location (e.g. indoor, local community, countryside) .....	18
4.4. Motivators and facilitators for engagement in physical activity .....	20
4.4.1. Social interaction .....	20
4.4.2. Enjoyment of exercise .....	21
4.4.3. Perceived mental and physical health benefits .....	21
4.4.4. Leadership and role models .....	22
4.5. Specific barriers for South Asians to taking part in physical activity or exercise .....	24
4.5.1. Lack of culturally competent facilities .....	24
4.5.2. Sportswear and clothing .....	25
4.5.3. Racism and personal safety .....	26
4.5.4. Dogs ('unclean' animals encountered in green spaces) .....	27
4.5.5. Other issues .....	27
4.6. Barriers similar to those of the majority population .....	27
4.6.1. Lack of adequate childcare provision .....	28
4.6.2. Lack of time, motivation and energy .....	28

4.6.3. Cost.....	28
4.6.4. Continuity and sustainability .....	28
4.7. Other feedback from key informants.....	29
4.7.1. Barriers to culturally competent service delivery .....	29
4.7.2. Issues around inclusion.....	29
4.8. Types of activities which would be accessible and acceptable.....	30
4.8.1. Culturally competent mainstream services.....	30
4.8.2. Specific services which can then be mainstreamed .....	31
5. Conclusions and recommendations.....	32
5.2. Recommendations for leisure services (e.g. swimming pools, gyms, leisure centres) .....	34
5.3. Recommendations for other services .....	35
6. References .....	36
Appendix 1. Search strategy.....	39
Appendix 2. General request for information .....	40
Appendix 3. Topic guide for focus groups.....	41
Appendix 4. Demographic questionnaire for focus group participants .....	44
Appendix 5. Interview topic guide for physical activity specialist and community group leaders.....	45

## **Acknowledgements**

We would like to thank all the people (individuals and those representing local authorities and health boards) who responded to requests for literature, and Smita Grant who agree to be our independent advisor. We would also like to thank everyone who shared their views and experiences with us, either in interviews or focus groups. Staff in SCORE Scotland and Sikh Sanjog and Mrs Cherrie Collins were particularly helpful in assisting with recruitment of focus groups. Finally, we wish to acknowledge the support and advice of Graeme Scobie and his colleagues in NHS Health Scotland.

The study was commissioned by NHS Health Scotland. The views expressed here are those of the authors and should not be attributed to the funding body.

## **Summary**

### **Overview of background/context**

There is evidence that increasing the level of physical activity can have a beneficial effect on health and well-being. It can also decrease the risk of developing diabetes, heart disease (CHD), high blood pressure and some cancers. However, although South Asians (people of Indian, Bangladeshi, Sri Lankan, Nepalese, and Pakistani origin or descent) living in Scotland are at higher risk of diabetes and heart disease, there is evidence that people from South Asian communities are much less active than the majority population. It is therefore important that steps are taken to encourage South Asians living in Scotland to increase their levels of physical activity.

### **Aims and methods**

The main aims of this research were:

- to explore the barriers, facilitators and motivators for South Asian people living in Scotland to engage in physical activity
- to discover the types of physical activity that are acceptable and appropriate and can be built into their daily routines.

The methods of research were twofold: a scoping of the published literature and unpublished reports related to South Asians living in the UK (to produce a database of reports); and a qualitative study including nine focus groups of either inactive or active parents between the ages of 20-40, and 10 semi-structured interviews with key informants. Focus group participants were selected from pre-existing South Asian community groups in Aberdeen, Edinburgh and Glasgow and included men and women of Pakistani, Indian and Bangladeshi origin or descent. All interviews and focus groups were recorded, translated (where necessary) and transcribed and analysed thematically using an interpretive approach.

### **Findings**

#### Scoping of the literature:

A total of 65 references were retrieved. A summary of some of the main findings of this literature are detailed below:

- Many of the barriers for Black minority ethnic (BME) groups do not differ too significantly to those facing non-BME communities (e.g. cost, lack of motivation, childcare issues, access)
- Cultural barriers included lack of women-only session, and perceived institutional and personal racism, lack of culturally competent choices, language barriers, lack of role models, lack of information
- Leisure facilities should be culturally competent and made more appropriate to women from ethnic minorities. Also need to be low cost and provide childcare
- Better information provision
- Use of role models

- Introducing people from ethnic minorities to local activities that are not normally 'on their agenda'
- Not focussing solely on the provision of 'ethnicised' services but adopting a more mainstream approach.

#### Qualitative research:

The focus groups and key informant interviews revealed that, in talking about physical activity with South Asian people living in Scotland, there are some issues that are also shared by the majority of people living in the UK and are not culturally specific. Thus the motivators, facilitators and barriers to becoming more physically active or taking part in exercise are often the same for anyone living in the UK today. However, South Asians living in Scotland do face cultural, religious, and/or structural barriers which when combined with other more generic barriers can result in severely restricted choices. However, there is a degree of variation according to individual/family experiences and attitudes, so that what may represent a cultural or religious barrier for some is either overcome, or simply not perceived as a problem by others. Therefore it is important that policy makers and those delivering services understand that while some South Asians may appear to use leisure services without any apparent concerns, in fact many simply cannot access them because of their observance of particular religious and/or cultural norms.

#### *Attitudes towards physical activity*

- The understanding of physical activity amongst the participants did not differ to any significant extent from the definition of the term described above. Both focus group participants and key informants talked about a wide spectrum of activities that they felt could be included under the terms 'physical activity' and 'exercise'. Many talked about daily activities such as gardening, housework, child care, running up and down stairs, walking to school, work or their religious centre (mosque or temple) and other daily activities.
- Participants' attitudes and beliefs around physical activity and exercise did not differ significantly from the majority population.
- Exercise as a leisure pursuit tends not to be part of the culture of older people from South Asian communities and this affected the take up of exercise in some of our participants.
- Like the majority population, attitudes towards physical activity in children and young people were variable. Physical activity levels in children were often related to parents' activity levels. What was perhaps different from the majority population for some participants was their attitude towards types of physical activity for female and male children, particularly when they reached adolescence. None actively discouraged girls or young women from taking part in physical activity, but the focus was on them doing activities in places where they would be 'safe.'
- Although most of our participants were aware of the links between physical activity and health and well-being, discussions emphasised

the importance of physical activity in treating chronic illness or being overweight rather than as a preventive measure.

#### *Activities that participants engaged, or wanted to engage in*

- The activities that our participants were most likely to participate in were similar to the majority population, including: swimming, going to the gym, dance, football, keep-fit classes, walking (both as an activity in itself and active travel), housework and being active in their workplace (e.g. lifting boxes, stacking shelves). Gardening was not mentioned by many participants.
- Children and young people participated in school-based activities or clubs, but outside school activity varied from very little to cycling, swimming, football or playing outdoors with friends.
- Families tended to do little activity as a family unit owing to work commitments, although some fathers took the children swimming and cycling while mothers were more likely to take children to the park to play or take them for walks. This appeared to be similar to the majority population.
- While there was no stated preference for place or location for physical activity, it was apparent that rural spaces may be accessed much less often by South Asians. Perhaps in a similar way to other inner city dwellers, those who lack exposure to the countryside feel alienated within it and do not know what to do when they get there. However, an added problem is that South Asian people become much more of a minority when visiting rural spaces and this can lead to some people feeling uncomfortable.
- There was also a great deal of variation regarding the presence or absence of active travel (walking, cycling or taking public transport). Some women who spoke enthusiastically of taking part in physical activity also took special steps to ensure that they and their children walked at least a part of the way to work or school.
- There were no activities that participants consistently stated they would not engage in.

#### *Motivators and facilitators*

- The main motivators to taking part in physical activity were found to be: enjoyment, weight reduction, perceived physical and mental health benefits and the opportunity for social interaction.
- Facilitators towards taking part in physical activity were particularly focused around having leadership and role models within their own communities.
- Types of activities that would be regarded as acceptable included culturally competent mainstream services rather than solely segregated, 'Asian only' services.

#### *Barriers*

- Barriers towards taking part in physical activity focused strongly on the lack of culturally appropriate facilities such as women or men only swimming or gym sessions; single sex changing rooms with lifeguards,



instructors and attendants of appropriate gender; no public viewing areas in single sex sessions. Other barriers included sportswear and clothing, racism and personal safety, dogs in public spaces (unclean according to Islam) and to a much lesser extent, language barriers and access to halal food in leisure centres.

- Other barriers similar to the majority population included: lack of time and energy; lack of childcare; cost; continuity and sustainability.
- The lack of relevant and accessible (familiar language) information available about activities or services and in particular their cultural acceptability (e.g. whether the activity would address issues of modesty).
- Racism and safety issues.

### **Conclusions and recommendations**

This study found that South Asians living in Scotland view physical activity in a similar way to the general population; enjoy (or would like to enjoy) more or less the same activities (particularly swimming, walking and using the gym); and have similar motivations. However, whilst some of the barriers are also similar (cost, childcare and lack of time), they also face barriers which can severely restrict choice, particularly for women. For example, swimming is one of the most popular activities for everyone in the UK including South Asians, but many South Asian women are unable to use their local swimming pool because of culturally inappropriate facilities. The barriers outlined above impacted not only on the adults we interviewed, but also the type and amount of physical activities that their children participated in. The findings in this study are very similar to those of other studies we identified in the scoping of the literature. However, while this literature demonstrates that these issues have been known about for a number of years, our study shows that there are still barriers that result in many ethnic minority people being effectively denied access to some services or activities.

There is a paucity of high quality evidence to provide guidance as to how to increase physical activity in South Asians living in Britain. There is a need to systematically review the existing evidence to identify the current evidence base and the gaps that the research community should be aware of. In order to progress further thinking on the issues highlighted by our qualitative research, we believe a next step should be to synthesise this with our literature/scoping review. The following recommendations, therefore, are based on our qualitative work and are not currently supported by a high quality quantitative evidence base. We believe that if any of the recommendations are implemented, most will need to be piloted and accompanied by rigorous evaluations. In addition, issues about sustainability of a service or facility should be considered at the outset. Many of the recommendations we make are equally applicable to the general population.

### *Leisure services (e.g. swimming pools, gyms, leisure centres)*

- There is clearly a need for women-only swimming and gym sessions (designed for all women, but culturally competent) and also men-only sessions. May need to modify existing facilities (e.g. have 'curtains' for large expanses of glass at swimming pools).
- Need to consider having more people from ethnic minorities employed at leisure services and perhaps leading some of the sessions (e.g. fitness instructors)
- More female group activities such as Bollywood dance sessions and team sports (e.g. netball) which could appeal to all women
- Male-only sessions
- More services for both parents and children
- Childcare facilities and lower cost for some activities
- Better communication about or marketing of the services that are available, their cultural appropriateness, their health benefits (particularly in relation to CHD and type 2 diabetes) and how to get involved (oral information as well as written if possible). Could consider putting leaflets and posters in religious and community centres to advertise services (where appropriate)

### *Other services*

- 'Taster' sessions for activities which South Asians do not usually get involved in (e.g. rock climbing, hill walking, cycling, tennis) which can then be dovetailed into mainstream activities. Black Environment Network and some other community groups already do this to some extent
- Family focused activities which encourage the whole family to be active
- Increasing leadership in the community – suggestions include training people from the community to become walk leaders, fitness instructors; more use of role models in promoting physical activity in the local community; case workers to organise events and get individuals active; use of buddy systems to support people to walk in the local area or countryside
- Better communication about or marketing of the services that are available, their cultural appropriateness, their benefits (particularly in regard to preventing CHD and type 2 diabetes), how to get involved, and how to access them by different modes of transport.
- More information about how to access and use green spaces (particularly local parks, woodlands and countryside). For example, may need to provide details of how to get there by a range of different modes of transport; and information about what to do when you are there (perhaps providing free activities or culturally appropriate information boards)
- Providing safe and pleasant environments to encourage walking
- Using spaces where people already meet (e.g. religious centres) to promote, encourage, and engage in physical activity

# **1. Introduction**

## **1.1 Background**

There is evidence that people in the UK from South Asia (people with ancestral origins in the Indian subcontinent including Pakistan, Bangladesh, Sri Lanka, Nepal and India) may be taking less physical exercise compared with the general UK population (Fischbacher, Hunt & Alexander, 2004). They also have a two fold increased risk of heart disease compared to the general UK population (Hippisley-Cox, Coupland, Vinogradova *et al.*, 2008), and rates of diabetes over five times higher than the general population (Primatesta and Brookes, 2001). The risk of such conditions can be greatly reduced if levels of physical activity are increased (Batty and Lee, 2004; Haapanen, Miilunpalo, Vuori *et al.*, 1997). However, there is little evidence of successful physical activity interventions amongst South Asian groups, and promoting physical activity which is appropriate and sustainable for these groups may pose particular challenges. Available interventions for use in the general population are likely to work, but will need some adaptation.

Whilst there may be cultural explanations for the differences in physical activity levels and the high levels of heart disease, other explanations are also considered in this research. For example, there is an accumulation of evidence that suggests that ethnic inequalities in health are predominately determined by social economic inequalities, underpinned by institutional racism, rather than inherent ethnic differences (Nazroo, 2003). However, there is considerable heterogeneity in health experiences/outcomes between South Asian groups, with people of Indian origin behaving most like the general population and those of Bangladeshi origin faring worst. In addition, ways in which people from ethnic minorities take part in physical activity may also be a function of socio-demographic factors as well as cultural ones. For example, there is evidence that ethnic minorities are less likely to use places such as National Parks to take part in activities such as rambling and hill walking. One explanation is that black and minority ethnic communities are now overwhelmingly inner city dwellers in Britain and expect to feel excluded and conspicuous when visiting the countryside, something they perceive as an exclusively 'White British' environment (Countryside Agency, 2005). However, there are some local parks and green areas near their community where they could participate in walking, rambling, and playing and socialising.

## **1.1 Aims**

The aim of this research was to explore the motivators, facilitators and barriers towards physical activity and the types of physical activity that are acceptable and appropriate and can be built into the daily routine of South Asians living in Scotland.

## **1.2 Objectives**

The specific objectives were to use qualitative methods with South Asian parents aged (20-40 years) living in Scotland to enable us to explore and identify:

- attitudes and beliefs towards physical activity in general (including the attitudes of the parents to their children's involvement in physical activity)
- beliefs/knowledge and awareness of the relationship between physical activity and health
- types of activities Pakistani, Indian and Bangladeshi individuals do, either as part of their daily routine or during leisure time and the position of physical activity in family life
- motivators, facilitators and barriers to undertaking physical activity
- types of activities which would be accessible and acceptable and could, where possible, be built into their daily routine.

All of the above objectives were explored with relation to factors such as age of children, occupational status, gender, current level of physical activity (active or inactive) and age.

This project consisted of two parts. The first part was a scoping of the relevant UK literature on physical activity and South Asians (both qualitative and quantitative) in order to establish a comprehensive database to inform the current work, and future intervention work. (The results of this are reported in a separate document). The second (main) part of the project was a qualitative study, focusing particularly on the younger (20-40 year old) Pakistani, Indian and Bangladeshi population with young children or older teenage children. We adopted a holistic approach to the research, combining both health and social science perspectives, in order to capture the range of factors affecting views on and experiences of physical activity in the South Asian population.

## **2. Methods**

### **2.2. Scoping of the qualitative and quantitative literature**

This part of the study involved a search for UK literature relevant to physical activity and South Asians in order to establish a comprehensive database to inform future intervention work. Relevant literature either describes interventions that promote physical activity or exercise in British South Asians (migrants or descendants of people from India, Pakistan, Bangladesh, Nepal or Sri Lanka) or explores factors preventing South Asians from participating in physical activity or exercise or encouraging them to do so. No analysis or synthesis of the literature was performed as this was not within the scope of the commissioning brief. The project team aim to seek further funding in order to take this phase of the project forward at a later date. However, we present a summary box of top line findings in the results section.

There were three main parts to the literature search:

- I. a systematic search of health and social science literature electronic databases
- II. contacting Scottish local authorities, health boards and relevant organisations to identify unpublished reports
- III. an Internet search.

The systematic search was carried out in February 2008 and included the following electronic databases:

- the Cochrane Library
- ASSIA: Applied Social Sciences Index and Abstracts
- EMBASE
- CINAHL
- ESRC Society Today
- IBSS
- MEDLINE
- PsychINFO
- National Research Register
- Social Services Abstracts
- ISI Web of knowledge
- SPORTdiscus.

The search strategy comprised 3 main elements:

- terms relating to physical activity
- terms relating to South Asian origin
- terms relating to UK wide interest.

The search strategy used for the MEDLINE database is attached in Appendix 1. Search strategies for other electronic databases were adapted from this. References identified from the searches were downloaded from the databases into Reference Manager (v10) and de-duplicated. Titles and abstracts were screened for relevance by one member of the research team (RR) and were considered relevant if they described a project aiming to increase physical activity in South Asian people living in the UK and/or listed facilitators or barriers to South Asians meeting levels of physical activity recognised as being beneficial to health.

Secondly, contact details of each mainland local authority and health board in Scotland were obtained from an internet search. Where possible, an email was sent to a central contact point requesting dissemination to relevant departments within the organisation. A copy of the standard text is included in the appendices (Appendix 2). An email was sent to the following organisations: Paths to Health, OpenSpace, Forestry Commission, SportScotland, JogScotland, BEMIS, SPARColl, and NRCEMH (National Resource Centre for Ethnic Minority Health) and investigators also attended a

meeting of the Edinburgh Ethnicity and Race Health Research Group which focused on physical activity and where they were given pointers to several people who might have relevant literature. In addition, the investigators were given access to an NHS Health Scotland commissioned report and database by REACH of current Scottish-wide physical activity projects for minority ethnic groups. Projects aimed at South Asians aged 20-50 years were identified from the database and emails were sent to project leads requesting any reports or publications.

The third method involved searching the internet via the Google search engine using the terms 'exercise' or 'physical activity' with 'South Asian', 'India(n)', 'Bangladeshi', 'Pakistani', 'Nepal(i)', 'Sri Lankan', 'urd(h)u', 'punjabi', 'Muslim', 'Hindu', 'S(e)ikh', or 'Islam'. The first 50 results of each search were scanned for relevant material. There was insufficient time to expand the search to individual activity types, but little new information was forthcoming towards the end of this search and it is thought that very little, if any, relevant material will have been missed.

Local authorities, health boards and relevant organisations were invited to suggest other places where literature might exist and these leads were followed. In addition, citations or leads from key literature that seemed relevant were also pursued. Key informants interviewed for the qualitative part of the study were also asked for any relevant reports.

As with the systematic searches in the electronic databases the literature identified from the other two methods was entered into the Reference Manager database and then all references were exported into tabular format. The information is also available electronically in Reference Manager and Microsoft Access database files.

### **2.3. Qualitative study**

We undertook a qualitative study which employed both focus groups and individual interview methods. Focus groups were chosen as a method because they are a cost effective way of seeking a range of views and can encourage groups of research participants with similar background to reflect more deeply on a topic through discussion with peers. Single interviews, on the other hand, were the most appropriate method to seek specific data from individuals with particular expertise and experience. Focus groups were used to explore the issues surrounding physical activity primarily with South Asian parents aged (20-40 years) living in Scotland. We aimed to include the widest possible range of perspectives, experiences, needs and views within an achievable time-frame. We conducted nine focus group discussions with parents of young children and/or adolescents to consider their experiences. Semi-structured interviews (either face to face or telephone) were also

conducted to elicit the views and experiences of 10 key informants (e.g. physical activity specialists/providers and those involved in the delivery of care or community-based activities to the South Asian population).

### *2.3.1. Recruitment and sampling of focus groups*

Data was collected in April and May 2008. The geographical locations for the focus groups were the urban centres of Glasgow, Edinburgh and Aberdeen. Because of the known difficulties recruiting people from ethnic minorities (Kendal, Harris & Murray, 2007; Sheikh, 2006) and the timeframe (and associated budget) given to complete the work, we adopted a pragmatic and multi-faceted approach to recruitment. We used pre-existing or natural groups (e.g. community sports groups) rather than using purposive sampling to recruit new groups with a particular set of attributes. Whilst such a sampling frame could introduce bias, we aimed to identify groups which gave us a range and spread of experiences and perspectives (e.g. groups located within deprived urban or affluent urban areas). Such an approach allowed us to be flexible in our sampling and recruitment. We undertook some preliminary analysis whilst running other focus groups, which gave us the opportunity to use more targeted sampling for subsequent groups.

To protect participant anonymity we did not directly recruit into the study but asked the local group staff/co-coordinators to act as gatekeepers. Whilst the use of gatekeepers may have introduced some bias into the groups we were able to recruit, we needed to use this method to fulfil our ethical obligations, and also to be able to recruit within the short time period. We recruited participants to reflect the range of language groups, gender, socioeconomic status, religious affiliations, and occupational background that are typical of the South Asian community in Scotland. Rather than using racial and ethnic categorisation which may be complicit with racial typologies and thinking, we included people within the target age group who defined themselves as being of South Asian origin (Gunaratnem, 2003). South Asia includes the countries of Bangladesh; British Indian Ocean Territory; Bhutan; India; Maldives; Nepal; Pakistan; and Sri Lanka. In Scotland, the majority of South Asians are Pakistani (31,793), followed by Indian (15,037) and then Bangladeshi (1,981) (General Register Office for Scotland (GROS), 2008). Therefore we concentrated on these three groups. The main religions of people from South Asia are Islam, Hinduism and Sikhism – in Scotland the most common of these religions is Islam (42,557) followed by Sikhism (6,572) and Hinduism (5,564). Although we tried to recruit people from all three religious backgrounds, we were unable in the short time frame to recruit people who considered themselves to be Hindus (we had arranged one focus group, but it was cancelled). We did however interview several key informants who were Hindus, and they did not raise any attitudes, motivators or barriers that were significantly different to those of the Muslims or Sikhs. We also sampled

people who were already involved in physical activities (e.g. football, swimming, keep fit) to identify motivators and facilitators.

To achieve the variety of groups detailed above, the first month of the study was spent assembling a list of people and organisations, both existing contacts and other organisations known to deliver relevant services (e.g. family centres, healthy living centres). We also contacted community and religious centres (e.g. Sikh Gurdwara's). We asked gatekeepers to advertise the study, distribute information sheets and display leaflets and posters in areas where people congregate. All information materials were provided in English, Urdu and Gurmukhi (Punjabi) languages. People who were interested in taking part were invited to contact named researchers for further information.

To avoid gatekeepers feeling exploited by research staff, wherever possible we made either a payment or donation to cover use of their facilities for the focus groups and ensured that refreshments for participants were also locally sourced.

Table 1 outlines how the groups were composed. A total of 59 people took part in nine focus groups. All of the focus groups apart from three were conducted wholly in English. In the other three, both Urdu and English were spoken, with roughly 50% of the participants speaking Urdu.

**Table 1 Details of focus groups**

<i>Location</i>	<i>Country of origin</i>	<i>Religion</i>	<i>Affluent/disadv. areas</i>	<i>Gender</i>	<i>Active/non-active</i>
Aberdeen	Pakistan	Islam	Mainly affluent	Female	Non-active
Edinburgh	Pakistan	Islam	Mainly affluent	Female	Mixed
Glasgow	Pakistan	Islam	Mostly disadvantaged	Female	Active
Aberdeen	Bangladesh	Islam	Mostly disadvantaged	Female	Non-active
Glasgow	India	Sikh	Mostly disadvantaged	Male	Mixed
Glasgow	Pakistan	Islam	Mainly affluent	Male	Active
Edinburgh	Pakistan	Islam	Mostly disadvantaged	Male	Non-active
Edinburgh	Pakistan	Islam	Mostly disadvantaged	Mixed	Mostly non-active
Edinburgh	India	Sikh	Mostly affluent	Female	Mostly non-active

We used the postcodes provided by participants to determine the level of affluence or deprivation of their residential area by linking it with the Scottish Index of Multiple Deprivation (SIMD06) rankings (Scottish Government, 2008b) which were converted to SIMD deciles (Scottish Government, 2008a). The Scottish Index of Multiple Deprivation (SIMD) identifies levels of



deprivation in small geographic areas throughout Scotland. Deprivation scores have been ordered and grouped in deciles. The number of participants in our study living in each decile is shown in Table 2 and this illustrates that participants came from a wide range of socio-economic groups with approximately 12% living in one of the 10% most deprived areas in Scotland. Within each of the focus groups there was a mix of affluent and deprived postcode areas.

**Table 2. Number and percentage of focus group participants in each SIMD06 decile**

SIMD 2006 decile	Number of participants	Percentage of participants
1 (most deprived)	7	11.9
2	4	6.8
3	5	8.5
4	2	3.4
5	2	3.4
6	4	6.8
7	8	13.6
8	7	11.9
9	8	13.6
10 (most affluent)	7	11.9
Total	54	91.5
Missing	5	8.5
Total	59	100.0

### *2.3.2. Recruitment and sampling for individual interviews with key informants*

Following discussions with NHS Health Scotland we drew up a list of 10 key informants who offered a range of perspectives. This included five interviewees of South Asian origin who were involved in promoting or providing physical activity at the community or policy level; with a further five interviewees involved at the policy or health promotion level. Interviews were conducted either face to face or over the telephone.

### *2.3.3. Ethical issues and obtaining informed consent*

The study was conducted with adherence to ethical guidelines for good practice in research. Prior to the start of the research we gained ethical approval via the Department of Applied Social Science (University of Stirling) Ethics Committee. All research in the Department of Applied Social Science (and the Department of Nursing & Midwifery) is required to seek clearance from the Departmental Ethics Committee, which complies with the requirements of the ESRC (Economic and Social Research Council) Research Ethics Framework. Details of the procedures are available at

<http://www.dass.stir.ac.uk/research/ethics/>.

Informed consent was sought in all cases prior to the focus groups/interviews and anonymity and confidentiality was ensured at all times. Given the potential language issues, particular care was taken to ensure that participants clearly understood the nature of their involvement in the study. It was essential that all participants were aware of the aims and purposes of the research, and that they were clear that participation would in no way be to their detriment. Information about the project was provided in a range of languages and formats. To support potential participants to make decisions about whether to participate, an independent person was available to talk through decisions in appropriate languages.

#### *2.3.4. Format of the focus groups and data collection*

The focus groups were held at a time and a place that was convenient to participants. We ensured that the location was appropriate and created a feeling of safety. For example, we held several groups in the local community centre or religious centre. In order to increase participation we offered child care expenses (of up to £20 in high street vouchers) and gave an honorarium of £20 (in high street vouchers) to cover any travel costs and inconvenience caused by attending the session.

The focus groups were digitally recorded. We used a semi-structured topic guide but allowed scope for free discussion where appropriate (see Appendix 3). The topic guide was developed to address the aims and research questions detailed in section 1, as well as themes identified in the scoping review. In addition we explored issues such as how physical activity levels differed between genders, social class and geographical location and the relationship between physical activity of parent and the age of their children. We also explored why they chose to use or avoid certain locations most commonly associated with physical activities (e.g. sports centres, community centres, parks, countryside).

We endeavoured to create a supportive environment where people felt that they could express themselves freely. All team members involved in the focus groups had previous experience of focus group work with members of minority communities. We took measures to support participation, for example running single-gender groups in cases where this was preferred, and ensuring as far as possible that venues were accessible. Either before or after the focus groups, participants were asked to provide demographic details by completing a brief questionnaire (see Appendix 4).

### *2.3.5. Format of the interviews and data collection*

Interviews with key informants took place either over the telephone or face to face in a location which was convenient for the interviewee. A semi-structured interview schedule was also used (see Appendix 5).

### *2.3.6. Data protection and confidentiality*

We fully complied with the terms of the Data Protection Act 1998. After participants had been recruited into the study and given informed consent we assigned them a non-identifiable code and all data (paper and electronic) used this code. Identifiable data (e.g. contact details) were held on a separate database (i.e. were not linked to any data) and were only used to contact the participant about the study.

All data were held on a secure, password protected university computer. The analysis was undertaken primarily by GA and FH with input from other members of the research team. These team members had access to anonymised focus group transcripts and to summaries and reflections based on these. The analysis took place on university computers at the Universities of Stirling and Edinburgh. The digital voice recordings will be destroyed at the end of the study and the non-identifying transcripts will be retained in a secure archive setting for 5 years to facilitate future analysis and publication of the study material.

Confidentiality is critical in any study of BME (black and minority ethnic) groups, who may belong to small communities. We guaranteed confidentiality in the production of reports, and did not seek sensitive personal information in the focus groups.

### *2.3.7. Data analysis*

The interviews and focus group discussions were tape-recorded, transcribed, and translated (where necessary) by GA and analysis of the English documents was facilitated by use of NVivo. We undertook preliminary analysis after each focus group to allow for new issues and themes to be incorporated and explored in subsequent focus groups. Our analysis was guided by the research questions and objectives, but we also allowed open coding, in order for new themes to emerge. We explored themes in relation to categories of 'difference' such as social class, sex, migration history, geographical location and country of origin (Pope and Ziebland, 2008). We were also mindful of the differences between the terms 'physical activity' and 'exercise' which describe different concepts (Caspersen, Powell & Christenson, 1985). Constant comparison (checking experiences against those of others in the sample) ensured that the thematic analysis represented all perspectives and negative cases were sought (Strauss and Corbin, 1990). Analysis also included unanticipated themes (Pope and Ziebland, 2008). In addition, we ensured that

we did not ignore the nature of diversity ('difference') and variation of experience and perspective within the South Asian communities.

Analysis of data also focused on whether, and how, participants agreed or disagreed about each issue and possible explanations for disagreements. Analyses of key informant interviews were descriptive around the main themes identified in the analyses described above. Key themes from each stage of the analysis were synthesised to give a comprehensive account of the experiences and needs of South Asian people living in Scotland.

### **3. Results of scoping the qualitative and quantitative literature**

The systematic search of electronic databases retrieved 737 references. Following screening by title and then abstract, 33 references met the inclusion criteria. The remaining searches led to 32 other reports or papers being retrieved which were added to the database. Thus 65 references were retrieved in total and included in our final database. Most of the studies were undertaken in the UK and all appeared to have some relevance to the research questions.

The literature is collated and reported in a separate document. Given the time and budgetary restrictions imposed by the research and our brief from NHS Scotland, no synthesis of the evidence was undertaken. However, this may be conducted by the research team at a later stage, with further funding. A very brief appraisal of the reports and studies indicates very similar findings to those reported in this qualitative study (see Box 1). Where appropriate and possible we have discussed the reports in the light of the findings from the qualitative study.

#### **Box 1. Top Level Findings from Scoping of the Quantitative and Qualitative Literature which included South Asians living in the UK**

- Many of the barriers for BME groups do not differ much from those facing non-BME communities (e.g. cost, lack of motivation, childcare issues, access)
- Cultural barriers included lack of women-only sessions, and perceived institutional and personal racism, lack of culturally appropriate choices, language barriers, lack of role models, lack of information
- Nearly all of the studies exploring the barriers to undertaking physical activities highlighted the need for culturally appropriate (particularly women-only) facilities/sessions, as well as addressing childcare and access issues.
- Several studies evaluated barriers to using outdoor spaces (parks, green spaces and the countryside) and identified transport issues, safety/racism issues, feeling excluded and not feeling comfortable as reasons why people did not use them as much as they could
- Many people from South Asia do want to exercise more
- Popular activities are swimming, walking and going to the gym

#### **Some of the recommendations**

- Leisure facilities should be culturally competent and made more appropriate to women from ethnic minorities. Also need to be low cost and provide childcare
- Better information provision
- Introducing people from ethnic minorities to local activities that are not normally 'on their agenda'
- Do not focus solely on the provision of 'ethnicised' services but adopt a more mainstream approach
- Provision of physical activities associated with ethnic minorities' cultures and in places where ethnic minority communities already meet
- Involving people from local communities in the planning of their services and activities
- Use of role models

#### **4. Results of the qualitative study**

Nine focus groups (involving 59 participants who were predominantly in the 20-40 age range with young children) and 10 interviews with key informants (policy makers and those involved in community activities) were undertaken. The following sections outline the main findings. We have used quotes from the participants to illustrate key points. Quotes are all anonymised and any identifying place names or names of people have been removed or changed. Various abbreviations have been used with the quotes as follows. All focus groups and interviews were facilitated by two researchers denoted as FH or GA. M or F denotes male or female (M1 and M2 are used to denote different people speaking); FG denotes which focus group the quotes were taken from (numbered from 1-9); KI denotes that it was an individual interview with a key informant (numbered from 1-10).

The focus groups and key informant interviews revealed that, in talking about physical activity with people of South Asian origin, there are some issues that are also shared by the majority of people living in the UK and Scotland and are not culturally specific. Thus the motivators, facilitators and barriers to becoming more physically active or taking part in exercise are often the same for anyone living in the UK today. However, people from South Asia do face cultural, religious, and/or structural barriers which when combined with other more generic barriers can result in severely restricted choices. It is important to note that within the study there is a degree of variation according to individual/family experiences and attitudes, so that what may represent a cultural or religious barrier for some is either overcome, or simply not perceived as a problem, by others. For this reason, where data allow, we aim to provide a more balanced and nuanced picture that deliberately seeks to avoid making the kinds of sweeping statements that simply lead to inappropriate stereotypes with a strong emphasis on cultural difference. Where data allow, we also pay attention to variations linked to gender, age and degree of affluence or deprivation.

##### **4.1. Attitudes and beliefs: physical activity and exercise**

The policy document *'Lets make Scotland more active'* defines physical activity as:

'A broad term to describe movement of the body that uses energy. It can be as simple as walking. Some people think about getting active as getting fit and assume that it means vigorous physical activity. It doesn't.' (Scottish Government, 2003)

The understanding of physical activity amongst the participants did not differ to any significant extent from the definition above. Both focus group participants and key informants talked about a wide spectrum of activities that they felt could be included under the terms 'physical activity' and 'exercise'. Many talked about daily activities such as gardening, housework, child care, running up and down stairs, walking to school, work or their religious centre (mosque or temple) and other daily activities. One person also mentioned prayers as a form of exercise:

M2: Yes, usually we do the *Namaz* [Muslim prayer] five times.

GA: Reading *Namaz*?

M2: Yes you are constantly getting up and down and kneeling on your knees. (FG 8, mixed – men and women)

Although this was only mentioned by one person in our study, other studies have found that people view *Namaz* as a form of physical activity (Grace, Begum, Subhani *et al.*, 2007; Greenhalgh, Helman & Chowdhury, 1998).

Discussion tended to focus more on those activities which took place outside home and work (e.g. in leisure time), such as swimming, football, walking, or going to the gym. One group did differentiate between 'exercise' and 'physical activity' in terms of group or individual activities:

GA: Do you think there are any differences between the terms 'physical activity' and 'exercise'?

M1: Exercise is very tedious and boring, whereas physical activity like football, badminton, swimming – you don't feel it but that is exercise.

GA: What did you say is boring?

M1: Exercise, like going to the gym. Being on your own, like jumping on a treadmill.

GA: So physical activity involves other people?

M2: It involves other people, other people take part with you whereas exercise involves running on a treadmill by myself. (FG 5, men)

Others believed that exercise could be split into two types in another way – 'formal' and 'informal'.

I just find with three children and running after them all the time, that I don't have time to actually do formal exercise. I used to be able to, when I wasn't working, I used to be able to walk my daughter to school and back, that was roughly about 30 minutes walking. (FG 4, women)

#### 4.1.1. *Attitudes of older people (parents of the participants)*

One of the issues that some of the focus group participants talked about was the attitude of older people towards physical activity. It was clear that for many of their parents' generation (predominantly Pakistani, Bangladeshi or Indian migrants), physical activity as a leisure pursuit was simply not a part of their cultural repertoire. Some participants had actively been discouraged from, for instance, going out running, walking, going to the gym or playing sports (particularly women). This was because of the cultural background and attitudes of their parents or older members of the community:

I think back home [in South Asia] because there's so much work to do and it's hot, they get that physical exercise there, they don't even think about anything like going to a gym or going to work outs or whatever. It's just naturally and because that way they stay fit. They don't even think. So there isn't like a culture of exercise, because you work hard too. (FG 4, women)

In order to capture comparative material regarding attitudes of the older generation of first migrants, we spoke to a group of older men. They confirmed that physical activity as something that one pursued in addition to the activity of everyday life was not part of their culture.

But I mean the other thing is, the cultural thing is in our society we... our generation, my generation have been brought up, we don't look at these things in any way, you know, exercise and going out for walks and things like that, you know. This is something strange to them, you know, as well. (FG7, men)

One woman explained how in Pakistan, many of her relatives had worked as farmers, which entailed a high degree of physical activity. This was also linked to an outdoor lifestyle. She said that the men worked hard outdoors and the women remained at home cooking, which carried forward into their experiences in the UK. For this reason, our female participants in particular felt that they had (in some cases) been actively discouraged from going out and exercising outside the home.

In one group they also talked about how they felt that people in Bangladesh were more 'modern' in their attitudes than their parents were. They thought that their parents were keen to hold onto an identity from the past:

F1: They kind of bring their memories back with them, and they want it the way that they were when they were younger, and the people actually back home are actually more modern...

F2: That's right, yeah.

F1: And when we go back home, you know, we're wearing our headscarves but they're not! (FG 4, women)



#### *4.1.2. Attitudes towards children's physical activity*

The attitudes towards children's physical activity were variable, and to some extent were related to the attitudes towards physical activity in the parents (e.g. those who were already physically active were more likely to be actively encouraging their children). However, most participants acknowledged the importance of children taking part in physical activity. Many participants and key informants spoke about the difficulties in getting children to exercise when they live in a world where television and electronic gadgets feature largely in their lives, and there were fears about the safety of their children. They also spoke about how participation in physical activity which was not part of the school curriculum declined in their children once they reached the teenage years. What was different in some participants was their attitude towards types of physical activity for female and male children, particularly when they reached adolescence. None actively discouraged girls or young women from taking part in physical activity, but the focus was on them doing activities in places where they would be 'safe.' One key informant also discussed how girls' roles often changed as they became teenagers, with an emphasis on looking after younger children, becoming 'good' in the home and helping their mothers in the kitchen (KI 7, female).

#### **4.2. Attitudes and beliefs: the relationship between physical activity and health**

The majority of people we interviewed were aware of the relationship between physical activity and health. In many of the groups people specifically mentioned the link between physical activity and obesity, diabetes and, to a lesser extent, heart disease. However, several people did talk about physical activity only being important once a person had a specific medical condition, or were overweight, rather than it being about preventing these conditions. One community worker described the attitudes of her community (which was economically deprived and in an urban area). She did stress that these were generally held views in her community, and not just those from people with South Asian backgrounds.

'Well I, I think, I think there is a section of the community which thinks exercise is only important if you are overweight, they don't see it as being physically active and exercise as a way of maintaining good health, being integral to good health, they see it as, you know, somehow if you have diabetes or you have been diagnosed with high blood pressure then you need to go and exercise.' (KI 7)

Again several people talked about older people's lack of knowledge of health issues and how they only became aware once they began to experience ill health (diabetes and heart disease in particular). Few mentioned the relationship between physical activity and health in relation to their children.

### **4.3. Types of activities people from South Asia were most likely to engage in**

Like the majority population, the participants engaged in a wide range of physical activities and there was a great deal of variation between individuals. Many of the activities that the participants talked about frequently and enjoyed (or wanted to participate in) are also popular in the UK as a whole. For example, data from the Office for National Statistics (ONS) found that the most popular sporting activity (excluding walking) was swimming followed by going to the gym (breakdown was not provided for different ethnic groups). The ONS also found that sporting activities that had the largest difference in levels of participation between men and women were outdoor football and snooker. Conversely, women participated in keep-fit, aerobics and dance exercise more than men (ONS, 2007).

#### *4.3.1. Activities that men were most likely to participate in*

Many of the male participants worked in shops or businesses and spoke about the physical activity gained through work, although there was some variation in opinion around this. While some regarded their working day as very active because of tasks such as shelf-stacking and the lifting and carrying of heavy boxes, others appeared to view their work as predominantly sedentary, which was possibly related to the presence or absence of shop assistants. Football was an activity that they enjoyed (or would enjoy if they had the opportunity) as well as cricket, walking (predominantly within the confines of their local neighbourhood), badminton and going to the gym. Less frequently mentioned were swimming and walking in the countryside. A few men (and women talking about their husbands) reported that they cycled to work or went out on their cycles after work, but this was not commonly reported. In many ways, the activities they were involved in and enjoyed were similar to those of the general population with one exception. As mentioned previously, snooker is the second most popular activity for men in the UK (ONS, 2007) but was not mentioned at all by participants, but this could be because they did not consider it to be physical activity.

#### *4.3.2. Activities that women were most likely to participate in*

Although in all of the groups there was some talk of going to the gym (or using indoor gym equipment), taking part in team sports (e.g. netball), and participating in exercise classes, swimming and walking were two activities that stood out in particular as being the ones that women engaged in (or wished to engage in). Walking in particular was one activity that many felt that they could incorporate into their busy lives. A similar study undertaken in the South of England, also found that activities such as swimming, walking and exercise to music were popular, whilst the younger British born Muslim women also wanted to have the opportunity to try spin-cycling (led exercise

sessions on stationary bikes), extended gym sessions and indoor team games (Duval, Sampson & Boote, 2004).

#### *4.3.3. Activities that children were most likely to participate in*

Studies of UK primary school children have reported lower levels of physical activity in ethnic minority groups (Alton, Adab, Roberts *et al.*, 2007) and lower levels of physical fitness in children originating in the Indian subcontinent (Bettioli, Rona & Chinn, 1999). In addition, a study of British adolescents reported that, whilst there were marked reductions in physical activity in all adolescents, Asian students were less active than their White counterparts (Boniface, Brodersen, Steptoe *et al.*, 2007). Most participants reported that their children took part in school-based activities or clubs, but activity outside school appeared to vary across different groups. The most frequently reported activity that parents reported their children did was swimming (particularly with younger children), football, being out on their bikes (usually in the local area close to home), or playing outside with their friends. However some spoke of their fear of letting their children play outside because of safety issues (see section on Racism and personal safety). The participants also spoke about how their child's participation in non-school based physical activity often declined once they reached the teenage years.

There was also a great deal of variation regarding the presence or absence of active travel (walking, cycling or taking public transport). Some women who spoke enthusiastically of taking part in physical activity also took special steps to ensure that they and their children walked at least a part of the way to work or school. For instance, one woman spoke about how her children would walk one way to school but get picked up on the way home. However, many women (who tended to be the parent who took their children to school) spoke of the lack of time to walk to school because of their other commitments. Some felt that the distance was too far, or that they feared for their children's safety if they were left to walk alone.

#### *4.3.4. Activities that families were most likely to participate in*

Many families appeared to do little physical activity together, partly owing to the work commitments of the men. Many of the men worked long hours in shops or worked shifts as taxi drivers, which meant that they rarely had time off at weekends to spend with their wives and children. Several men also commented on the time that they spent at their religious centre (mosque or temple). Those that did participate as a family talked about activities such as badminton, and walking.

For participants, there was the realisation that regular exercise was important, but there were varying degrees of commitment to actually doing regular exercise or ensuring that their children did so. They did, however, enjoy

socialising together as a family group by going, for example, on picnics. Some women talked about how the extended family (i.e. large numbers of people) meant that it was difficult to organise events. It was more common for our female participants to talk of doing things with their children (though not necessarily involving physical activity) while their husbands were at work. This included taking children to the local park, going for walks with them or simply taking them to a friend or relative's house to play. Again, this is not dissimilar to the majority population.

#### *4.3.5. Activities people from South Asia were less likely to engage in*

There was no single physical activity that participants talked about consistently as not wanting to participate in. However, some activities, such as rugby and lawn bowls were mentioned by some individuals as particular activities which they did not feel were relevant to them or their communities. Attitudes to engaging in activities in the countryside (e.g. hill walking, rock-climbing) differed between the groups and are discussed in more detail in section 4.3.6.

Cycling was not mentioned by many women as an activity they participated in, but neither was it an activity that they said they would not participate in. One female community worker commented,

'You wouldn't think about jumping on a bike and going for a bike ride with the rest of your family. It's funny when you think of when they're back at home in Pakistan and India that they're on bikes. Riding a bike is part of daily life. That's how a lot of people possibly get around. And walking, because it's surrounded by countryside but they don't seem to want to be involved in it here for some reason. I think it's very much a lot to do with 'it's not for me, it's not pointing at me, it's the white, middle class person.' (KI 8)

She also commented that the lack of South Asian women cycling could be due to the fact that they did not learn as children.

#### *4.3.6. Activities and location (e.g. indoor, local community, countryside)*

As expected there was a degree of variability as to where people undertook physical activity, or would wish to undertake physical activity. However the location (e.g. leisure centre) could prevent participation and this is described in more detail under the section on barriers. Some reasons for choosing a location were dependent on variables such as access (e.g. distance from home) and would be similar for the population in the same geographical location. When people discussed whether they would do activities in the 'countryside' such as hill walking and rock climbing there was a range of responses. Most responded positively to the idea of the countryside and green

space, but several mentioned the difficulties of accessing it. However, others talked about what they did in the countryside:

M2: We go to Loch Lomond and all that.

GA: Is it quite physically active?

M2: We usually go for walks and all that. We go to some of the country parks and walk around.

GA: Do you like going out to the countryside?

M4: Definitely. We love going out, we take our barbecues with us.

M3: Cities can be polluted, it's nice to get out to the countryside and get some fresh air. (FG 5, men)

One key informant who provided outdoor activities for women from minority groups felt that ethnic minority women might feel completely alienated in rural spaces. She said it was partly because many of them lived in towns or cities and the 'outdoors' was a space that they did not feel comfortable in – they didn't know how to behave or how to handle being in the countryside. She said that they were also slightly fearful of being in unfamiliar spaces – particularly for those who might not speak fluent English because there was the fear of getting lost and not having the confidence to approach people for directions. She then also spoke about access to the outdoors in the UK and the weather and how this puts people off getting out and about (KI 1, female). Although not reported to any degree by people in this study, another informant said that there was evidence from their work that people from black and minority ethnic groups (including people from South Asia) did not have the same cultural habits when visiting or using local woodlands or green space.

'In essence that means that there isn't the same level of families [from South Asia] walking their dogs or playing in parks or going along to woodland for a range of fun physical activity.' (KI 6, male)

He identified a number of barriers including a lack of information in terms of what is available, where to go and how you get there and what you can do when you actually go there. However a third key informant noted that white people from a poor urban area might also not know what to do when in the countryside (KI 7, female).

Several reports have highlighted the barriers to people engaging in green spaces and the countryside which include lack of confidence, fears for personal safety and lack of public transport or access (Black Environment Network, 2004; OPENspace, 2006; Rishbeth, 2004). Several organisations such as the Black Environment Network and National Parks are actively engaging with projects to increase use of such spaces (Black Environment Network, 2004; Pendergast, 2004).

#### **4.4. Motivators and facilitators for engagement in physical activity**

Motivators, in this report, are defined as the reasons why people want to take part in physical activity. Many of the reasons that participants gave for what motivated them to participate in physical activity - enjoyment, weight reduction and/or perceived health benefits, and social interaction - were similar to the majority population. For example, a recent review of qualitative studies undertaken in the UK reported that weight management, social interaction and enjoyment were common reasons for participation in sport and physical activity (Allender, Cowburn & Foster, 2006). Similarly, the Office for National Statistics reported that reason for participation in sport were to keep fit and for enjoyment. Other reasons were meeting with friends and taking their children (ONS, 2007). Facilitators in this report are concerned primarily with leadership and role models. Issues which could be reported as facilitators, such as provision of childcare facilities, women-only spaces, access (e.g. location and provision of sports facilities), are discussed under 'barriers' in sections 4.5 and 4.6. This is because these issues were primarily seen as barriers to participation in physical activity (e.g. the lack of these facilities was noted and discussed more commonly as a reason for not participating than their presence was a facilitator).

##### *4.4.1. Social interaction*

There was a preference for taking part in physical activity with one or more friends rather than going along to a group session alone or exercising alone. This was common to both men and women and did not differ by other variables. However, those participants who were regular participants in different forms of physical activity also went to the gym, ran, walked or jogged alone. One group of men who were active in sport talked about what motivated them to do it:

GA: What are the key things that motivate you to do that [be physically active], what is it?

M3: For me it is just getting together with these guys, that's my.

GA: Social thing?

M3: Yeah because we get to see the guys twice a week or three times a week for a match or training.

M2: That's so nice.

M3: It is the social aspect you know, like you can get your brothers and playing competitively and going to training and going to the gym and stuff for me that's the main thing. (FG 6, men)

Women also talked about how they enjoyed the social interaction

FH: So is it a kind of social... do you like the idea of doing activities together?

F2: Yeah, it's more fun as well.

F3: It motivates you more than doing it on your own doesn't it?

F2: Yeah, definitely, definitely. So you'll want to go out more if you know your friends are coming as well, you know, it's much better.  
(FG 4, women)

Team sports (e.g. football and netball), badminton, swimming, and dance or exercise classes were all associated with providing social interaction. Walking groups were also mentioned by some groups.

#### 4.4.2. *Enjoyment of exercise*

Enjoyment of exercise was commonly mentioned as a motivator, especially when it included a social element. Dance was seen as one form of exercise that provided both 'fun' and social interaction. One key informant thought that it was a significant form of physical activity for females in his community:

M1: Yeah. I think dance is a big thing.

F1: Really?

M1: Yeah, I do, I think especially with women and girls in particular, I think dance is a big thing, it gives physical exercise, there's an element of colour, fun and social connection, and I think that kind of focus is inherited or can be given to older women as well, because I think they enjoy that as well, and that they get great pleasure in that. (KI 9, male)

While some women favoured dancing to Bollywood videos or taking part in Bhangra dancing, one person disapproved of this because of religious objections.

'I don't like doing that [bhangra dancing] to music because it is not allowed in Islam, Indian music and songs. I don't want me or my family to participate in that, you know.' (FG 8, female)

Since Bhangra dancing is related to the Sikh religion and culture, this particular participant felt it was inappropriate for Muslims. However, one of the women's groups who were the most conservatively dressed in terms of modest clothing and the wearing of 'scarves' (the Muslim women's head covering) expressed strong preferences for Bollywood dancing. Although they acknowledged that this was not really permitted under Islam, they felt that it was acceptable in the privacy of their own homes with friends.

Other activities which were associated with enjoyment included football, walking and going to the gym.

#### 4.4.3. *Perceived mental and physical health benefits*

The perceived mental and physical benefits were mentioned frequently as a motivator, but not as often as the social and enjoyment motivators (and not necessarily linked with them), perhaps indicating that they are not sufficient in

themselves. Several people, both participants in the focus group and the key informants talked about the increase in self esteem associated with participating in physical activity. One key informant who ran outdoor activities for South Asian women reported that after taking part in one of her courses it was wonderful to see how some of the women became much more confident in general so that the skills that they learnt for exercising in the outdoors somehow translated into higher self esteem and a greater confidence in general. One key informant also mentioned the increase in self esteem she noticed after women had been taking part in exercise classes:

‘They found something where they can come and enjoy, get some exercise done and they have started taking an interest in themselves, valuing themselves, that ‘I’m worth something. And I respect my body and I respect myself.’ So self respect has started to generate now.’ (KI 10, female)

Physical benefits as a motivator were linked to either pre-existing conditions (e.g. having diabetes):

M3: The other thing is if you have something like diabetes, diabetics or keeping fit, I can then turn you know control my diabetes then I don’t have to take insulin, I can keep my diet controlled and there was one time I was just about to go onto insulin and take tablets and stuff and I said no, so I made a little bit more effort after many years without it and starting badminton again. So it is for your health in general, you know. (FG 8, mixed).

The desire to lose weight or be slim and feel better was also mentioned:

GA: What motivates you to exercise?

F1: Well we look at slimmer people makes us really motivated (starts laughing).

F2: General fitness as well because you find yourself getting better. (FG 1, women)

#### *4.4.4. Leadership and role models*

Several people talked about how they would appreciate having someone to lead activities and be a motivator, such as having someone from their own community organising activities. In addition, several of the key informants discussed projects in which they had encouraged people to take leadership role (e.g. becoming walk leaders) in order to increase the participation amongst the south Asian community.

‘ What they really need is one head man, you say right there’s six or ten people in a group, they’ve got to arrange themselves, right we’ll be there at a certain time we’ll go for a walk or go for a swim. You make a group.’ (FG 7, men)



One key informant also felt that religious centres could take on a leadership role in promoting physical activity:

‘And I sometimes think even religious groups in terms of the work I do, if religious institutions could encourage it and in partnership with what they teach, because active... being fit and something is not discouraged at all, no religion says it's bad, it's encouraged because essentially it gives you a better and healthier life.’ (KI 9, male)

Some groups and key informants also spoke about the importance of role models such as sport personalities (e.g. boxers). However, several people commented that there were not many role models around for them. Although well known people were mentioned as role models (including Bollywood actors), participants also talked about having people in their local communities or families as role models. For example, one key informant noted that by going out running herself, other women could say, ‘oh, you're doing it, I could possibly be doing it’ (KI 8, female). Similarly one group of women talked about seeing a woman from South Asia running the marathon:

F1: Because I saw somebody in the London Marathon just on telly, obviously a Muslim woman, and she had a headscarf on but she was running a marathon, so I thought oh, so she must have something very light or something. She was wearing tracksuit trousers, full length, and she had full length shirt on and hair was covered because of her scarf.

F2: It's good to see that on TV as well actually, because it might encourage other ladies to think, well if she can do it then we certainly can as well. (FG 4, women)

One key informant had consulted community leaders about sports that children would want to participate in and cricket was reported to be an important sport for them:

‘We did a bit of consultation with some of the community leaders and that [cricket] is something that had a high value, high status. A lot of the young people's role models were famous cricketers from India, Pakistan and South Asia generally and that was something a lot of the young people aspired to be successful at.’ (KI 6, female)

She also said that some of the children were not necessarily fans of British sports so their role models were from South Asian countries rather than the UK.

Although sports personalities were seen as people to aspire to, one person did comment on the fact that it was ‘their profession to stay fit’ (FG 8, mixed)

possibly implying that they were less inspirational because they were paid to do it as their job.

#### **4.5. Specific barriers for South Asians to taking part in physical activity or exercise**

##### *4.5.1. Lack of culturally competent facilities*

Cultural competence is defined as:

‘having the right policies, the knowledge and the skills to meet the needs and practices of people from different cultural backgrounds. Culture is often taken to include aspects such as lifestyle, dress, diet, language including art and music and spiritual needs. Religious practices may cross cultural boundaries.’ (National Resource Centre for Ethnic Minority Health (NRCEMH), 2008)

A culturally competent (health care) setting should include culturally diverse staff who reflect the community (ies) served; providers or translators who speak the clients’ language(s); training for providers about the culture and language of the people they serve; signage and instructional literature in the clients’ language(s) and consistent with their cultural norms; and culturally specific settings (Anderson, Scrimshaw, Fullilove *et al.*, 2003).

Most of the focus groups which included women had discussions around the lack of culturally competent services, primarily in relation to swimming and also use of gyms. As mentioned previously in section 4.3, both swimming and going to the gym (either alone or for group sessions such as aerobics) were activities participants, particularly women, would like to do. However, sports facilities were often not providing culturally competent services which meant that they were not able to use them. Modesty was an important concern for women (and some men) in regard to undertaking physical activity (see also section 4.5.2 below on sport’s attire) and it was sometimes linked in with their religious beliefs. The main barrier that women reported was the lack of women-only sessions and the fact that, even when women-only sessions were available, male lifeguards were often still in areas of the leisure centre where the women were swimming or changing:

F1: And the other thing is, like, for example, swimming which is really a good sport to do but because of religious issues you can't just go into a swimming pool and take a class because it's mixed and for religious reasons we like them to be female only. There are a few that are run but I don't think the swimming pools actually sometimes understand what that means because, for example, [leisure centre] has a female class but a male lifeguard who wanders round the changing rooms, and to me...

FH: Around the changing rooms?

F1: Oh yes.

FH: Really?

F1: Yes. Because he was mopping the floor. (FG 2, women)

Several participants also mentioned the fact that some of the pools or gym facilities had large glass areas. This meant that even when there were women-only sessions, other people could view them:

F2: There is some place you can go to on Wednesday evenings for swimming, but it's no use because there are windows all around and people can see inside which is not covered. So there's no point in having ladies' swimming classes if everybody in the whole area can see. (FG 8, mixed)

Women-only sessions (e.g. swimming, aerobics, yoga, dance classes) in leisure centres are important for many women, not just those from the South Asian communities. However, whilst a male lifeguard, instructor or an open viewing area may make many women in the UK feel uncomfortable or embarrassed, they may still use the facilities and services. For women from South Asia (particularly Muslim women) it would usually mean that they were unable to use the facilities. Many of the female participants needed a space where they could wear attire that made them feel comfortable and unselfconscious (such as t-shirts and shorts or other more 'modest' clothing), where they would have a female instructor or lifeguard in a 'women-only session' and where there would be no public viewing.

Some men also discussed 'men-only' space and/or sessions, as they were not comfortable in gyms where women were also exercising. Some men were also not comfortable exercising in mixed sessions in swimming pools and using communal changing rooms. One key informant described what she thought were the issues for men:

'I think it's about being undressed in front of foreign women, foreign as in women that are not within their own house or their wives or their partners. So anybody who's not their wife they don't feel comfortable being so undressed in front of them.' (KI 4, female)

#### 4.5.2. *Sportswear and clothing*

Most women talked about sportswear and how they needed to preserve their modesty when undertaking physical activity, but how they often felt 'different' or embarrassed by what they wore.

F1; We went out for walks and we were running but we had like our trousers on and our dresses on and our headscarves on, and our

....

[Laughter]

F1: Yeah, you just get all the stares and looks. We were just wanting to keep fit, you know, we took our mum as well and we just wanted to do it, but it's unusual so people were looking at us and it de-motivates you, you think 'well I don't want to go out now' because, it's not nice when people look at you and think 'check that Ninja!'. (FG 4 women)

They also discussed what to wear at the gym and how hot the scarf was to wear. A few men also spoke about not wanting to wear skimpy clothing.

#### *4.5.3. Racism and personal safety*

Several groups raised the issue of personal safety and the fear of racism. This was particularly apparent when talking to people living in disadvantaged communities in Glasgow and Edinburgh. Personal safety in disadvantaged areas is also an issue for the majority population, but it would appear that racism sometimes compounds the problem of personal safety in these areas. The issue was raised by both men and women, particularly in relation to walking and their children playing outside. Several men and women felt that people who wore headscarves were the targets of more racial abuse:

'Well, myself, my sister and another friend and neighbour - she's Muslim as well - we were out for a walk. It was about the same time, about half past 9, 10 o'clock, and my sister wears her headscarf and there was two young boys, youths, walking past and when we were walking up towards them we didn't even think, we just thought they're going to walk past, and then they just kind of like pushed my sister. Not me or my other friend because we don't wear headscarves. Just my sister because she had a headscarf on her head.' (FG2, women)

Greater fears for personal safety in disadvantaged areas meant that some participants did not feel safe going out for walks, letting children walk to school, or allowing their children to go out to play (FG8).

M4: We had a lot of racial problems where we used to stay, our son didn't go out that much. So we had, initially we had a lot of problems there, so they didn't meet their friends and they didn't go out and they didn't play. Now with our youngest son we have to persuade him. He is quite happy now, we are a little bit more settled here and he goes out to play, you know, we have to say to him "go out, do something and make friends", it is difficult to make friends sometimes, especially when people don't accept your children and they don't want to play. (FG 8, mixed)

Some women recognised that the fear for the safety of their children was not confined to their own ethnic group, or related just to fear of racism:

F4: I've had some English parents, mothers, saying that they wouldn't let their 10 year old boy walk to school, so it's not just us, everybody has this fear.

F6: It's not just us.

#### 4.5.4. *Dogs ('unclean' animals encountered in green spaces)*

Although the issue of dogs was not discussed in all focus groups, several groups did see it as a barrier to walking in the local area, or in the wider community. Some, because of their religious beliefs, did not like dogs (in Islam dogs are considered to be unclean), whilst others, similar probably to many living in their local area, did not like the thought that they, and/or their children, might be exercising in an area where there was dog excrement.

#### 4.5.5. *Other issues*

Language was rarely mentioned as a major barrier to accessing physical activity services, but this could be because the majority of the participants spoke English. Other less frequently mentioned barriers included lack of halal food at leisure centres and feeling conspicuous and sometimes unwelcome in leisure centres.

### **4.6. Barriers similar to those of the majority population**

Many of the barriers that people spoke about were not culturally specific, but were still perceived as major barriers. Although this was not a comparative study (i.e. we did not talk to men and women in the general population and compare their barriers with the barriers from people from South Asia) other research suggests that the barriers described below are not specific to a particular cultural group. For example, a report by Birmingham Race Action Partnership (BRAP) found that the barriers facing BME communities tended not to differ too significantly to those facing non-BME communities (Birmingham Race Action Partnership, 2007). One of the main determinants was socio-economic status where housewives, low paid workers or the unemployed, were much less likely to participate in any physical activity irrespective of their ethnic group, age or gender. Likewise, low activity was also linked to issues of time, affordable childcare and competing responsibilities. Similarly a US study of a culturally diverse group of women reported that family priorities were a main barrier to physical activity in all the groups, regardless of cultural background. Having multiple roles as wife, mother, daughter, and as an active community member was mentioned as time-consuming and difficult, leaving little time or energy for exercise (Eyler, Vest, Sanderson *et al.*, 2002).

The following issues were mainly (though not exclusively) reported by women - especially those from low income groups.

#### *4.6.1. Lack of adequate childcare provision*

Daily life for young women with small children was regarded as particularly energy and time consuming owing to the nature of these women's busy lives. For many, they juggled work commitments with dropping off and picking up children from school, nursery or after school clubs and taking care of the household. Some also cared for elderly relatives. Many women reported that one of the main barriers to undertaking more physical activity was the lack of childcare facilities in leisure centres as they only catered to the under fives. However, one of our key informants who was involved in leisure services explained:

'Well after five there are programmes for kids to get involved in, as in activity programmes. So again, it's a mindset almost that up to five that is crèche and that's really care, you know the crèche service is providing a care service for children and looking after them while their parents or their guardians go away and do something. After five the mindset is that we really want to engage those kids in a physical activity or a sport and then and at the same time their parents can go away and do, you know.' (KI 4)

#### *4.6.2. Lack of time, motivation and energy*

Both men and women talked about their busy lives and lacking the time and motivation to undertake physical activity. Many were engaged in work, child care, family activities and household tasks. Some also talked about the time they spent at their religious institutions (e.g. mosque or temple) or practising their religion. Women in particular felt that they had a lack of 'leisure' time in which to undertake physical activity:

F2: I think it's a male/female thing as well. At least men have leisure time. We come home and we have to put fresh food on the table everyday, you know it's so much of that as well.

F1: We've got chores to do as well. (FG 1, women)

#### *4.6.3. Cost*

Cost of leisure activities (e.g. use of the gym, swimming and hire of courts for racquet sports) was mentioned by several people as a barrier to taking part in physical activity.

#### *4.6.4. Continuity and sustainability*

Some participants and several key informants talked about the frustration they experienced when they had found culturally competent services (some mainstream, others for South Asians) which only had short term funding. Thus they may have been involved in an activity which they enjoyed, but which subsequently ceased to be offered. A report of initiatives in Scotland offering physical activities to people from BME groups also found that, where concerns were raised about the success of an initiative, this was normally to do with funding difficulties and long-term sustainability (Banday and Paterson, 2008).

## **4.7. Other feedback from key informants**

### *4.7.1. Barriers to culturally competent service delivery*

Some of the key informants we spoke to provided services for the general population in Scotland and therefore spoke about wider issues of access and use. Some of them raised the issue that since they did not collect information on the ethnicity of users of the service/activity, they did not know whether or not it was being used by South Asians. For example, people involved in the delivery of activities such as walking groups did not routinely collect data on participants, and rarely collected data on the ethnic origin of participants. Some of the key informants we interviewed in the voluntary or government organisations were restricted by lack of funding and could offer activities or services to meet the needs of the general population (e.g. cycle paths, green spaces), rather than routinely targeting any specific groups. However, from the work done by REACH (Banday and Paterson, 2008) there are some initiatives targeting minority groups, but they often lack sustainability.

### *4.7.2. Issues around inclusion*

More than one of the key informants discussed whether services should be developed specifically for South Asians, or whether the current services should be more culturally competent. One key informant felt that services designed solely for South Asians only reinforced stereotypes and worked against the spirit of inclusion.

‘But a lot of this separate sports for Asian people just reinforces the notion that black people will never integrate with white people and I am really against that. What’s the difference between white women’s yoga and black women’s yoga?’ (KI 7, female)

There was also a concern that some of the physical activity services that were being developed for South Asians or BME groups tended to target ‘problem groups’ such as teenagers who were ‘misbehaving’. Another concern was that they may be reinforcing stereotypes by only offering a small range of activities which fitted the cultural or gender stereotype. For example, because South Asians do not regularly, or in any great numbers, go out into the countryside to walk, mountain bike or rock climb, people think that it is because of their culture and not offer those activities. Whereas, the reason may simply be that they may not have had the opportunity to visit the countryside or do not know what to do when they get there. One key informant suggested that some sort of taster sessions might help them to get involved, but then these sessions should be dovetailed and integrated into mainstream activities.

All of the key informants who spoke about services acknowledged that there needed to be the opportunity for women-only activities. Almost all of the focus group participants also agreed that they were happy to participate in mainstream services, as long as they were appropriate to their needs.

#### **4.8. Types of activities which would be accessible and acceptable**

##### *4.8.1. Culturally competent mainstream services*

Swimming, using the gym, walking and some team sports (e.g. netball and football) were all activities that the participants and key informants talked about and would be keen to engage in. Although many people talked about activities and services that they had used which had been designed for people from South Asia, most were happy to use mainstream services as long as they were culturally competent:

'I think the one thing I would say is not be seen as some sort of special service that happens two months of the year. If you're going to provide a sports facility let it have the facility there for Muslims or Asians to accommodate them regularly, not just as a one off special treatment for two months when they get their class or whatever and then it just goes. We want to be part of the long term process and I think that's where we fail at the moment. I mean if you look at England, for example, the cities that have a huge proportion of Muslims or Asians I'm sure their facilities allow them, on a regular basis...and I think that's important, the regularity of it isn't there, and that's what they have, they have a sports facility where they can go once a week and they know it's going to be the right environment for them to do the exercise. You don't have that in Scotland at all I don't think.' (FG 2, women)

These findings reflect those of the report by BRAP which concluded that 'efforts to increase BME physical activity therefore should not primarily focus on the provision of 'ethnicised' and 'culturally specific' services (Birmingham Race Action Partnership, 2007). Instead, a more holistic approach might need to be adopted that takes into account all the different factors - the practical, institutional and structural - that currently act as barriers to greater BME physical activity.'

It may be that services need to develop better marketing of current activities which are culturally competent (even though they may not have been necessarily designed to be so). Many women and men may not use the facilities because it is not clear to what extent they are appropriate, and do not want to be put in a position where they feel embarrassed or uncomfortable.

One key informant also stressed the fact that it would be preferable to develop services that would suit women-only (whilst also being sensitive to South Asians' needs) as there were a lot of shared concerns from all women about having women-only spaces (KI 1). One similar study found that although not all South Asian women required single sex facilities, the vast majority of Muslim women did and gaining their trust is crucial if attendance at exercise sessions is to be increased (Duval, Sampson, & Boote, 2004). Women-only sessions should give clear information about whether there are only female



staff (female lifeguards, changing room attendants and other staff), and no public viewing.

*4.8.2. Specific services which can then be mainstreamed*

More than one of the key informants were concerned that developing specific services might lead to stereotyping. However others felt that people need to be first provided with 'taster' sessions so that they could be allowed to see what was available, and get comfortable (e.g. trips to the countryside etc.) and then the service could become more mainstream.

'We'll develop a programme for females who are wanting to go walking as a female-only walking group, we'll have a female coach there, there'll be transport there so you can come and take them wherever they want to go. And then slowly maybe integrate them eventually with another women's group that's running in a Scottish or a mainstream group that's running elsewhere so that, okay, they get their comfort zone in that, but allow them to integrate through that.' (KI 9, male)

## **5. Conclusions and recommendations**

The findings in this study are very similar to those of other studies we identified in the scoping of the literature. This study found that South Asians living in Scotland view physical activity in a similar way to the general population; enjoy (or would like to enjoy) more or less the same activities (particularly swimming, walking and using the gym); and have similar motivations. However, whilst some of the barriers are also similar (cost, childcare and lack of time), they also face barriers which can severely restrict choice, particularly for women. For example, swimming is one of the most popular activities for everyone in the UK including South Asians, but many South Asian women are unable to use their local swimming pool because of culturally inappropriate facilities. The literature demonstrates that these problems have been known about for decades, but our study shows that little progress has been made towards addressing the problem that many ethnic minority people are effectively denied access to some of the leisure services.

The barriers outlined above impacted not only on the adults we interviewed, but also the type and amount of physical activity that their children participated in. Evidence from other studies suggests that South Asian and BME children tend to exercise less than the general population. Studies have also found that barriers to children participating in physical activity include parents' lack of current participation in sports and exercise; and restricted access to opportunities for participation in sport or exercise (e.g. cost; distance and safety issues) (Brunton, Harden, Rees *et al.*, 2003). Thus the barriers we identified also mean that it is difficult for parents (particularly mothers) to exercise with their children and provide a range of opportunities for them.

Those of our participants who could be regarded as physically active overcame barriers shared by the majority population, such as restricted access to childcare and leisure facilities. They found ways of building physical activity into their days, but their choices were restricted as to which activities they could participate in. Often they had to make strategic choices such as parking the car part of the way to work and walking the remainder of the journey, or including their children in long walks. However, no matter how much they enjoyed and valued physical activity, they could not overcome barriers imposed by inappropriate infrastructure: mixed swimming sessions, public viewing areas in gyms or swimming pools, mixed changing areas, and male lifeguards, for instance.

For those of our participants who were non-active, there were significantly more barriers that made it difficult to overcome the first hurdle to becoming active. Although many of the barriers to taking part in physical activity mentioned above are shared by the majority population, ethnic minority

communities face additional barriers such as the imperative that women have truly women-only spaces to exercise in, and the various experiences of racism (both institutionalised and personal). Experiences of racism were compounded for some of our female participants who wore more 'traditional' South Asian clothing. They sometimes became targets for racist remarks when out in public (personal racism) and sometimes experienced the institutional racism embedded in some services: the inability to access services because they were not truly women-only, or being prevented from entering a swimming pool wearing attire that did not conform to what was worn by the majority of swimmers.

One of the core values of Scotland's physical activity strategy is to promote equal access 'regardless of age, sex, race, religion, social class, ability, disability, health status or geographical location' (Scottish Government, 2003). Most of our participants would welcome small changes that would enable them to access facilities that members of the majority population take for granted. While it would be beneficial to offer special taster sessions to South Asians to encourage the inactive to take part in exercise and help them to become motivated, most of our participants did not expect to have exercise classes or sessions that were restricted to members of their communities. There was a desire to integrate with the mainstream so that, for instance, women only sessions would be for all women regardless of age, ethnicity or other markers of difference. With attention to the design and delivery of services, this could mean that for example, leisure centres across Scotland were able to provide truly inclusive services for all people in Scotland, and provide a range of choices to enable them to increase their levels of physical activity.

The recommended amount of physical activity needed to reduce the risk of premature death from cardiovascular disease and type 2 diabetes and to provide other health benefits is a minimum of 30 minutes a day for adults and 60 minutes for children of at least moderate intensity physical activity on five or more days of the week. These recommended levels of physical activity can be built up in bouts of 10 minutes or more (Department of Health, 2004). Achieving this level of activity in South Asians living in Scotland is likely to require a range of choices which are all culturally competent, easily accessible, enjoyable and low cost. The range of motivators and barriers suggests that there is no single solution. There are already a number of innovative and successful initiatives in Scotland that provide physical activity to BME communities and have been mapped in another report.<sup>36</sup> A wide range of activities are currently offered, from walking and gentle exercise, to more strenuous activities such as football and dancing. Most of these initiatives had been subject to some level of evaluation and reported positive findings such as sustained participation and user enjoyment. However, the

report and our study found that some are only temporary projects that disappear at the end of short term funding. The step-change needed in order for many to achieve the minimum recommendations is substantial and is therefore likely to require multi-faceted and intensive interventions.

In addition to the initiatives mentioned above, two Edinburgh-based studies are worth noting. The Khush Dil study, undertaken in Edinburgh in 2002, set up health visitor led screening clinics for South Asians (Mathews, Alexander, Rahemtulla *et al.*, 2007). It found that, between baseline and return visits, returnees reported an increase in physical activity. This was mentioned by several of our participants in positive terms, although it was also an example of a successful intervention that was not sustained in the long term. Also of note is the Prevention of Diabetes in South Asians (PODOSA) trial which is currently underway in Scotland (<http://www.podosa.org>). This randomised controlled trial (RCT) uses dieticians to work with people at high risk of developing diabetes to encourage weight loss and increase physical activity. Both of these studies are notable for the high quality, rigorous evaluations that are embedded in the interventions.

There is a paucity of high quality evidence to provide guidance as to how to increase physical activity in South Asians living in Britain. There is a need to systematically review the existing evidence to identify the current evidence base and the gaps to be addressed by further research. In order to progress further thinking on the issues highlighted by our qualitative research, we believe a next step should be to synthesise this with our literature/scoping review. The following recommendations, therefore, are based on our qualitative work and we are not certain whether or not they are also supported by a high quality quantitative evidence base. Therefore, if any of the recommendations are implemented, most will need to be piloted and accompanied by rigorous evaluations. The step-change needed in order for many to achieve the minimalist goal of 30 minutes per day, five days a week is substantial and is therefore likely to require multi-faceted and intensive interventions. In addition, issues about sustainability of a service or facility need to be considered at the outset. Many of the recommendations we make are equally applicable to the general population.

## **5.2. Recommendations for leisure services (e.g. swimming pools, gyms, leisure centres)**

The following leisure service changes or activities are recommended:

- women-only swimming and gym sessions (designed for all women, but culturally competent). Existing facilities may need to be modified (e.g. have 'curtains' for large expanses of glass at swimming pools)
- male-only sessions too
- more people from ethnic minorities employed at leisure services and perhaps leading some of the sessions (e.g. fitness instructors)
- more female group activities such as Bollywood dance sessions and team sports (e.g. netball) which could appeal to all women
- more services for both parents and children
- childcare facilities and lower cost for some activities

### **5.3. Recommendations for other services or activities**

The following service changes or activities are recommended:

- 'taster' sessions for activities which South Asians do not commonly get involved in (e.g. rock climbing, hill walking, cycling, tennis, volunteering, gardening projects) which can then be dovetailed into mainstream activities. The Black Environment Network and some other community groups already do this to some extent
- family focused activities which encourage the whole family to be active (including active travel)
- increasing leadership in the community – suggestions include training people from the community to become walk leaders and/or fitness instructors; more use of South Asian role models in promoting physical activity in the local community; case workers to organise events and get individuals active; use of buddy systems to support people to walk in the local area or countryside
- better communication about or marketing of the services that are available, their cultural appropriateness, their benefits (particularly in regard to preventing CHD and type 2 diabetes), how to get involved, and how to access them by different modes of transport. Could consider putting leaflets and posters in religious and community centres to advertise services (where appropriate)
- more information about how to access and use green spaces (particularly local parks, woodlands and countryside). For example, may need to provide details of how to get there by a range of different modes of transport; and information about activities to do when you are there (perhaps providing free activities or culturally appropriate information boards)
- providing safe and pleasant environments to encourage walking
- using spaces where people already meet (e.g. religious centres) to promote, encourage, and engage in physical activity
- increasing awareness and long term funding/resources/space for community-based initiatives such as REACH which provide services to Black and Minority Ethnic (BME) groups.

## 6. References

- Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Education Research: Child Obesity Prevention Special Issue*, 21(6), 826-35.
- Alton, D., Adab, P., Roberts, L., & Barrett, T. (2007). Relationship between walking levels and perceptions of the local neighbourhood environment. *Archives of Disease in Childhood*, 92(1), 29-33.
- Anderson, L.M., Scrimshaw, S.C., Fullilove, M.T., Fielding, J.E., & Normand, J. (2003). Culturally competent healthcare systems: A systematic review. *American Journal of Preventive Medicine*, 24(3, Supplement 1), 68-79.
- Banday, S., & Paterson, A. (2008). Mapping exercise of initiatives to increase physical activity amongst Black and Minority Ethnic (BME) groups.: NHS Health Scotland.
- Batty, G.D., & Lee, I.M. (2004). Physical activity and coronary heart disease. *BMJ*, 328(7448), 1089-1090.
- Bettiol, H., Rona, R.J., & Chinn, S. (1999). Variation in physical fitness between ethnic groups in nine year olds. *International Journal of Epidemiology*, 28(2), 281-286.
- Birmingham Race Action Partnership (2007). Barriers to Physical Activity for Black and Minority Ethnic Individuals.
- Black Environment Network (2004). Increasing Physical Activity within ethnic minority communities: Opportunities linking health and the built and natural environment. Guidance paper No.8.
- Boniface, D.R., Brodersen, N.H., Steptoe, A., & Wardle, J. (2007). Trends in physical activity and sedentary behaviour in adolescence: ethnic and socioeconomic differences. *British Journal of Sports Medicine* 41(3), 140-144.
- Brunton, G., Harden, A., Rees, R., Kavanagh, J., Oliver, S., and , Oakley A Children and physical activity: a systematic review of barriers and facilitators. Available: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=245> - Last accessed 1-8-2008
- Caspersen, C.J., Powell, K.E., & Christenson, G.M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Rep*, 100(2), 126-131.
- Countryside Agency "What about us?" Diversity Review evidence - part one Available: [http://www.countryside.gov.uk/Images/DR%20PUBS%20ETHNOS%20FULL%20REPORT\\_tcm2-27064.pdf](http://www.countryside.gov.uk/Images/DR%20PUBS%20ETHNOS%20FULL%20REPORT_tcm2-27064.pdf) - Last accessed 23-7-2008
- Department of Health (2004). At least five a week: Evidence on the impact of physical activity and its relationship to health. (pp.1-127). London: Department of Health.

Duval,L., Sampson,J., & Boote,E. (2004). Perceptions of Local Women about Physical Exercise Provision in Shelton, Tunstall, Burslem and Longton.

Eyler,A.A., Vest,J.R., Sanderson,B., Wilbur,J., Matson-Koffman,D., Evenson,K.R., Thompson,J.L., Wilcox,S., & Young,D.R. (2002).

Environmental, policy, and cultural factors related to physical activity in a diverse sample of women: The Women's Cardiovascular Health Network Project - Summary and discussion. *Women and Health*.36(2)(pp 123-134), 2002.Date of Publication: 2002.(2), 123-134.

Fischbacher,C.M., Hunt,S., & Alexander,L. (2004). How physically active are South Asians in the United Kingdom? A literature review. *Journal of Public Health*, 26(3), 250-258.

General Register Office for Scotland (GROS) Table UV10 - Ethnic Group (14 category classification) Available: <http://www.gro-scotland.gov.uk/> - Last accessed 3-8-2008

Grace,C., Begum,R., Subhani,S., Frost,G., Greenhalgh,T., & Kopelman,P. (2007). Understanding roadblocks to physical activity participation in a UK South Asian community: cultural and religious perspectives. *International Journal of Obesity*, 31 S194.

Greenhalgh,T., Helman,C., & Chowdhury,A.M. (1998). Health beliefs and folk models of diabetes in British Bangladeshis: A qualitative study. *British Medical Journal*, 316(7136), 978-983.

Gunaratnem,Y. (2003). *Researching 'Race' and 'Ethnicity'*. Sage, London.

Haapanen,N., Miilunpalo,S., Vuori,I., Oja,P., & Pasanen,M. (1997). Association of leisure time physical activity with the risk of coronary heart disease, hypertension and diabetes in middle-aged men and women. *International Journal of Epidemiology*, 26(4), 739-747.

Hippisley-Cox,J., Coupland,C., Vinogradova,Y., Robson,J., Minhas,R., Sheikh,A., & B.P. (2008). Predicting cardiovascular risk in England and Wales: prospective derivation and validation of QRISK2. *BMJ published online early 23 June 2008; doi:10.1136/bmj.39609.449676.25*.

Kendal,M., Harris,F., & Murray,S. (2007). Researching the 'good death': a qualitative in-depth interview and focus group study exploring key challenges and ways forward.

Mathews,G., Alexander,J., Rahemtulla,T., & Bhopal,R. (2007). Impact of a cardiovascular risk control project for South Asians (Khush Dil) on motivation, behaviour, obesity, blood pressure and lipids. *Journal of Public Health*, 29(4), 388-397.

National Resource Centre for Ethnic Minority Health (NRCEMH) Ethnicity Glossary Available: [http://www.nrcemh.nhsscotland.com/ethnicity\\_glossary.html](http://www.nrcemh.nhsscotland.com/ethnicity_glossary.html) - Last accessed 9-8-2008

Nazroo,J.Y. (2003). The structuring of ethnic inequalities in health: Economic position, racial discrimination and racism. *American Journal of Public Health*, 93(2), 277-284.

- ONS Social Trends. No 37 Available:  
[http://www.statistics.gov.uk/downloads/theme\\_social/Social\\_Trends37/Social\\_Trends\\_37.pdf](http://www.statistics.gov.uk/downloads/theme_social/Social_Trends37/Social_Trends_37.pdf) - Last accessed 7-7-2008
- OPENspace (2006). Review of the Scottish Forestry Strategy Consultation Process: Focus Groups.
- Pendergast,S. (2004). Social Inclusion Involving People from Ethnic Minorities in the Peak District National Park, England .
- Pope,C., & Ziebland,S. (2008). Qualitative research in health care: analysing qualitative data. *BMJ 2000;(320):114-6*.
- Primatesta, P and Brookes, M Health Survey for England - The Health of Minority Ethnic Groups '99. Cardiovascular disease: prevalence and risk factors Available: <http://www.archive.official-documents.co.uk/document/doh/survey99/hse99-03.htm>
- Rishbeth,C. (2004). Re-placed People, Re-visioned Landscapes: Asian Women Migrants and their Experience of Open Space .
- Scottish Government 'Lets make Scotland more active' Available:  
<http://www.scotland.gov.uk/Publications/2003/02/16324/17895> - Last accessed 9-8-2008
- Scottish Government Analysis by postcode Available:  
<http://www.scotland.gov.uk/Topics/Statistics/SIMD/SIMDPostcodeLookup> - Last accessed 9-8-2008a
- Scottish Government SIMD 2006 Background Data - Annex B SIMD ranks to quintiles, deciles and vigintiles Available:  
<http://www.scotland.gov.uk/Topics/Statistics/SIMD/simdbackgrounddataannexb> - Last accessed 9-8-2008b
- Sheikh,A. (2006). Why are ethnic minorities under represented in US research studies? *PLoS Medicine*, 3(2), e49.
- Strauss,A., & Corbin,J. (1990). *Basics of qualitative research: grounded theory procedures and techniques*. Sage, London.



## Appendix 1. Search strategy

1. exercise movement techniques/ or breathing exercises/ or dance therapy/ or exercise/ or exercise therapy/ or muscle stretching exercises/ or relaxation/ or relaxation techniques/ or walking/ or yoga/
2. cricket.ti,ab,kw.
3. (active adj5 living).ti,ab,kw.
4. (active adj5 lifestyle).ti,ab,kw.
5. housework.ti,ab,kw.
6. (physical adj5 activit\$).ti,ab,kw.
7. exercis\$.ab,ti,kw.
8. dancing/ or gardening/ or sports/ or athletic performance/ or physical endurance/ or baseball/ or basketball/ or bicycling/ or boxing/ or football/ or golf/ or gymnastics/ or hockey/ or exp martial arts/ or mountaineering/ or racquet sports/ or tennis/ or running/ or jogging/ or skating/ or snow sports/ or skiing/ or soccer/ or swimming/ or diving/ or volleyball/ or walking/ or weight lifting/ or wrestling/
9. sport\$.ti,ab,kw.
10. (walking or swimming or cycling or bicycling or running).ti,ab,kw.
11. ((tai adj chi) or (tai adj ji) or (track adj2 field)).ti,ab,kw.
12. 1 or 2 or 3 or 5 or 6 or 7 or 8 or 9 or 10 or 11
13. (south\$ adj asia\$).ti,ab,kw.
14. (urd?u or punjabi or bengali or nepali).ti,ab,kw.
15. (muslim\$ or moslem\$ or hindu\$ or islam\$ or s?ikh\$).ti,ab,kw.
16. (india\$ or Bangladesh\$ or Pakistan\$ or (Sri adj Lanka\$) or Nepal\$).ti,ab,kw.
17. 13 or 14 or 15 or 16
18. (scot\$ or engl\$ or wales or welsh or (northern adj ireland) or (northern adj irish) or (united adj kingdom) or (great adj britain) or Brit\$ or uk).ti,ab,kw.
19. 12 and 17 and 18
20. remove duplicates from 19

## **Appendix 2. General request for information**

For a piece of work funded by Health Scotland we are collating literature (including unpublished reports) on projects that have:-

- i) provided physical activity or exercise for Scottish South Asians (migrants or descendants of people from India, Pakistan, Bangladesh, Nepal or Sri Lanka) or
- ii) explored factors that prevent Scottish South Asians from participating in physical activity or exercise or encourage them to do so.

If your local authority (for example, through health, leisure, sports, social work or cultural diversity departments) has produced any articles or reports on these topics I would be very grateful if you could let me have a copy (electronic if available). If you know of someone or another organisation that might have some relevant information please could you give me their contact details.

## Appendix 3. Topic guide for focus groups

### 1. Defining physical activity and exercise

What do you think of as physical activity and exercise?

- Competitive or team sport e.g. team or individual athletics, cricket, badminton, squash
- Activities for leisure e.g. walking, swimming, cycling
- Others kinds of activity: dog-walking; taking kids to the park; gardening; dancing, manual labour, housework

### 2. General attitudes towards physical activity and exercise.

We would like to know a bit about what kind of physical activity you do at the moment and what your general thoughts are about exercising. First of all:

Physical activity is actually anything that uses up energy, while exercise is about things like playing tennis, swimming and so on. Bearing this in mind, how does physical activity fit in with your daily life at the moment?

- What is a typical day like? (use of car or walking; active job or home life etc; amount of non-active things like TV watching / reading / listening to music)
- Emotional energy used up dealing with family etc?

How do you feel about taking exercise in general?

(Exploring their personal attitudes to exercise rather than their knowledge about exercise for health)

- Involved in exercise at the moment?
- What kinds? (Aerobics at home / class; team sports, etc)

### 3. Barriers and motivators to exercise & physical activity

What kinds of exercise/physical activity would you be most likely to take part in/do (explore why)?

What kinds of exercise/physical activity would you be most likely to take part in/do (explore why)?

For those of you who are not involved in taking much exercise, what do you think the main things are that make it difficult for you to be more active?

- On a personal level: Having very small children, tiredness, ill health, caring for relatives, too busy at work / work long hours, no-one to go to the exercise class/gym with?
- How do friends / relatives / partners view exercise? Any differences for men or women?
- religious and cultural factors, language issues, not knowing where to go, not feeling comfortable going to a place where there are no members of your community, fear of and/or experience of being treated

unfairly

- Institutional level: do leisure centres provide women-only sessions etc; clothing – is this restrictive and is there sportswear available that suits their needs / culture etc

What would make it easier to fit some kind of exercise or just more physical activity into your daily life?

What sort of activities would you enjoy and what do you think is just not appropriate for you?

- cultural/religious appropriateness, local facilities, feeling safe, exercise instructors who can speak my language, culturally specific exercise bhangra dancing, cost, more understanding of weight and exercise issues, fitness assessments, exercise consultations; help with childcare

For those of you who regularly take exercise – how do you manage to fit it in with your daily life?

- What motivates you? (e.g. Enjoyment of the activity itself, getting out of the house, exercising with friends, health benefits like weight loss etc)
- Did you have any obstacles to overcome before you got into the habit of taking regular exercise? (e.g. Inappropriate facilities, racism, cost, access, lack of time or childcare, attitude of partner or relatives etc)

#### **4. Children and physical activity**

What kind activities are your children involved in on a day to day basis that you think can be defined as exercise and as physical activities (prompt: walking to school, at school, after school activities, weekends, **is there a difference between boy children and girl children and different age groups**)

How do you feel about this?

- Do they watch much TV, use computer games, DVDs etc?
- When and where are they most active: at home, school, outside with friends, outside with family, in the gym or swimming pool?
- Do you encourage them to be active / more active or not (explore why/why not)?

Is there anything that stops your children from taking part in physical activity and exercise? (Prompt: bullying, fear of safety of children and as above. **Also explore issues for girl children and boy children and different age groups**)

#### **5. Family and physical activity**

What do you enjoy doing as a family? How do you normally spend your time together?

What sort of things do you do as a family that are physically active? (with or

without partners)

- Going for walks
- Playing with the kids at home / park / swimming pool / leisure centre
- What do you most enjoy doing together?
- What would encourage you all to be more active as a family?
- What stops you from being active as a family?

#### **6. Attitudes to the 'outdoors' v indoor centres for exercise**

How do you feel about going out into the countryside for walks compared with doing exercise in a gym or leisure centre?

- How do you feel about the 'outdoors' in general? (would they ever take the kids camping, hill walking etc?). Is there a particular place in the outdoors that you enjoy (e.g. beach, river, hills)
- How do you feel going into a gym (e.g. a pulse centre with exercise machines and weights) or the swimming pool

#### **7. Physical activity and health**

How would you describe a 'healthy person'? (what does this mean; what sort of shape and size etc)

Do you see any health benefits in taking regular exercise and/ or being physically active?

- Beliefs around health and illness; fears related to ill health and exercise (eg heart disease and fear of heart attack; diabetes and control of blood sugar etc)
- Issues of weight control? (What is overweight? Does this matter?)
- Mental well-being if physically active?

#### **8. What physical activity facilities or services they would like (can suggest anything, think laterally)**

- If you had a say in designing services or facilities to encourage physical activity or sport, what would you want for you, your family or your children? e.g. women-only sessions at the gym, walking groups for Muslim women, more information about relevant services, childcare facilities, workout videos that are culturally specific, free services, more access to services, different opening hours.

## Appendix 4. Demographic questionnaire for focus group participants

### TALKING ABOUT PHYSICAL ACTIVITY WITH PEOPLE FROM SOUTH ASIAN COMMUNITIES IN SCOTLAND

We would like to find out more about the people who take part in our groups. We would be very grateful if you could answer the questions below

**Are you?**

Male	<input type="checkbox"/>
Female	<input type="checkbox"/>

**How old are you?**

Under 20	<input type="checkbox"/>	31-35	<input type="checkbox"/>
20-25	<input type="checkbox"/>	36-40	<input type="checkbox"/>
26-30	<input type="checkbox"/>	Over 45	<input type="checkbox"/>

**Please tell us about your children (write the number in the box)**

How many <b>female</b> children do you have <u>under</u> 16?	<input type="text"/>	How many <b>female</b> children do you have <u>over</u> 16?	<input type="text"/>
How many <b>male</b> children do you have <u>under</u> 16?	<input type="text"/>	How many <b>male</b> children do you have <u>over</u> 16?	<input type="text"/>

**How would you describe your ethnic origin?**

Indian	<input type="checkbox"/>	Sri Lankan	<input type="checkbox"/>
Pakistani	<input type="checkbox"/>	Nepalese	<input type="checkbox"/>
Bangladeshi	<input type="checkbox"/>	Other, please specify _____	<input type="checkbox"/>

**What is your religion?**

Islam	<input type="checkbox"/>	Buddhism	<input type="checkbox"/>
Hinduism	<input type="checkbox"/>	Christianity	<input type="checkbox"/>
Sikhism	<input type="checkbox"/>	No religion	<input type="checkbox"/>
		Other, please specify _____	<input type="checkbox"/>

**Are you currently working?**

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If yes, are you in:		If no, are you:	
Full time employment	<input type="checkbox"/>	Unemployed	<input type="checkbox"/>
Part-time employment	<input type="checkbox"/>	In full time education	<input type="checkbox"/>
Homeworking (e.g. sewing for a factory)	<input type="checkbox"/>	In part time education	<input type="checkbox"/>
Self employed	<input type="checkbox"/>	Retired	<input type="checkbox"/>
		At home caring for children/relatives	<input type="checkbox"/>

Please tell us your post code? \_\_\_\_\_

**THANK YOU**

## **Appendix 5. Interview topic guide for physical activity specialist and community group leaders**

\*\* Could you start by telling me about your role and what you do?

### **1. Defining physical activity and exercise**

What do you think of as physical activity and exercise?

- Competitive or team sport e.g. team or individual athletics, cricket, badminton, squash
- Activities for leisure e.g. walking, swimming, cycling
- Others kinds of activity: dog-walking; taking kids to the park; gardening; dancing, manual labour, housework

### **2. What are the main aims of health promotion for physical activity and exercise in Lothian?**

Are there any special health promotion activities for people from South Asia or other ethnic minorities? Describe.

How does Lothian Health Board ensure equal access to health promotion messages about physical activity?

### **3. Have you been involved in any work specifically focusing on South Asians?**

If so, tell me about it.

Why? What? How well did it work?

What worked well about each project?

What did you learn from the experiences?

### **4. Barriers and motivators to exercise & physical activity**

What kinds of exercise/physical activity do you think people from South Asia would be most likely to take part in/do (explore why)?

What kinds of exercise/physical activity do you think people from South Asia would be least likely to take part in/do (explore why)?

What do you think the main things are that make it difficult for south Asians to be more active?

- On a personal level: Having very small children, tiredness, ill health, caring for relatives, too busy at work / work long hours, no-one to go to the exercise class/gym with?
- Any differences for men or women?
- Religious and cultural factors, language issues, not knowing where to go, not feeling comfortable going to a place where there are no members of your community, fear of and/or experience of being treated unfairly
- Institutional level: do leisure centres provide women-only sessions etc;

clothing – is this restrictive and is there sportswear available that suits their needs / culture etc

How do you think this might differ from white British population?

Would/Do you do anything different to encourage more exercise or more physical activity in South Asians' daily lives than you would do for white British people?

What sort of activities do you think S Asians enjoy and what do you think is just not appropriate for them?

- cultural/religious appropriateness, local facilities, feeling safe, exercise instructors who can speak my language, culturally specific exercise bhangra dancing, cost, more understanding of weight and exercise issues, fitness assessments, exercise consultations; help with childcare

### **5. Children and physical activity**

Does your remit cover children?

Are there any initiatives especially for children from S Asian families?

Do you think boys and girls and different age groups require different ways of promoting physically active lives? If so, what are these and how does health promotion do this?

Do you think S Asian children have any particular barriers that prevent them from taking part in physical activity and exercise? (Prompt: bullying, fear of safety of children and as above. **Also explore issues for girl children and boy children and different age groups**)

### **6. Attitudes to the 'outdoors' v indoor centres for exercise**

Do you think there is any benefit in promoting either indoor or outdoor exercise?

Are you aware of any differences in attitude between S Asians and the white British population to going out into the countryside for walks or exercising in a gym or leisure centre?

### **7. What physical activity facilities or services would you like to see developed that would help encourage S Asians in Lothian to become more active? (can suggest anything, think laterally)**

If there were no resource constraints what would you like to see developed for the S Asian community? e.g. women-only sessions at the gym, walking groups for Muslim women, more information about relevant services, childcare facilities, workout videos that are culturally specific, free services, more access to services, different opening hours.