

Physical Activity in Young Mothers

CFE Research, on behalf of
Leicester City Council

Document summary

This short report provides an overview of the barriers and facilitators for women, but more specifically mothers, when it comes to participating in sport and physical activity.

It begins by using local data on the Wycliffe and Eyres Monsell wards of Leicester City to set the scene. It then provides an overview of the published academic literature and with insights from Sport England to support and illustrate the findings.

The document ends with information on behaviour change techniques that have been used to inform the design of the data collection tools to be used to gather insight data on physical activity from mothers in the target wards.

Data Review

Summary of local data describing the make up of the Wycliffe and Eyres Monsell wards, and physical activity levels in Leicester City.

Employment: Data Comparison

	Eyres Monsell	Wycliffe	Leicester	England
Students	8.7%	14.3%	16.9%	9.2%
In paid employment of self-employed	56.2%	40.5%	52.9%	62.1%
Unemployed (not studying full-time)	7.2%	8.7%	6.2%	4.4%
- long-term unemployed	3.3%	3.3%	2.5%	1.7%
Looking after home or family	6.9%	13.6%	6.2%	4.4%
Long-term sick or disabled or otherwise economically inactive	9.6%	13.6%	8.5%	6.2%
Retired	11.4%	9.3%	9.3%	13.7%

Sources: Compendium of key statistics Leicester, 2011
Office for National Statistics, Neighbourhood Statistics

Demographics: Data Comparison

	Eyres Monsell	Wycliffe	Leicester	UK
Born in UK	90.6%	43.1%	66.4%	
Ethnicity: White: British	84.2%	5.2%	45.1%	79.8%
Ethnicity: Asian/Asian British: Indian	1.7%	56.6%	28.3%	2.6%
Religion: Muslim	2.6%	73.5%	18.6%	5.0%
Main language is English (in persons aged 3+)	95.3%	42.4%	72.5%	

Source: Compendium of key statistics Leicester, 2011

Health: Data comparison

	Eyres Monsell	Wycliffe	Leicester	UK
Very Bad Health	2.0%	1.7%	1.5%	1.2%
Bad Health	6.0%	5.0%	4.5%	4.2%
Fair Health	16.0%	13.0%	13.4%	13.1%
Good/Very Good	76.00%	80.30%	80.5%	81.4%

Source: Neighbourhood Statistics, 2011

PA Levels: Comparison (Active People)

Ethnicity: adult participation in sport and active recreation

	White	BME
Coventry	22.9%	23.8%
Derby	23.2%	12.3%
Nottingham	20.6%	26.1%
Leicester	15.8%	16.1%

Source: Active people, 2016

Age: 16-34 years olds who participate in sport

Coventry	33%
Nottingham	28.50%
Derby	26.80%
Leicester	20.40%

Source: Active people, 2016

PA Levels: Comparison (Active Lives)

Adult participation in sport and active recreation (including gardening)

	Inactive (<30 minutes per week)	Fairly Active (30-149 minutes per week)	Active (150+ minutes per week)
Coventry	25.2%	14.5%	60.3%
Derby	19.5%	11.9%	68.7%
Nottingham	24.8%	12.1%	63.1%
Leicester	30.8%	12.5%	56.8%

Source: Active Lives, 2017 – year 1 report

Summarising the problem

‘...likelihood of being in the highest quartile of the sports/exercise and active-living indices, compared with the other three quartiles, was decreased among older, non-white, less well educated, heavier women who had young children at home, lacked motivation to exercise or perceived external obstacles to exercise behaviour.’
(Sternfeld, 1999)

Evidence Review

Summary of findings from review of published research and Sport England insight relating to physical activity in young mums.

Literature Search

Search terms:

Activity	People	Place	Participation
Physical activity	Young mothers/mums	Leicester	Participation
Sport	Mothers/mums with young children	Inner city	Motivation
Exercise	Mothers/mums	Deprived area	Barrier
	Young parents / young women	Disadvantage	Support
	Carers / caregivers	Immigration	
	Ethnic minorities, immigrants		

Search locations:

- Academic database
- Online search for 'grey literature'
- Citations within articles/reports

Sources selected and reviewed:

- 40 academic research articles, including 3 RCTS and 2 meta-reviews of evidence
- 5 institutional reports
- Review of relevant insight documents available on Sport England website

Evidence Scope and Quality

While there are a number of articles which focused on parents or those with caring responsibilities, most of these focused on physical activity levels rather than motivations and barriers. Sport England, however, has a growing body of evidence which provides insight into engaging women and girls which can be used to help expand on the findings from the academic literature.

Similarly, there is little academic work which focuses on the specific aspects of our population of interest, e.g. mothers of young children, particularly those from inner city locations and ethnic minorities. However, insight from a variety of Sport England funded projects can begin to shed light on some of these areas.

Perceived Benefits of Physical Activity

Parents acknowledge physical, psychological and social benefits to participation in regular PA, with perceived benefits including:

- Improved physical health and fitness
- Improved mental well-being and mood
- Feeling healthy and good about oneself
- Improved social life
- Weight loss/control

(Hamilton and White, 2010)

This begs the questions that if they recognise the value of it, what is stopping them from doing it?

Physical activity opportunities rarely reflect the multi-faceted nature of what is important to women.

Women in Sport research has identified six core values which help women decide how they spend their time:

- Looking good
- Feeling good
- Achieving their goals
- Having fun
- Developing skills
- Nurturing family and friends.

(Women in Sport, 2013)

Barriers to Physical Activity for Women

Women and girls face a plethora of social barriers which have a negative impact on their views towards physical activity (WHO Report, Bailey, Wellard and Dismore).

Fear of being judged (by family, friends, their community, others in the class) is a major barrier and often hinders women from participating in physical activity and sporting opportunities. Other barriers for women include:

- Time and cost – both the practical matter of not having them, and also whether it's appropriate to prioritise using them on physical activity
- Finding the right activity at the right time
- Lack of information on activities
- Not wanting to look 'hot and sweaty'
- Worries that 'it's not for me' or 'I won't fit in'.
- Concerns about their ability of fitness levels.

(Sport England, 2016a)

Barriers to Physical Activity for Parents

It's unsurprising that mothers face these same barriers. However, there is the added dimension of children to keep in mind when consider these barriers.

Studies highlight barriers which hinder participation in PA amongst parents of young children include:

- Lack of time, due to commitments to children, housework/shopping, to partners and to work
- Tiredness or fatigue
- Inconvenience/ inflexibility
- Lack of motivation
- Lack of social support
- Lack of money or cost

(Hamilton and White, 2010 & Brown et al., 2010)

Barriers to Physical Activity for Mothers

And the constraints of parenthood are more of a struggle for women than for men, with work and family roles curtailing time for exercise. Women spend less time on exercising than men. Married men are more advantaged and motivated than married women in finding time for exercise. (Nomaguchi & Bianchi, 2005).

Studies also highlight that women's ethic of care and good mother discourses work together to constrain mothers' physical activity levels. (Lloyd, O'Brien & Riot, 2016)

While these studies explore barriers to physical activity, they provided little to no in-depth analysis or discussion around these barriers.

However, findings from This Girl Can research demonstrates that often mothers feel they will be seen as neglecting domestic and maternal duties and will be labeled as 'self-indulgent' for spending time on exercise (Sport England, 2016a).

All in all, it seems that mothers have a host of additional barriers to overcome in order to become more physically active.

Socio-economic Disadvantage

Disadvantaged groups are amongst the most under-represented in research, but our evidence review brought to light a few interesting findings.

Evidence suggests that even after adjusting for socio-economic status, disparities in PA levels remain between the most and least disadvantaged groups. The authors suggest local environments (facilities and access to) are important factors in addressing inequalities (Kavanagh et al., 2005).

Those from higher socio-economic groups perceive they receive more support from their partners and more support from their extended family and friends for undertaking physical activity than those in lower socioeconomic groups (Brown et al., 2010).

Lower levels of social support and sources of support will need to be explored further in the Eyres Monsell and Wycliffe areas as it has implications for any potential interventions developed.

Cultural Factors (1)

There is relatively little research in this area around cultural influences on physical activity in young mums. One study reviewed suggested that in US society religion plays a small role in diet and exercise behaviour (Kim & Sobal, 2004).

Anecdotal evidence, and a local learn to ride programme in Leicester, suggests that Muslim women face some unique barriers to participation including:

- Segregation by sex reduces access to facilities/activities
- Stigmatisation of mothers: pressure to stay at home/look after kids
- Clothing customs and modesty inhibit participation in certain PA/facilities
- Cultural/familial norms may:
 - neglect importance of PA
 - prohibit participation by sex, and
 - inhibit participation in certain activities (also gendered), for example, bike riding is considered 'Haram' (forbidden) by some fatwas (Islamic legal pronouncements).
- Lack of mixing/integration with other cultures

(Williams & Kaleem, 2016)

Cultural Factors (2)

A fact sheet produced by the Women's Sport and Fitness Foundation and Sporting Equals also concludes that due to religious misinterpretations or simply a lack of awareness, many Muslim women have been prevented or not felt able to participate in sports. Apprehension about taking part stems from a fear of discrimination or of facing negative attitudes from service providers in relation to their religious and cultural needs.

(Women's Sport and Fitness Foundation & Sporting Equals, 2010)

These barriers will need to be considered when making recommendations for physical activity interventions, specifically within the area with high Muslim populations.

Environmental factors

It is also important to take note of the local environment and understand if there are physical factors which need improving, e.g. increasing safety, improving accessibility of green spaces etc.

In a US study, mothers tended to have a more negative view of their local environment than fathers, with mothers more likely to perceive their neighbourhood as unsafe to go for a walk at night and less likely to perceive transit stops (e.g. bus stop) within 10-15 minutes walking distance (Hamilton, Cuddihy & White 2013).

These perceptions of the safety and ease of moving around their environment may add another layer of complexity to a mother's perceived ability to undertake physical activity close to home.

Facilitators of Physical Activity

Unsurprisingly, parents with young children find it easier to participate in physical activity when the barriers are removed.

Facilitators which encourage parents to participate in physical activity include:

- Convenience/flexibility of the activity
- More time
- Having fun, enjoyment
- Inherent love for the activity
- Motivations from the children.

(Hamilton & White, 2010)

Women in Sport research highlights the importance of ‘making it easy for women to act’ and states the value of making certain the practical and emotional barriers do not outweigh the motivation to be active, e.g. right time, right place, right people ect. It also states that to make sport and physical activity the ‘norm’ for women relies on ‘local women of all shapes, sizes and faiths’ being active and encouraging others to do so also.

Facilitators – Self-efficacy

Self efficacy (e.g. a person's belief in their own ability to overcome personal barriers and undertake a specific behaviour) also plays a strong role in increasing short term physical activity levels (Miller, Trost and Brown, 2002).

Sport England's *Go where women are* report highlights this further by focusing on the importance of identifying different 'triggers' for women and suggests talking about specific cause related challenges which are concrete and achievable, helping women to think it's something they could go for (Sport England, 2016a)

Facilitators – Support

Those parents who experience social support are more likely to engage in physical activity. Social support can take many forms, including:

- Encouragement by their partner
- Willingness of friends and family to take part in an activity with them
- Family and friends helping them to plan activities around their physical activity

(Hamilton & White, 2010)

Social support can also take the form of encouraging and supportive instructors, which will help women sustain physical activity levels.

...there have been some women who have had low points with certain things in their life. [The instructor's] determined and he's rung them up and said, 'Look, you know, we're here for you. The team's here for you. We need you, you need us, use us, lean on us' " **Participant**

(CFE Research, 2016)

Another option is for participants to act as buddies for new people. (Sport England, 2016a).

Facilitators - Others

Active Women also found similar facilitators for engaging women in sport, including:

- Contact from staff in between sessions
- Positive social dynamics of a session
- Atmosphere/ tone of a session
- Encouraging project staff
- Use of incentives e.g. 'team t-shirts' , loyalty cards for a free session

(IFF Research, 2012).

These facilitators and barriers are common not only in mothers with young children, but also are strong influencers of behaviours in the adult population. Thus an intervention developed addressing these areas could also have wider implications across the general population (BHFNC, 2015)

Examples from promising interventions – convenient location

Evidence around successful interventions in the adult population suggest those which are delivered in the workplace and the community show the most promising practice for increasing PA levels (BHFNC, 2015).

The evaluation of Sport England's Community Sport Activation Fund also noted the importance of location. More specifically, the We Move, She Moves project in Hertsmere found that formal venues such as leisure centres did not work, and that attendance increased when sessions were moved to community spaces, e.g. local parks and communities venue. (CFE Research, 2016)

When looking specifically at engaging with parents, a review found that embedding interventions within routine visits to child health clinics seems to increase attendance (Hartman, Hosper & Stronks, 2011).

Another intervention noted increased physical activity levels in mums using a play group setting to reach mothers, providing them with home based materials (e.g. exercise charts) and five face-to-face workshops/skills development sessions. However, it is not possible to say whether it was the convenience of the location, the information given, or the workshops/skills development sessions which provided the biggest impact (Monteiro 2012).

Examples from promising interventions – online approaches

Internet-delivered interventions, which include elements of education, self-monitoring, feedback and personal programmes also *may be useful* in increasing physical activity levels. (BHFNC, 2015)

Similarly, *Mums Step It Up* Facebook app used theory of planned behaviour to target attitudes towards physical activity, develop social support (e.g. ability to interact with ‘teammates’) and address perceived behavioural controls (e.g. what *I* should or should not do). Findings from this study noted that social networking might be useful when bringing about behaviour change and increasing physical activity. (Kernot et al., 2014).

Examples from promising interventions – self-efficacy

Effective interventions also included counselling on mother-specific barriers (Hartman, Hosper & Stronks, 2011).

Go where women are also highlights the importance of talking about personal barriers directly and helping women solve them, but advises to avoid being patronising about the barrier (Sport England, 2016a)

An intervention for women with young children found that community participation approaches to increasing self-efficacy (for example, by inviting mothers to participate in the development of local strategies to promote PA) were key when trying to increase physical activity level (Miller, Trost and Brown, 2002).

Another studies With one study noting that planning could help play a role in undertaking a behaviour: “*...Active mothers are purposefully planning for physical activity*” e.g. writing planned activities sessions in an appointment book or calendar (Dlugonski and Moltl, 2014).

Design of the research tool

Summary of the theory used to help inform the design of the interview tool.

Theory of Planned Behaviour

Within the current literature, ‘Theory of Planned Behaviour’ (TPB) features heavily in the way researchers understand why people engage in specific behaviours. There is empirical evidence to support the general structure of TPB, e.g. that behavioural controls and social norms have roles in determining behaviour. This theory offers us a structure exploring behaviours around PA in young mothers.

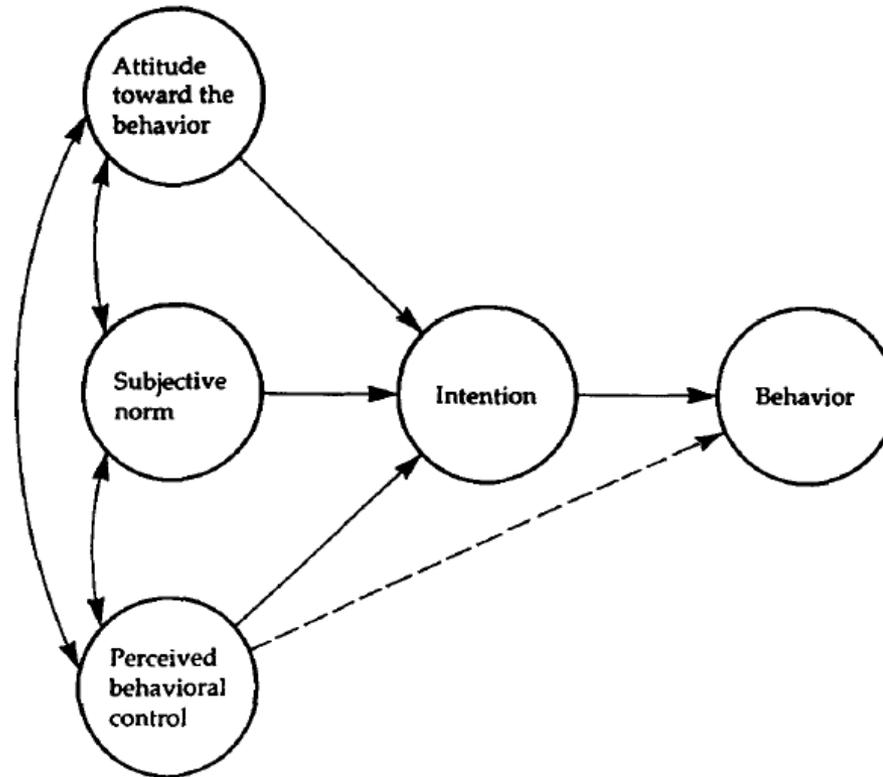
TPB has three determinants of action:

- **Attitude towards the behaviour** – degree to which person has favourable evaluation of the behaviour (activity)
- **Subjective norm** – social pressure to perform the behaviour [‘social norm’ may be a better term]
- **Perceived behavioural control** – difficulty of performing the behaviour

These combine with **intention** help determine behaviour. Ajzen (1991) also distinguishes between *perceived* and *actual* behavioural control.

Theory of Planned Behaviour

Ajzen (1991) offers a theory that *explains* and *predicts* behavior relating to physical activity.



Behaviour Change – Sport England Model

Sport England's 2016-2021 Strategy 'Towards an Active Nation' presents the behaviour change model as seen on the right. (Sport England, 2016b)

The TPB model sits comfortably within the 'thinking about it', 'planning to do something soon' and 'getting started' elements of this model. It helps unpick what barriers women need to overcome or what enables them to move from contemplation to preparation to action stages.



People can move back and forth through these stages

Data Collection Tool Design

We have used the TPB to help inform the design of our tool, to help explore respondents' current and previous attitudes to physical activity, how they perceive the different barriers to undertaking physical activity, and their perceptions of the 'societal norms' which exist within their local community/cultural groups.

We will explore the pre-contemplation phase of the Sport England behavior change model by exploring awareness of opportunities.

We are also seeking to explore perceptions of the local area, facilities and the attractiveness of different activity types.

End

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