Premier League Health

A national programme of men's health promotion delivered in/by professional football clubs: Final Report 2012

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Reader Information

Leeds Metropolitan University were funded to undertake the evaluation of Premier League Health by the Football Foundation.

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Foreword

The Football Pools has always been committed to leaving a lasting legacy, not only for its millions of winning customers, but also through its support of good causes. Over £1.1 billion in donations have been made to sport, the arts and charitable initiatives in its 87 year history. Since 2009, The Football Pools has strengthened its commitment to British football by partnering the Football Leagues across several charitable initiatives with the objective of improving the lifestyles of fans within the Football Clubs' communities. The Football Pools donated £1.63 million of funding into 'PLH', a scheme designed to raise awareness of and to tackle men's health issues across the country in 16 Premier League clubs.

Ian Penrose, CEO of Sportech Plc., owner and operator of The Football Pools, comments: *"The Football Pools is delighted to see how Premier League Health is impacting positively on the lives of fans across the country. Individual stories from fans participating in the scheme are inspiring and show that the programme is well-targeted. The Football Pools is proud to have helped create this on-going opportunity at Premier League clubs for fans and communities alike."*

In total, over 100 clubs are now actively involved in community projects funded by The Football Pools. To play The Football Pools please visit http://www.footballpools.com/ or call 0800 500 000 for further information.

The Football Pools.

Acknowledgments

The Centre for Men's Health and the Centre for Active Lifestyles at Leeds Metropolitan University would like to thank the following for their invaluable help, time, hard work and dedication to Premier League Health and its evaluation.

Firstly, The Football Pools, The Football Foundation and The Premier League, who have played an integral part in making Premier League Health come to life. Secondly, all of the football clubs, including the staff, involved in Premier League Health: Blackburn Rovers, Bolton Wanderers, Chelsea, Everton, Fulham, Hull City, Liverpool FC, Manchester City, Manchester United, Middlesbrough, Newcastle United, Portsmouth, Stoke City, Tottenham Hotspur, West Bromwich Albion, and West Ham United.

Finally, to all of the participants involved in Premier League Health interventions and local partners who took part and supported the programme and research.

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Executive Summary

Introduction

This report covers the evaluation of the first national men's health promotion initiative delivered in and by English Premier League football clubs. The Premier League Health (PLH) evaluation ran from October 2009 to June 2012 and has provided a unique opportunity to explore how the power of elite football clubs can influence the health of men.

Men's health continues to be of concern in the UK, and across the whole of the European Union with high levels of preventable premature death and chronic disease (EC, 2011). Harmful lifestyle behaviours and poor socio-economic circumstances contribute to the prevalence of many of these preventable health problems (Pronk, 2010). Efforts to influence men's ill-health are challenging; activities delivered through traditional channels often have limited effectiveness (Sinclair, 2012). In part, this failure to reach out to men is due to a lack of evidence-based programmes meeting men's needs, especially around health improvement opportunities for younger men delivered in community settings (White *et al* 2011).

PLH was a £1.63m three year programme of men's health promotion delivered through professional football clubs. Premier League football clubs submitted proposals to run men's health interventions that met local needs identified in conjunction with partner agencies. Sixteen clubs were awarded funding to run interventions delivered by health trainers, managers and health professionals ("PLH staff") who received education and training in behavioural change techniques and men's health promotion. Men were recruited using a range of techniques targeting those aged 18-35 years, although all adult men were eligible to attend. PLH activities included health checks and awareness raising activities combined with a programme of regular weekly exercise classes designed to improve health and wellbeing.

Method

When undertaking the evaluation of PLH, the RE-AIM framework has been used as a guiding set of principles in which to frame the outcomes (Glasgow, 1999). Evaluation data was collected through self-report questionnaires completed by participants engaging interventions. Data were provided by 4020 men pre-intervention and 875 both pre and post-intervention. PLH participants were predominantly white British (70.4%), aged 18-34 years (56.5%), and employed (60.7%). Further investigations undertaken with 58 participants and 18 PLH staff identified key design characteristics.

Results are reported for *"Adopters"* and *"Completers".* Adopters provided data pre-intervention, whereby information was captured at first point of contact, typically before men engaged the intervention, activities and sessions. In contrast, completers provided data pre-intervention, adopted the project and then completed the same measures at post-intervention (typically 12 weeks).

Advisory Note

The following investigation is based on data submitted up to June 1st 2012 and provides analysis for men engaging in the evaluation. A total of 4020 men engaged in the evaluation, although, the expected reach is estimated to be far wider as many men engaged with the intervention but not the evaluation.

Post-intervention data emerged solely from participants engaging in the evaluation and elements of the intervention delivered on a weekly basis. It was not possible to collect post-intervention data from those participants (n=1056) engaging in the intervention through "one-off" match day type events as there was no follow up, therefore, these participants are not included in the post-intervention analysis. Consequently, the maximum number of participants that could have provided data at both pre and post-intervention is 2964. Of these, 875 (29.5%) submitted data at both collection points at the time this report was prepared. Loss of data from interventions in community settings is common place due to participant attrition, poor literacy rates and apprehensions regarding surveillance (Pringle *et al* 2010).

Results

Men Adopting Premier League Health

PLH was adopted by men demonstrating multiple problematic lifestyle behaviours, meaning that the programme was effective in recruiting the target audience. Yet, many of these adopters did not view themselves as having poor health. PLH also connected with men typically regarded as 'hard to connect with' (Sinclair, 2012). Over a third of adopters 'never' consulted their GP, and over half 'never' used health advice and information services such as NHS Direct. Therefore, despite their substantial needs, adopters were unlikely to engage with conventional health promotion opportunities. Further, around one third of men were not fans of the host club, suggesting that factors other than the badge of the specific football club were influential in facilitating the engagement of PLH by these 'non-fans'.

- More than 9 out of 10 men presented at least one negative health behaviour.

- Approximately 8 out of 10 men reported combinations of lifestyle risk factors associated with an increased risk of non-communicable disease. Unemployed white British men were at an elevated risk.

- Over 8 out of 10 men didn't meet the current physical activity (PA) guidelines (150+ minutes of moderate PA a week). Older employed men from a black and minority ethnic (BME) background were most at risk of insufficient PA.

- 9 out of 10 men did not consume five or more portions of fruit and vegetables each day. Younger BME men were most at risk here.

- 6 out of 10 men had an unhealthy body mass index (BMI). Older white British men were most at risk of having an unhealthy BMI.

- 1 in 3 men exceeded the recommended weekly alcohol guidelines (<21 units/week). White British men were most at risk.

- 1 in 3 men currently smoked; younger, unemployed adopters were especially at risk.

- Less than 1 in 10 men regularly visited their GP, and 1 in 3 men never visited their GP.

- Nearly 2 out of 3 men reported that their health had suffered due to stress in the past month; insufficiently active men were most at risk.

- Almost 4 out of 10 men were unemployed; young, white British men were the most likely to be economically inactive.

- 6 out of 10 men demonstrated an elevated health risk due to prolonged bouts of sitting (>4.7 hours/day). Unemployed white British men presented a heightened risk.

- In spite of all this, 2 out of 3 men reported that their health was good or very good.

Men Completing Premier League Health

PLH has been effective in increasing a number of health-enhancing behaviours in men who completed the intervention. Completers demonstrated an impressive array of statistically significant positive changes in health-enhancing behaviours.

- 7 out of 10 men made at least one positive change to their health behaviours.

- Almost 1 in 4 men reduced the number of harmful lifestyle risk factors they presented for non-communicable disease, 5% reduced two or more. Completers who were employed and from BME backgrounds demonstrated a reduced risk of presenting multiple lifestyle risk factors.

- More than 4 out of 10 men improved their level of activity. Additionally, 7.5% of completers who were insufficiently active pre-intervention were meeting the PA guidelines post-intervention.

- 1 in 3 men improved their diet. Further, 5.1% of completers who had a poor diet pre-intervention were meeting the current guidelines of five or more daily portions of fruit and vegetables post-intervention.

- There were statistically significant reductions in BMI, 1 in 3 men moved to a healthier weight category, and over one quarter moved from a risky weight category pre-intervention to a healthy weight category post-intervention.

- 3 out of 10 men who surpassed the alcohol recommendations (21 units/week) pre-intervention were achieving the guidelines post-intervention.

- 1 in 4 men who were unemployed pre-intervention went on to find employment post-intervention.

- Over 4 out of 10 men reduced their risk through prolonged bouts of daily sitting. Further, 1 in 3 men who presented a risky sitting category pre-intervention moved to the lower risk category post-intervention.

- Although there were no statistically significant changes in the use of GP services, there was a statistically significantly greater uptake of health advice and information services like NHS Direct by completers.

How These Outcomes Were Achieved

To identify the most important factors for engaging in PLH, 58 participants engaging in PLH were interviewed and completed the Card Sort Technique (CST).

- By frequency, the five most important factors about the interventions for men engaging PLH were:
  (i): “To Get Fitter and Healthier“ 79%

(ii): “It’s Fun & Enjoyable” 55%

(iii): “The Club” 36%, “It Builds Confidence” 36%, “To Make New Friends” 36%

To help identify the most important design characteristics across the behavioural change continuum, a further 18 PLH staff were interviewed. Fourteen also carried out the CST with researchers. PLH investigations into the active design characteristics of men’s health improvement services delivered in a professional football context found that:

- Combining the appeal of professional football clubs with the opportunity to develop health in a ‘male friendly’ way represented a unique opportunity for reaching men.

- Football-based awareness raising events and outreach activities were especially important for reaching men who were ambivalent towards orthodox health promotion activities.

- The informal approach of PLH staff and the familiarity of settings - including club stadia and community venues - were essential for safeguarding regular involvement in PA and lifestyle sessions. These surroundings were seen as having substantial advantages over conventional NHS locations.

- Goal setting self-revaluation and awareness raising activities were important when optimising the adoption of healthier behaviours.

- Furthermore, interventions that incorporated socially supportive environments facilitated a sense of belonging and a fun and enjoyable atmosphere. For many men, this experience supported maintaining newly acquired healthier behaviours.

Conclusion

PLH represented a major opportunity to assess the impact of a men's health promotion initiative delivered in and by English Premier League and championship football clubs. The findings show that professional football clubs have a powerful effect on reaching men typically regarded as hard-to-connect with and who are viewed as resistant to change. PLH was adopted by men demonstrating multiple problematic lifestyle behaviours, each of which contribute to chronic health conditions that ultimately convert into a substantial burden on NHS services. However, at the outset many of these adopters did not view themselves as having poor health. Indeed, over a third of these men never consulted their GP, and over half never used health advice and information services such as NHS Direct. Therefore, despite their substantial and diverse needs, these adopters were unlikely to be exposed to orthodox health promotion opportunities made available through conventional channels.

The unconventional approach adopted by PLH was underpinned by staff being trained in contemporary behaviour change approaches. This enabled nearly three quarters of completers to make one or more positive changes to their health. Sustained, these changes can help moderate the substantial inequalities in mortality and morbidity rates that blight the futures of many such men. Moreover, these findings fill many of the gaps in the evidence about how these effects can be achieved.

However, even though PLH was well-targeted, and elicited positive short term changes in lifestyle behaviours, it was not as effective at achieving substantial longer-term effects. This was in part due to the relatively low response rate of the follow-up questionnaires when compared to the pre-intervention measures. This loss of data is common place on community settings and can be attributed to participant attrition, poor literacy and apprehensions regarding surveillance.

Nevertheless, PLH represents a unique contribution to understanding both the effects of football-based interventions and the most important active design characteristics for engaging, and keeping men involved in health promotion interventions. These have been drawn together to form a toolkit to inform

practitioners on how to assess needs, plan, implement and evaluate gender-specific health interventions implemented in and by professional football clubs. A selection of the most important lessons learnt from PLH can be found in Box 1.

Box 1: Lessons from Premier League Health:

PLH provided a unique opportunity to explore how the power of elite football clubs can influence the health of men. We have outlined a selection of ten of the most important lessons learnt from the PLH. These should be seen as key considerations for planning, implementing and evaluating men's health interventions delivered in and by professional football clubs.

1. Use all the assets the club has to offer: Utilise the badge, players (where possible) branding, communication channels, and mascots to get publicity. Further, make use of facilities and fully engage volunteers and supporters groups.
2. Consult your target audience when designing interventions. Use social marketing to understand what will motivate - and discourage - potential participants.
3. Build support networks, make it a social event. This is a key aspect of widening men's social capital and a real help in times of crisis.
4. On-going activities with no pre-defined engagement periods (i.e. 12 weeks) are more participant-friendly. They are more likely to induce change.
5. Recognise the importance of identifying and working with partners that have access to your target audience. Businesses and settings with a high proportion of males (construction sites, taxi ranks, pubs, betting shops, takeaways etc.), and voluntary organisations or charities can reach out to those who are unemployed, socially excluded and most health-needy.
6. Don't preach health messages. Have open and frank discussions in short bursts (around 10 minutes), and make it relevant to what the men are doing.
7. Don't restrict activities to just football. Provide an array of fun and enjoyable sports and inclusive activities that may be more suitable for all participants.
8. Don't put out too much complex information. Simple messages and language work best. You can refer people to other sources if they want more detail.
9. Don't expect everything to happen all at once and work first time. It takes time to get established, and requires momentum for word-of-mouth to work.
10. Evaluate and follow up all projects so you can show impact and lessons learnt. Think about this from the start, set realistic aims and objectives, and keep on top of data collection and input.

Recommendations

Based on the evidence from PLH, the following recommendations are proposed:

Recommendations for Commissioning Agencies

- Commission men's health interventions delivered in and by professional sporting clubs. These have the power to be effective at reaching and facilitating the adoption of working age men, including those regarded as hard-to-connect with. Interventions further have the power to facilitate health improvement with an initial intervention period.
- Ensure that all staff delivering interventions are adequately trained in men's health and contemporary behavioural change techniques.
- Undertake evaluation and longitudinal research. Explore how engagement and short-term change can be maintained over the longer-term. Use current health guidelines as yardsticks and explore multiple problematic behaviours.

Recommendations for Delivery and Evaluation Agencies

- Develop men's health promotion interventions in partnership with a range of other organisations from the health, physical activity and sports sectors. They can provide resources, advice and knowledge as well as sustainable exit routes for participants.
- Implement men's health interventions in and by professional football clubs using the active design characteristics and key lessons identified in this study. They are important because they clearly facilitate change for lifestyle behaviours in men across the behavioural continuum.
- Be timely and efficient about managing the data collection and evaluation protocol. Build this in to the day to day running of the intervention.

1.0 Introduction

The purpose of this document is to provide findings from the evaluation of Premier League Health (PLH), carried out with stakeholders and participants since its inception in September 2009 up to June 2012. This report covers findings from pre-intervention data, post-intervention data, semi-structured interviews and Card Sort Techniques (CST) with participants adopting, and practitioners delivering PLH. It is set within the context of the challenges men are facing with their health and the need for young men in particular to have more focused provision.

Issues relating to the health of men continue to be of concern in the UK and indeed across the whole of the European Union (EC, 2011, White et al., 2011). Within the 27 European Union countries, men have a 64% higher death rate than women with the largest differences being in the 15-64 year age range. This high level of premature mortality and morbidity in men has further psychological, social and economic consequences for relatives, households, communities and the workplace. In both national and European health policy, men are largely taken for granted resulting in limited development of evidence-based programmes to meet their needs (White, 2011).

Chronic health conditions such as cancer, cardiovascular disease (CVD), diabetes and chronic respiratory disease are now grouped together in public health terms as non-communicable diseases (World Health Organization, 2011). While non-communicable diseases are underpinned by lifestyle risk factors including poor diet, inactivity, smoking and excess alcohol, relatively small changes can produce substantial health benefits (World Health Organisation, 2011).

Research suggests that lifestyle risk factors (i.e. not meeting the recommended guidelines for physical activity, diet, alcohol and smoking) may not only occur in isolation, but also simultaneously, which progressively increases disease risk (Ford et al., 2012). Therefore, accumulating positive lifestyle behaviours affords incremental risk reductions for morbidity and mortality in men across the adult life course (Pronk et al., 2010). These benefits can add up to 14 years to life expectancy

(Khaw et al., 2008). Further, reducing these in young-adulthood can lead to lower cardiovascular disease risk profiles when assessed 20 years later (Liu et al., 2012). A combination of two or more of these lifestyle risk factors is associated with a higher risk of non-communicable disease compared to the sum of individual effects (Schuit, 2002). This is particularly concerning since clustering is especially prevalent in men, younger age groups, and those of low socio-economic status (Chiolero, 2006; Fine 2004).

Not surprisingly, within the UK, every 100 deaths in the most affluent areas are matched by 199 deaths in the least affluent areas. These health inequalities are also widening with men showing nearly a 14-year difference in life expectancy between the rich and the poor in 2008 compared with just over 10 years in 1999 (Thomas et al., 2010). Men are not their 'own worst enemies' when it comes to their health, consequently, emphasis should be more on addressing social determinants, and considering how services can best engage men in ways that are appropriate and applicable to their needs (Banks 2001). Men can, and do engage in health promoting behaviours and with services if this process can be legitimated in ways that help sustain their masculine identity (Robertson 2006, 2007).

It is widely recognised that social relationships and affiliations have powerful effects on physical and mental health. Social networks are thought to operate at a behavioural level through provisions for social support, social influence on engagement and attachment, and access to resources and material goods (Berkman, 2000). As a result, interventions that create and strengthen a diverse natural social network, increase the availability of social support and reduce negative interactions are thought to be the best buy (Cohen, 2004). The influence of social relationships on risk for mortality is comparable with well-established risk factors for mortality; participants displaying stronger social networks have a 50% increased survival rate (Holt-Lunstad, 2010).

While there is no evidence that men delay in presenting to a GP when they have a symptom compared to a women (Wenger, 2011) the non-engagement of young men within primary care, especially preventative health care, further exaggerates men's health profiles (European Commission, 2011). Men have been shown to be discouraged from going to see their GP (Coles, 2010) due to feelings of embarrassment and anxiety linked to particular medical issues (Potter, 2009), not wanting to 'waste' the GPs time, and by being unable to fit attendance at surgeries around work commitments (European Commission, 2011). Additionally, research indicates that young men are among the least likely to access professional help for mental health difficulties (Biddle, 2004). Reasons for this include a need for self-reliance and a dislike of talking to strangers about emotional problems (Burke, 2007). Further, voluntarily seeking help for psychological distress is viewed by many males as a sign of weakness (Tedstone, 2010). Therefore, approaching young men about mental health issues in contexts viewed as acceptable is critical to their engagement (Pringle, 2006). Moreover, there is currently limited provision for tackling the health needs in these vulnerable groups of men.

Previous work has shown that taking services to places where men are already gathered can help their engagement with service delivery (Pringle, 2006). Researchers have also recommended using leisure and sporting contexts to connect with men over their health (White, 2011). Both in the UK and internationally, a number of interventions have responded to this advice and been effective at reaching men. Professional football clubs have a growing tradition of delivering health related activities to supporters including men.

With that in mind, the funding and delivery of PLH provides an excellent opportunity for the first large scale national programme to be evaluated in order to consider what works (and what does not work) when delivering innovative programmes to promote men's health through the medium of football and its associated branding.

2.0 The Methodology

This section aims to report the procedures used in the collection and analysis of the data for PLH. Research is needed to identify the effectiveness of different elements of gender specific health interventions delivered in/by professional football contexts. In deconstructing the concept of effectiveness further, the RE-AIM framework (Glasgow *et al* 1999) not only provides a comprehensive structure for assessing the impact of interventions across the behavioural change continuum, but also the process by which interventions have an impact on men's health behaviours.

2.1.1. The RE-AIM Framework

When undertaking the evaluation of PLH, the RE-AIM framework (Glasgow *et al* 1999) has been used as a guiding model in which to frame the evaluation outcomes emerging from the PLH programme. This has been used as a framework for evaluating community health interventions over the last decade. Not only does it provide an opportunity to assess change across the behavioural continuum, but also the process by which such outcomes are obtained through the implementation of interventions. RE-AIM assesses the following five dimensions of programme effect:

(i): REACH: The absolute number, proportion, and representatives of the participants who are reached by PLH activities, further, those men who adopt or participate in PLH interventions or projects.

(ii): EFFECTIVNESS: The impact of PLH interventions on important health outcomes and behaviours, including PA, smoking, alcohol consumption, healthy eating, BMI, social support and the use of health care services.

(iii): ADOPTION: The absolute number, proportion of participants, and the representatives of priority groups who adopt PLH interventions. Adoption also includes the recruitment of partners who support the implementation of interventions in the 16 clubs.

(iv): IMPLEMENTATION: This incorporates the design of PLH and how this impacts on health behaviours (i.e. PA, smoking, diet etc.) across the continuum of behavioural change. That is how men are Reached (Learn), Adopt (Start) and Maintain (Stick) interventions delivered by PLH.

(v): MAINTENANCE: The extent to which participants continue with PLH interventions and/or other interventions which help to maintain health enhancing behaviours.

Table 1 shows the RE-AIM framework, a definition of each component and the methods that were used and to capture each aspect.

Table 1: RE-AIM Framework Mapping against Data Capture

Component	Definition	Method of Data Capture
R = Reach	*Who was reached and how they learnt about PLH*	Self-Report Questionnaires (P) Interviews (PLH Staff & P) Card Sort Activity (PLH Staff)
E = Effectiveness	*The overall impact of PLH*	Self-Report Questionnaires (P) Interviews (PLH Staff & P) Card Sort Activity (PLH Staff & P)
A = Adoption	*Who adopts and how they started interventions*	Self-Report Questionnaires (P) Interviews (PLH Staff & P) Card Sort Activity (PLH Staff)
I = Implementation	*How PLH was implemented, what are the active design characteristics*	Interviews (PLH Staff) Card Sort Activity (PLH Staff)
M = Maintenance	*How men stick with PLH*	Self-Report Questionnaires (P) Interviews (PLH Staff & P) Card Sort Activity (PLH Staff)

Note: PLH Staff= Data gathered from PLH staff, P= Data gathered from male participants

2.1.2. Evaluation Instrumentation

After securing Local University Ethics Clearance, four methods were used to capture evaluation data for this report.

(i): Self-Report Questionnaires with PLH Participants

After gaining informed consent from all potential contributors, men aged ≥18 engaged in programmes delivered by English Premier League and Championship

clubs, and completed self-report measures. These measures addressed demographics (Marcus, 2009) and adapted versions of self-report lifestyle behaviours including physical activity (Marcus, 2009), consumption of fruit and vegetables (NHS, 2009), smoking, consumption of alcohol (Department of Health, 2007), use of primary care services and perceptions of health (Witty and White, 2011). Height and weight were recorded to calculate body mass index and this was compared with recommended guidelines (NICE, 2006). Questionnaires were completed pre-intervention to provide data on reach and adoption. This measure occurred at first point of contact or at participant inductions and assessments. The same data was captured again at post-intervention to assess any change in the variables measured. These questionnaires were filled out by PLH staff during interview lead questioning or by men engaging PLH via a participant led approach.

Prior to data collection, the self-report questionnaire was discussed with staff implementing the interventions, and training was given in order to assess its appropriateness for use with participants. Following changes to the instrumentation, PLH staff piloted the questionnaire prior to the commencement of full data collection. Following data collection, staff from the 16 clubs entered the questionnaires onto a database located on an evaluation website, which was accessed through a secure web link at the Football Foundation. The data was then accessed by researchers at Leeds Metropolitan University who performed cleaning of the data.

Data was then analysed by researchers using Chi-Squared tests for association (χ^2) to test for relationships between variables. This is based on the idea of observing frequencies that you find in certain categories, compared to the frequencies you might expect to see in those categories by chance. Odds Ratios and 95% Confidence Intervals were also calculated (OR= 95%CI), these relate to the ratio of the odds of an event occurring in one group compared to another, and the confidence intervals provide an estimated range of values which is likely to include the population parameter. Paired t-tests (*t*) and Wilcoxon signed rank tests (Z) were undertaken to assess for change post-intervention and the probabilities of that happening by chance. Finally, multilevel logistic regression models were used to predict outcomes (β). For all inferential tests, a *p* value of <.05 was taken to be

statistically significant. All data analysis was performed using SPSS for windows version 19.

(ii): Semi-structured Interviews with PLH staff and Participants

In order that process of implementation data could be captured on PLH interventions (I: component of RE-AIM), semi-structured interviews were performed with PLH staff leading the interventions and participants engaging the programme. When undertaking this work, researchers adopted existing methodologies used in the evaluation of multi-site community health programmes and previously published in peer reviewed literature (Sport England and Department of Health, 2006).

Following participant consent, semi-structured interviews were undertaken to help identify the key design characteristics deemed influential across PLH. Interviews were digitally recorded, transcribed verbatim and participants were given pseudonyms. After transcription, interesting features of the data were coded in a systematic fashion across the entire data set, collating data relevant to each code. Coded data was then collated into potential themes, gathering all data for potential themes. A thematic map of the analysis was generated and two researchers met to refine the specifics of each theme and generate clear definitions and names for each theme (Braun, 2006). Participant data sets were broken down into four further areas across the behavioural change continuum. These were for factors that facilitated (i) Reach and how men learn about PLH, (ii) Adoption and how men start PLH interventions, (iii) Acquire, how men change behaviour, and (iv) Maintenance, how men stick with new behaviours.

(iii): Card Sort Technique (CST) with PLH Staff and participants

The CST is used to generate information about the associations and grouping of specific data items. Participants completing CST are asked to organise individual, unsorted items shown in card form into groups and rank them. It is commonly used when developing elements of system design and has been frequently used in research into public health issues. CST are used because they are accessible, enjoyable for participants and a cost effective tool for collecting information.

Moreover, CST have been used when developing and designing systems and services, including those providing health care.

The following highlights the steps used to generate the cards.
(Step 1): The year one interviews conducted with the PLH staff identified the key design characteristics in helping men reach and adopt health promoting interventions in each of the PLH projects.
(Step 2): As part of a training session for staff delivering PLH interventions, PLH staff were required to give a presentation on the implementation of their interventions. Two researchers recorded lists of key design characteristics for engaging men in PLH interventions, compared them with the original list and generated a master copy by updating the original list.
(Step 3): This list was then shared with experts in men's health to confirm no design characteristics had been excluded.
(Step 4): Design of the card sort tool, this followed six revisions, two pilot exercises and two further revisions.
(Step 5): Once the master list was generated (24 cards for the men, 47 cards for PLH staff), participants undertook the card sort exercise using the following steps:
(a): Look through the cards, if there were any key design characteristics not listed in the pack, three blank cards were available to write and illustrate the design characteristic.
(b i): Men were asked to only select the five most important factors for engaging PLH interventions.
(b ii): PLH staff were requested to identify the key design characteristics across the four stages of behaviour change discussed earlier. That is, how hard-to-contact men learn (Reach), start (Adopt), acquire (Change) and stick (Maintain) with PLH interventions.
(c): Both groups were then asked to report the characteristics in rank order (selecting the five most important), and across the four stages of behaviour change for the PLH staff.

Once data was collected, the total frequency of each card reported was tallied to determine the most frequently occurring and active design characteristics for each group and across the four stages of behavioural change where appropriate.

(iv): Meetings with PLH Staff

Over the duration of the project, researchers met with PLH staff of the 16 interventions. This information has been used along with quotes from the semi-structured interviews performed with PLH staff to inform selected case studies, which support the main evaluation findings.

3. Results for Men Adopting Premier League Health

In this section, results are presented for Reach and Adoption (See RE-AIM framework, section 2). Following the implementation of the instrumentation reported in section 2, a total of n=4020 adopters provided data pre-intervention from the sixteen different clubs.

Adopters are those men who provided data at pre-intervention. Data was captured by health trainers/project staff at first point of contact with the men, typically before they engaged with the intervention and undertook activities/sessions.

Variations in the sample size were found for each evaluation item when compared to the number of adopters who engaged PLH interventions overall. This is indicative of some data being collected through “one-off” match day type events, where it was only possible to collect the participant’s demographic and contact data. Additionally some adopters chose not to submit full data sets. For example, some men may have provided data on demographics however didn’t for lifestyle behaviours, and some men may have provided certain data on lifestyle behaviours yet didn’t for other behaviours.

Results are presented for adopters in the following section for (I) demographic profiles, (II) health and lifestyle profiles/behaviours and, (III) use of health care services. Chi Square tests for association were undertaken to test for relationships among variables, further, Odds Ratios (OR) and 95% Confidence Intervals (95%CI) were also calculated where appropriate (See section 2).

When reporting results, a selection of brief case studies have been provided which outline examples of the key design (implementation) characteristics that are being undertaken by the different PLH interventions.

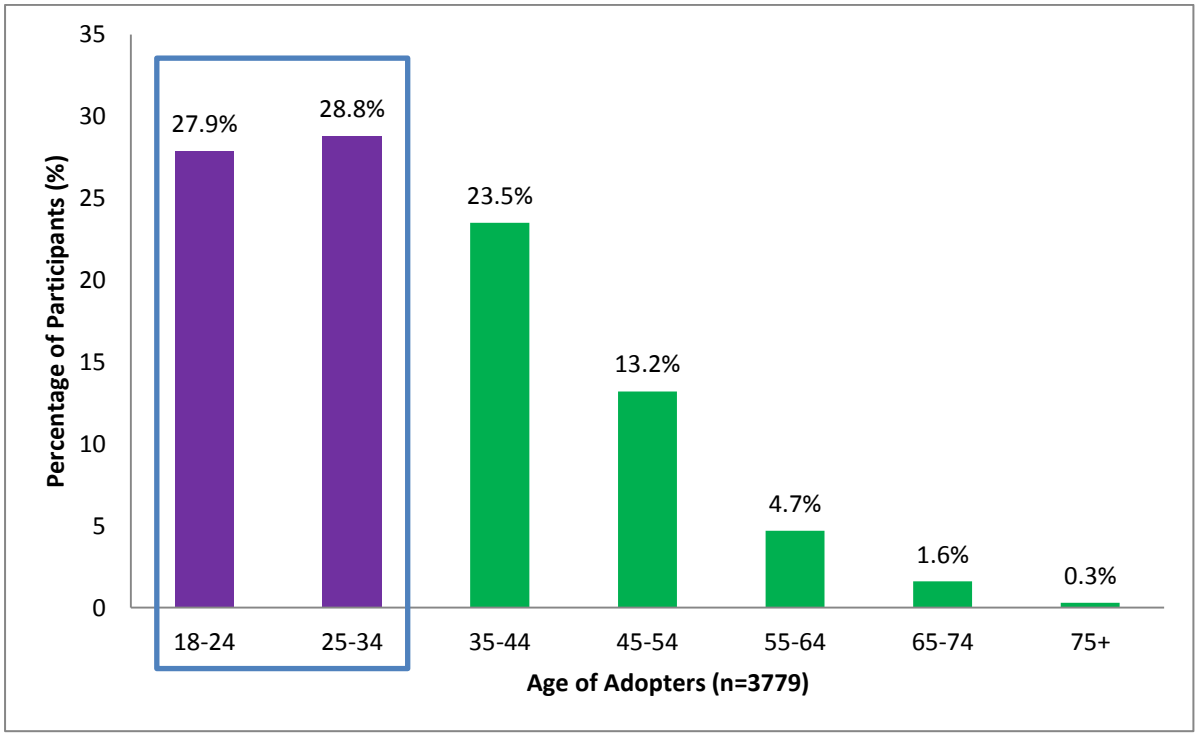
3.1. Demographics

Demographic data was received from 16 clubs with 4020 adopters providing information.

3.1.1. Age of Adopters

Data was provided by n=3779 adopters (**Figure 1**). Adopters engaged PLH interventions from a range age groups; however PLH was predominantly adopted by men aged 18-34 years (56.5% n=2134/3779).

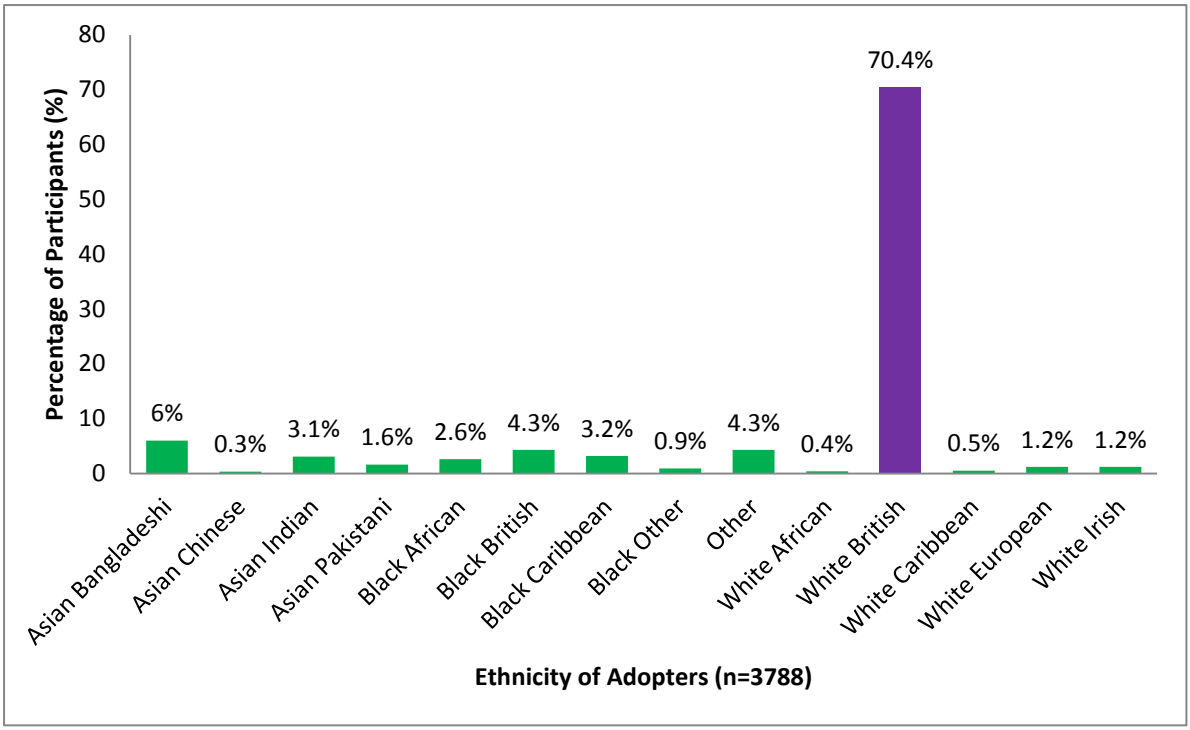
Figure 1: Age of Adopters



3.1.2. Ethnicity of Adopters

Data on ethnicity was provided by n=3788 adopters (**Figure 2**). Interventions predominantly recruited white British males (70.4% n=2669/3788). However, participants from BME groups were also engaged in interventions, **Case Study 1** illustrates this point further.

Figure 2: Ethnicity of Adopters



Case Study 1: Blackburn Rovers

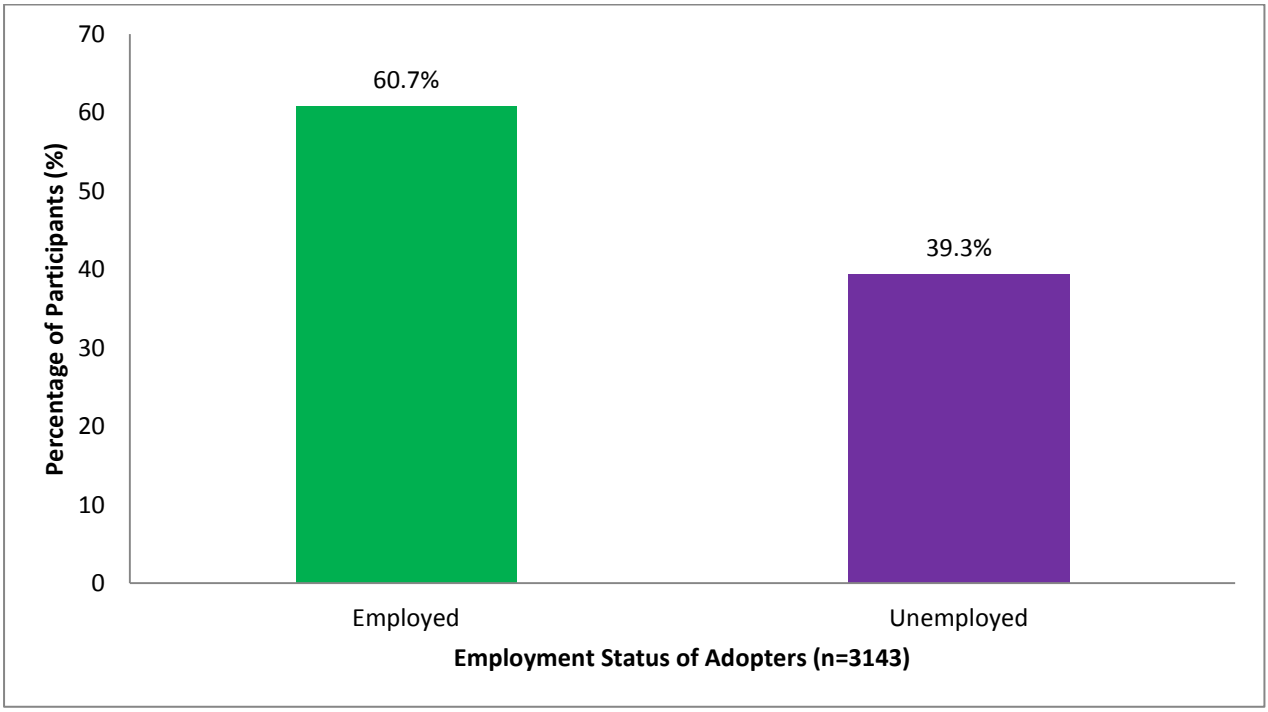
At Blackburn Rovers, PLH aims to reach and encourage the adoption of interventions by sedentary South Asian males aged 18+ from the Darwen, Audley and Baswell areas of the town.

- Participants can take part in healthy lifestyle sessions, badminton, volleyball and five-a-side football, including a league for men aged 35 years and over.
- Given the intended target group, the club has built links with local mosques which were important settings when aiming to reach South Asian men in these local areas.
- Health awareness events were held at three different mosques and aimed to increase the profile of PLH and reach this group with messages designed to promote health and well-being.

3.1.3. Employment Status of Adopters

Data on current employment status was provided by n=3143 adopters (**Figure 3**). Over 39% of adopters (n=1236/3143) were unemployed. Statistically, significantly more adopters from BME backgrounds (χ^2 21.785 p<.001) and those aged ≥35 (χ^2 8.187 p<.005) were employed compared to white British men, and younger men aged 18-34 years. **Case Study 2** shows how employability is being promoted through PLH.

Figure 3: Employment Status of Adopters



Case Study 2: Manchester United:

The PLH intervention at Manchester United aims to recruit sedentary unemployed men aged 18 years over who are at risk of CHD, Type 2 diabetes and some cancers as a result of their unhealthy lifestyles.

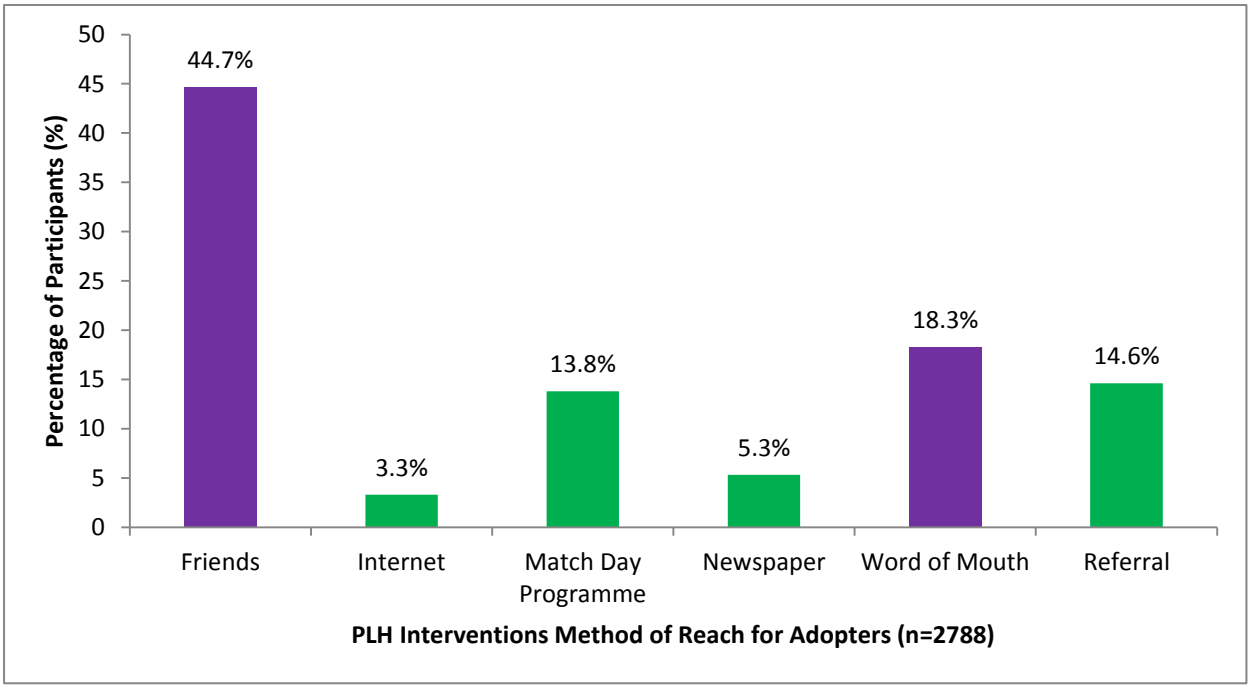
- Twice weekly sessions offer football, gym and health talks which aspire to establish both a structure and stability into participant's daily routines. Indeed, the positive effects of the structured sessions on participants on attitudes, skills and self-belief have enabled some of them to find employment. One Health Trainer reported:

"We are working in Wythenshawe, where unemployment figures for men aged 18-24 have doubled. However, we've had eight/nine of our guys get jobs and I think that's phenomenal."

3.1.4. Reaching Adopters with PLH Interventions

Data on the method by which men found out about PLH interventions were provided by n=2788 adopters (**Figure 4**). Around 63% (n=1755/2788) of adopters found out about PLH through friends and "word of mouth". **Case Study 3** provides an example of the methods that were used to reach participants with information on PLH activities and interventions.

Figure 4: Reaching Adopters with PLH Interventions



Case Study 3: Middlesbrough: Live Well Stay Safe

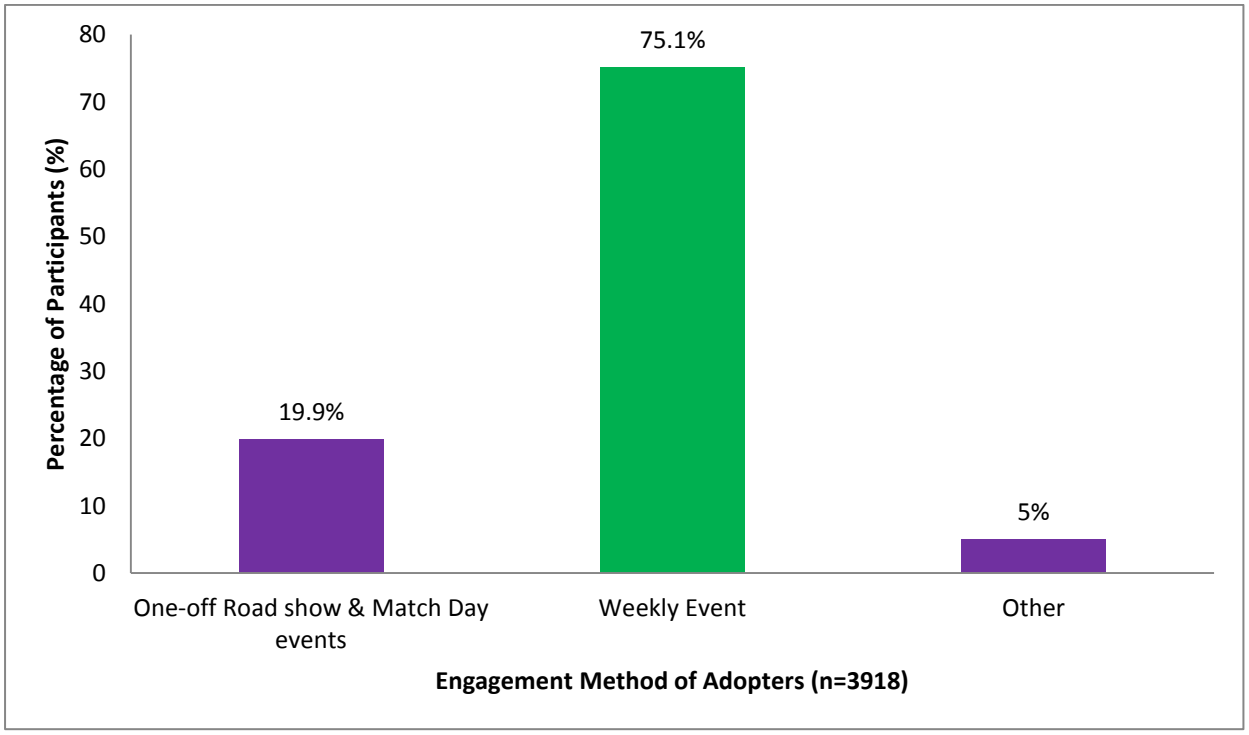
Live Well Stay Safe aims to reach men 18-30 years of age from deprived areas of Middlesbrough and the Tees Valley, including those who suffer from mental health issues and who may be dependent on cigarettes and alcohol.

- Men are recruited using a range of methods including, match day events, the club website and referral through local partners such as *"Sure Start"*.
- Participants adopt a 12-week intensive suite of activities including fitness training, health education activities, and vocational training and education to enhance employability.
- Men predominantly found out about activities through peers and other men engaged in the programme.

3.1.5. The Mode by which Men Adopted PLH Interventions

Data on the type of intervention men engaged with was provided by n=3918 adopters (**Figure 5**). Men adopted both match day events and road show activities (19.9% n=781/3918), yet structured weekly activities run by the different clubs was the most common mode of engagement (75.1% n=2943/3918). Although it is possible that some of these men may have been reached through "one-off" road shows and "match day" events and gone on to attend on a weekly basis. The category "other" was taken to be those participants who attended weekly events, but were irregular attenders.

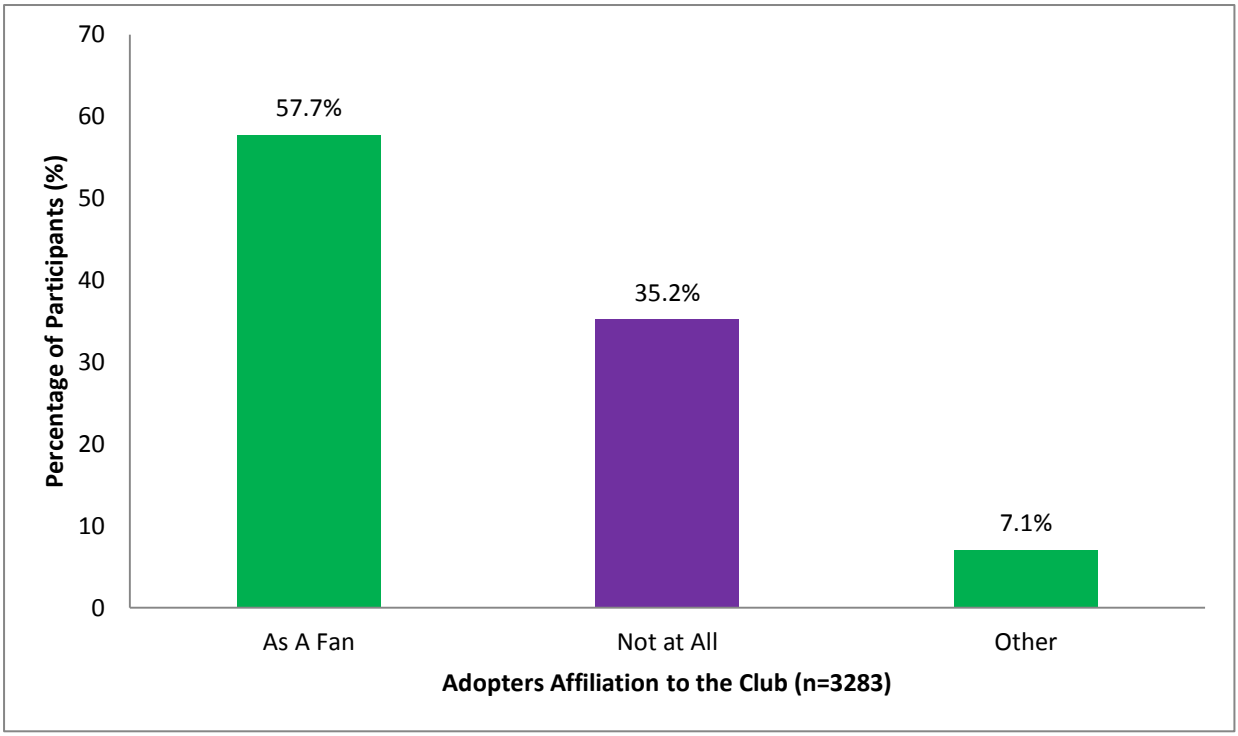
Figure 5: Engagement Method of Adopters



3.1.6. Adopters Affiliation to the Club

Data was provided by n=3283 adopters (**Figure 6**). This indicates that 57.7% (n=1895/3283) were fans of the club they engaged with. This also highlights the reach of the club given that over 35% of adopters (n=1156/3283) were not fans of the club hosting the intervention. **Case Study 4** shows how the infrastructure of the clubs was used to reach men.

Figure 6: Adopters Affiliation to the Club



Case Study 4: Hull City: Tigers FC

The Tigers FC intervention aims to reach sedentary men aged between 18 and 40 years.

- It incorporates a six week programme of health education classes covering smoking cessation, physical activity, weight management, alcohol and diet. These are followed by fitness sessions located in the KC stadium, and at the end of the six weeks men can attend follow-up fitness classes. The use of the club badge, players and the stadium appear to increase adoption. A health trainer reported:

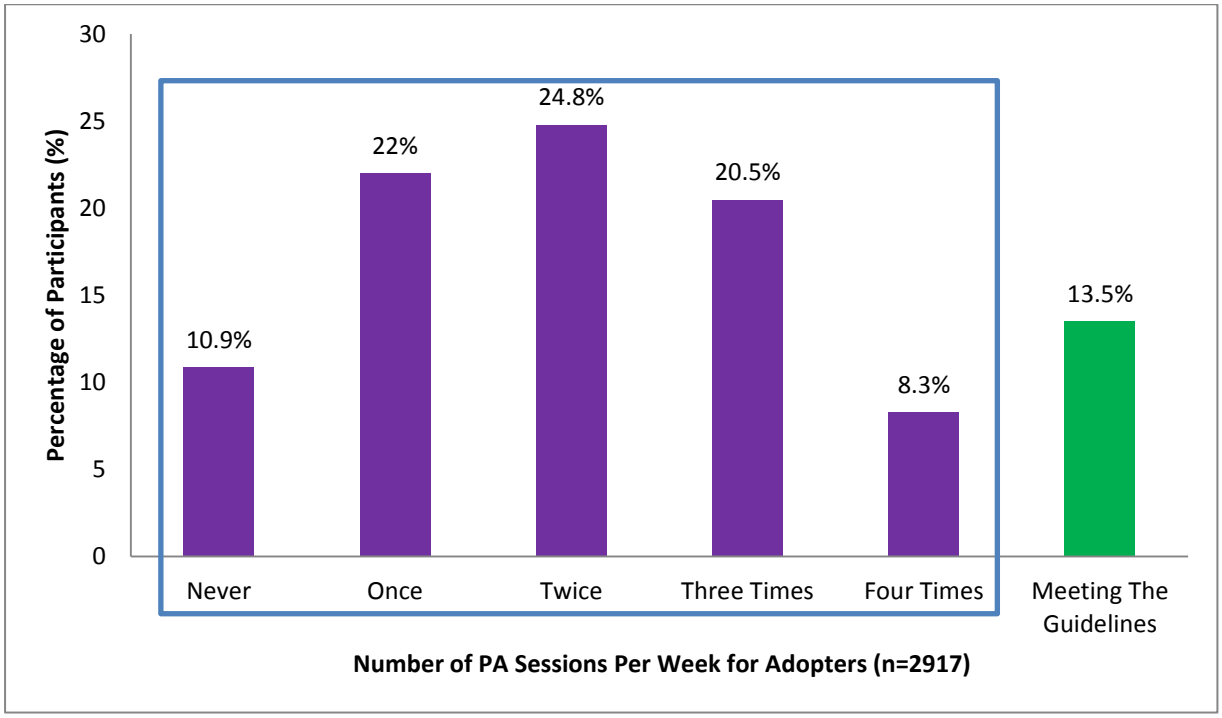
  "Don't underestimate the power of the badge. In terms of attracting people, we use the club image to get participants on-board. We get ex-players to get involved and use incentives. I know it's free, but if there's a t-shirt with a badge that their mates don't have, it helps get to people."

3.2. Health Behaviours of Adopters

3.2.1. Physical Activity Levels of Adopters

Self-reported PA data was provided by n=2917 adopters (**Figure 7**). More than 86% of adopters (n=2524/2917) did not meet recommended guidelines for PA (150+ minutes of moderate intensity PA each week). Adopters aged ≥35 years were at a 27% elevated risk of reporting PA as a lifestyle risk factor (LRF) [i.e. not meeting the guidelines] when compared to those aged 18-34 years (χ^2= 4.508, *p*<.05) (OR= 1.27, 95%CI: 1.01-1.58). Further, adopters who were employed were at a 55% elevated risk of reporting PA as a LRF compared to those who were unemployed (χ^2= 15.52, *p*<.001) (OR= 1.55, 95%CI: 1.25-1.94), and those from BME backgrounds were at a three-fold elevated risk of reporting PA as a LRF compared to adopters who were white British (χ^2= 56.53, *p*<.001) (OR= 2.97, 95%CI: 2.21-3.99).

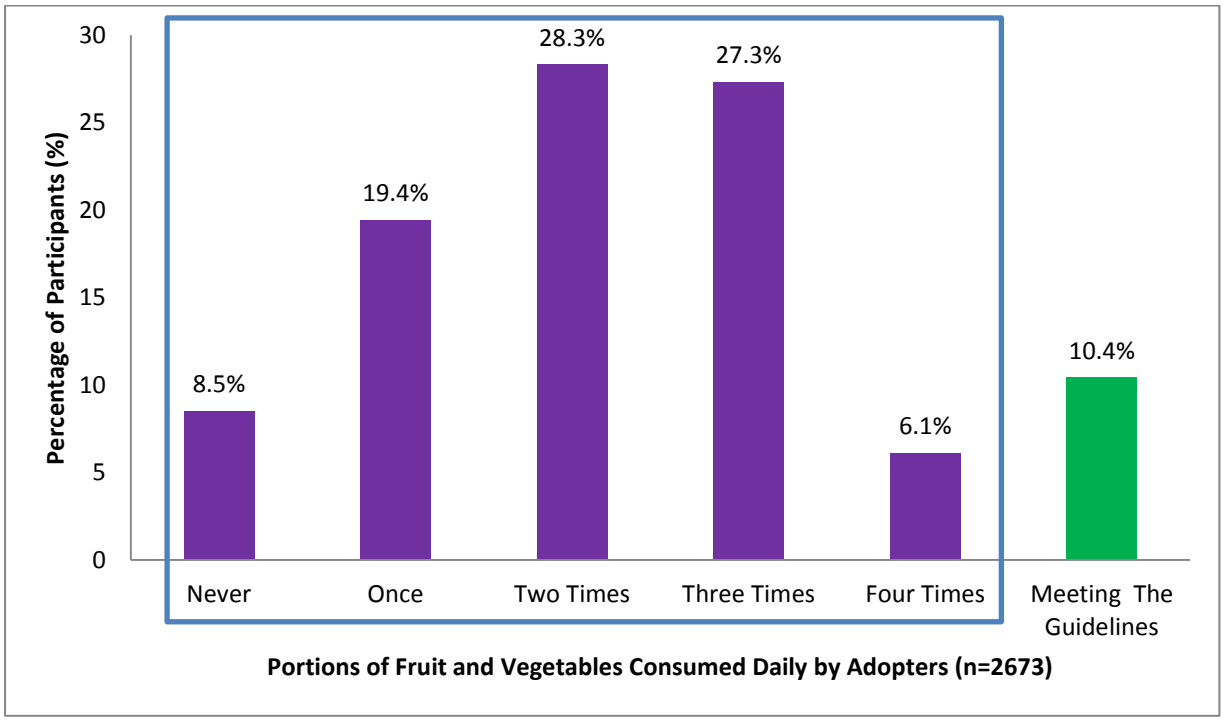
Figure 7: PA levels of Adopters



3.2.2. Daily Consumption of Fruit and Vegetables by Adopters

Data on the daily consumption of fruit and vegetable portions was provided by n=2673 adopters (**Figure 8**). Nearly 90% of adopters (n=2396/2673) did not meet recommended guidelines (five or more portions of fruit and vegetables on each day of the week), and were therefore at a greater risk of various chronic health conditions. Adopters aged 18-34 years were at an 87% elevated risk of reporting diet as a LRF (i.e. not meeting the guidelines) compared to those aged ≥35 years (χ^2= 26.226, *p*<000.) (OR= 1.87, 95%CI: 1.46-2.38). Further, adopters from BME backgrounds displayed twice the risk of reporting diet as a LRF compared to those who were white British (χ^2= 21.174, *p*<.001) (OR= 2.01, 95%CI: 1.49-2.71).

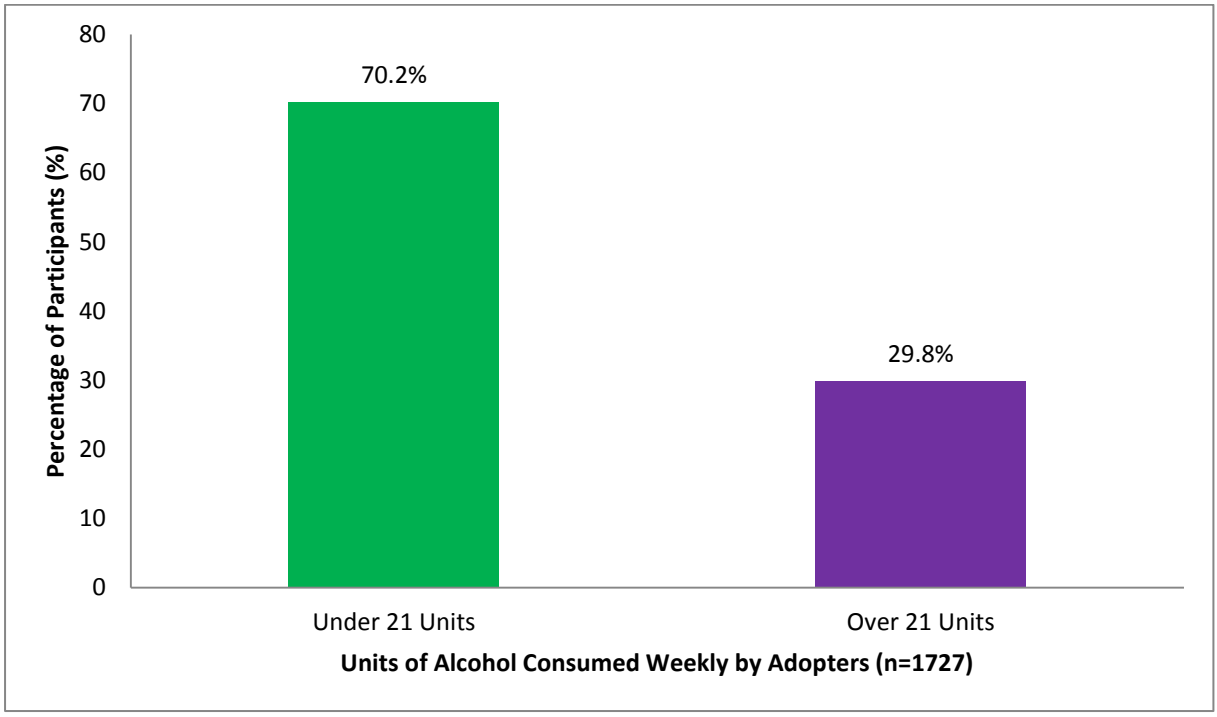
Figure 8: Daily Consumption of Fruit and Vegetables by Adopters



3.2.3. Weekly Consumption of Alcohol Units by Adopters

Data on alcohol consumption was provided by n=1727 adopters. **Figure 9** shows the number of adopters who met the recommended guidelines (<21 units of alcohol each week). Only 29.8% of adopters (n=514/1727) reported exceeding the recommended weekly guidelines (≥21 units of alcohol each week), and 21.4% (n=370/1727) of adopters providing data reported that they never drank alcohol. Further, those adopters who were white British were at a five-fold elevated risk of reporting alcohol as a LRF when compared to those who were from a BME background (χ^2= 103.72, *p*<.001) (OR= 5.47, 95%CI: 3.83-7.82).

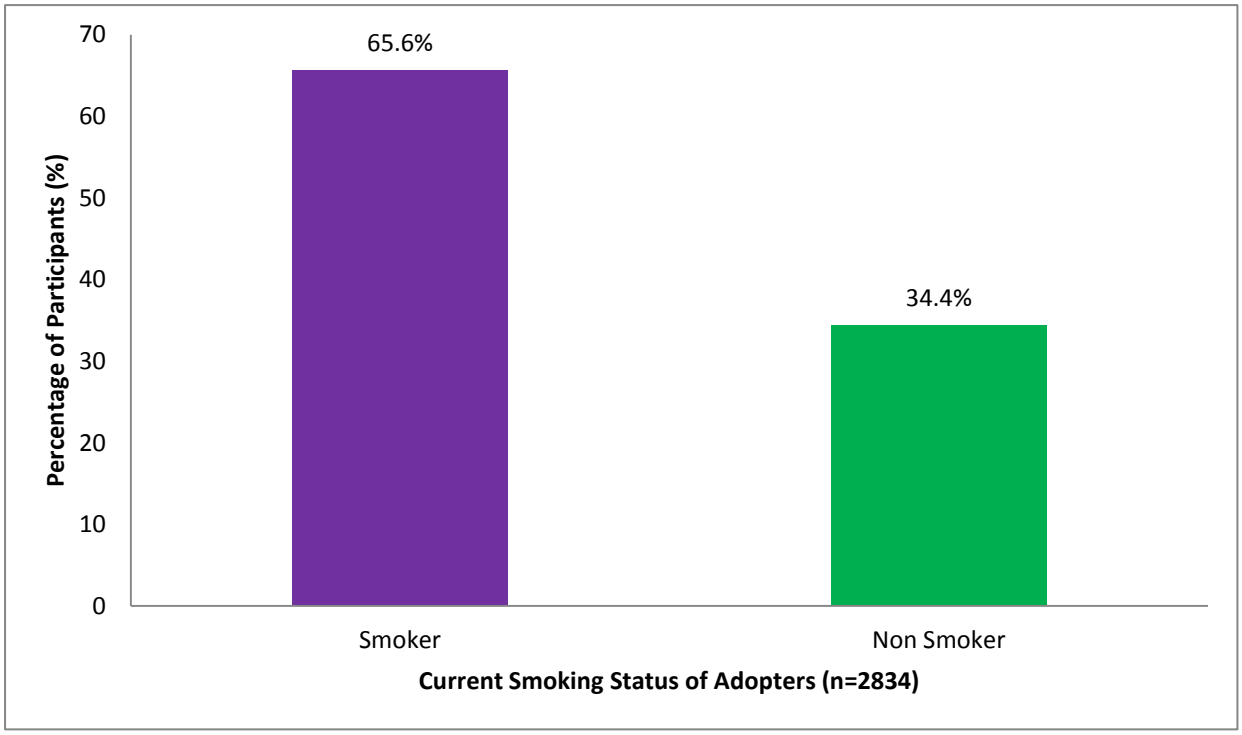
Figure 9: Weekly Consumption of Alcohol Units by Adopters



3.2.4. Current Smoking Status of Adopters

Data on smoking was provided by n=2834 adopters (**Figure 10**). Over 34% (n=975/2834) reporting that they currently smoke. Adopters who were unemployed were at a 67% greater risk of being current smokers when compared to those who were currently employed (χ^2= 37.91, *p*<.001) (OR= 1.67, 95%CI: 1.42-1.97). Further, adopters aged 18-34 years were at a 38% greater risk of being classed as current smokers when compared to those aged ≥35 years (χ^2= 15.75, *p*<.001) (OR= 1.38, 95%CI: 1.18-1.62).

Figure 10: Current Smoking Status of Adopters



3.2.5. Combinations of Lifestyle Risk Factors (LRFs) for Adopters

Data on combinations of LRFs were provided by n=1667 adopters. LRFs were present if the adopter did not undertake 150+ minutes of moderate PA per week, consumed <5 portions of fruit and vegetables per day, drank ≥21 units of alcohol per week or currently smoked. **Table 2** highlights the prevalence of the 16 possible combinations of LRFs. Chronic health conditions such as cancer, CVD, diabetes and chronic respiratory disease are now grouped together in public health terms as non-communicable diseases which are underpinned by these LRFs. Research suggests that LRFs may not only occur in isolation, but also simultaneously, which progressively increases disease risk.

Table 2: Combinations of LRFs for Adopters

Number of LRFs	**Identified LRFs**				**Occurrence**
	Poor Diet	Physically Inactive	Current Smoker	Excessive Alcohol	% (n)
4	✓	✓	✓	✓	9.71 (162)
3	✓	✓	✓	X	15.77 (263)
	✓	✓	X	✓	14.28 (238)
	✓	X	✓	✓	1.44 (24)
	X	✓	✓	✓	0.24 (4)
					31.73 (529)
2	✓	✓	X	X	37.25 (621)
	✓	X	✓	X	1.98 (33)
	✓	X	X	✓	2.46 (41)
	X	✓	✓	X	1.32 (22)
	X	✓	X	✓	1.08 (18)
	X	X	✓	✓	0.12 (2)
					44.21 (737)
1	✓	X	X	X	5.16 (86)
	X	✓	X	X	5.28 (88)
	X	X	✓	X	0.72 (12)
	X	X	X	✓	0.36 (6)
					11.52 (192)
0	X	X	X	X	2.82 (47)

Note: ✓ = risk factor present, x = risk factor absent.

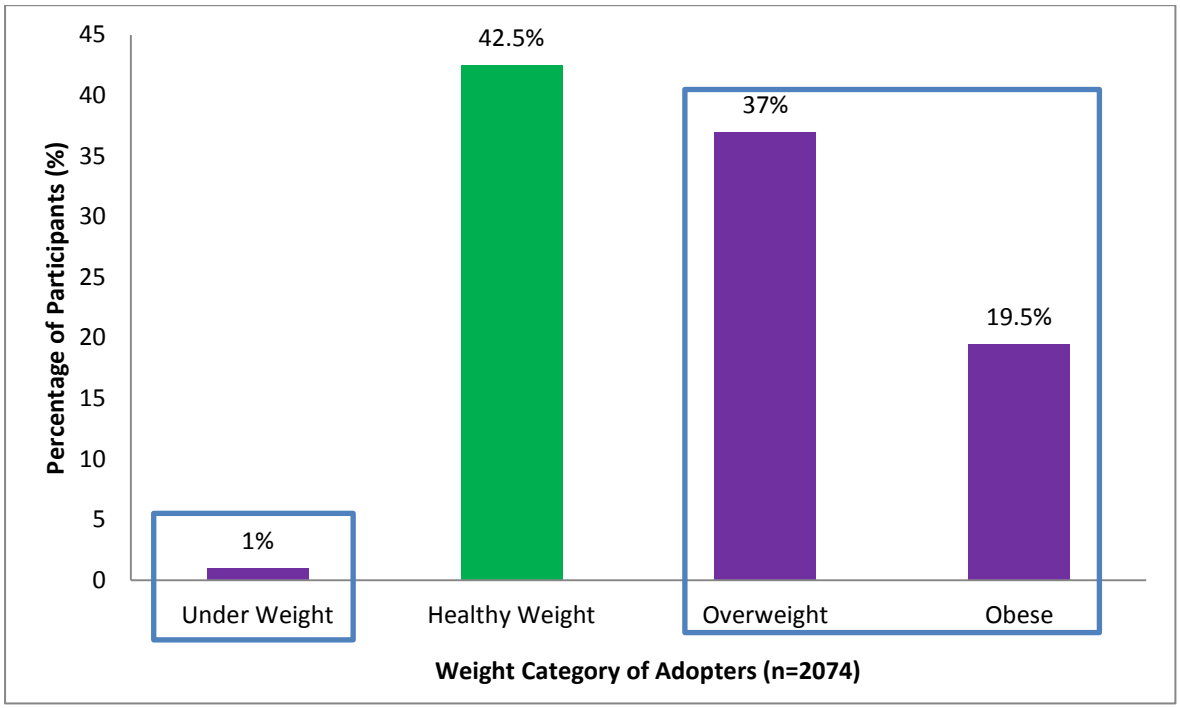
Of the adopters providing data for analysis, **Table 2** shows that 2.8% had no LRFs, 11.5% had one, 44.2% had two, 31.7% had a combination of three and 9.7% had all four LRFs. Unemployed adopters were at a 50% elevated risk of reporting three or more LRFs when compared to those who were employed (χ^2= 15.85, p<.001) (OR=1.50, 95%CI: 1.23-1.83). Further, white British adopters were at a 89% elevated risk of reporting three or more LRFs when compared to those who were from BME backgrounds (χ^2= 27.17, p<.001) (OR= 1.89, 95%CI: 1.48-2.41). However, there were no statistically significant differences when adjusting for age. Clustering occurs when the observed combination of LRFs exceeds the expected prevalence of the combination. Clustering of LRFs was found for four combinations, (i) for all four LRFs in combination, (ii) poor diet + inactivity + excessive alcohol consumption, (iii) poor diet + inactivity + smoking, and (iv) poor diet + inactivity. These combinations were greater than would have been expected on the basis of the occurrence of individual LRFs in the study population, and therefore prone to cluster.

Previous LRF research has also highlighted economically inactive men as being at an elevated likelihood of presenting risky health profiles (Poortinga, 2007; Schuit, 2002). Their research identified that 29% and 23% of men respectively presented with 3-4 LRFs which is cause for concern in itself. However, over 41% of PLH adopters presented with 3-4 LRFs. This not only reinforces the necessity of health promotion interventions with this population, but further supports the power of sporting settings as a tool with which to reach and engage men with multiple health complications.

3.2.6. Weight Category of Adopters

Data on weight category was provided by n=2074 adopters (**Figure 11**). Over 57% of adopters (n=1192/2074) presented an unhealthy Body Mass Index (BMI). BMI is a person's weight in kilograms divided by the square of their height in meters. It is one of the most commonly used ways of estimating whether a person is overweight, obese, underweight or a healthy weight. Having a healthy weight reduces the risk of diseases associated with overweight and obesity, such as coronary heart disease, type 2 diabetes, osteoarthritis and some cancers. Adopters aged ≥35 years displayed almost a three-fold elevated risk of reporting an unhealthy BMI compared to those aged 18-34 years (χ^2= 117.83, p<.001) (OR= 2.72, 95%CI: 2.27-3.27). Further, adopters who were white British displayed a 33% elevated risk of reporting an unhealthy BMI when compared to those men from a BME background (χ^2= 8.04, p<.005) (OR= 1.33, 95%CI: 1.09-1.62).

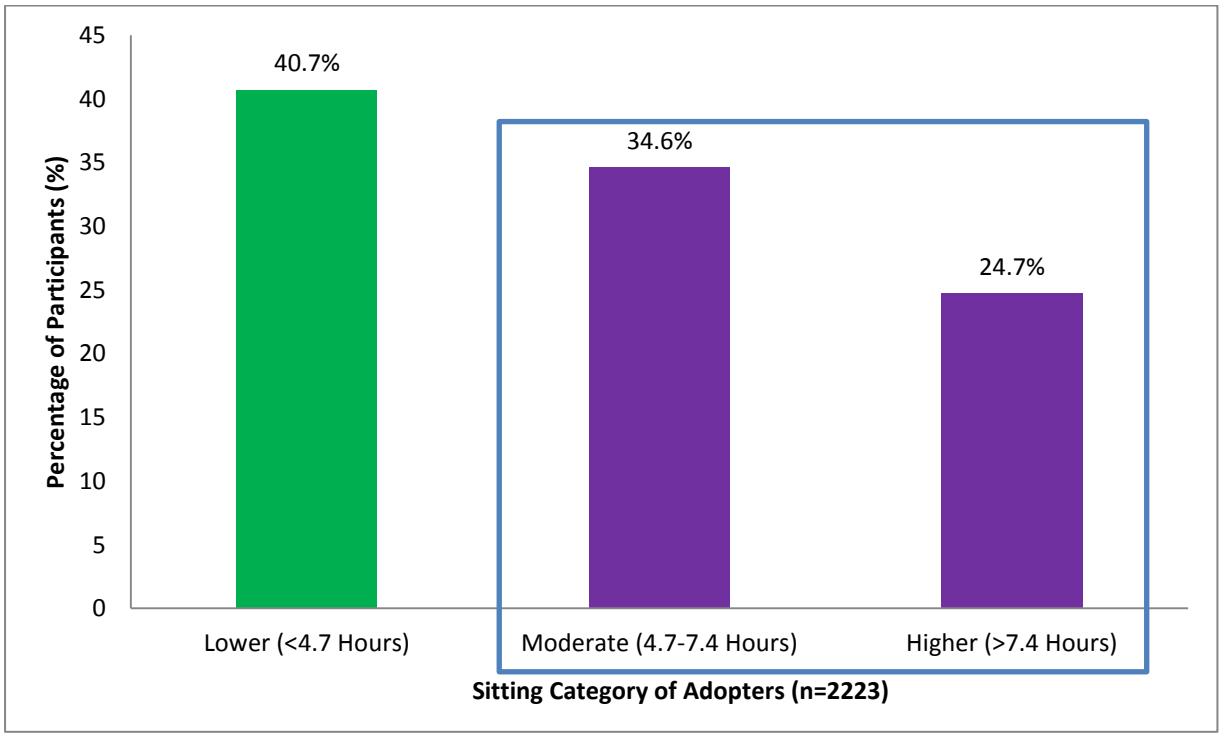
Figure 11: Weight Category of Adopters



3.2.7. Sitting Category of Adopters

Data on daily sitting time was provided by n=2223 adopters. **Figure 12** shows the sitting risk categories of adopters characterised by time spent sitting each day. Prolonged sitting, independent of time spent in PA, is associated with all-cause mortality, CVD, obesity, type 2 diabetes, poor bone health and metabolic syndrome (Brown, 2003). Over 59% of adopters (n=1319/2223) were classed as being at an elevated risk (sitting >4.7 hours/day) of these conditions as a result of prolonged bouts of daily sitting. The risk of sitting for prolonged periods throughout the day was elevated by 70%, for those adopters who were employed (χ^2= 32.63, p<.001) (OR= 1.70, 95%CI: 1.41-2.03), and by 73% for those adopters who were white British (χ^2= 35.38, p<.001) (OR= 1.73, 95%CI: 1.44-2.07).

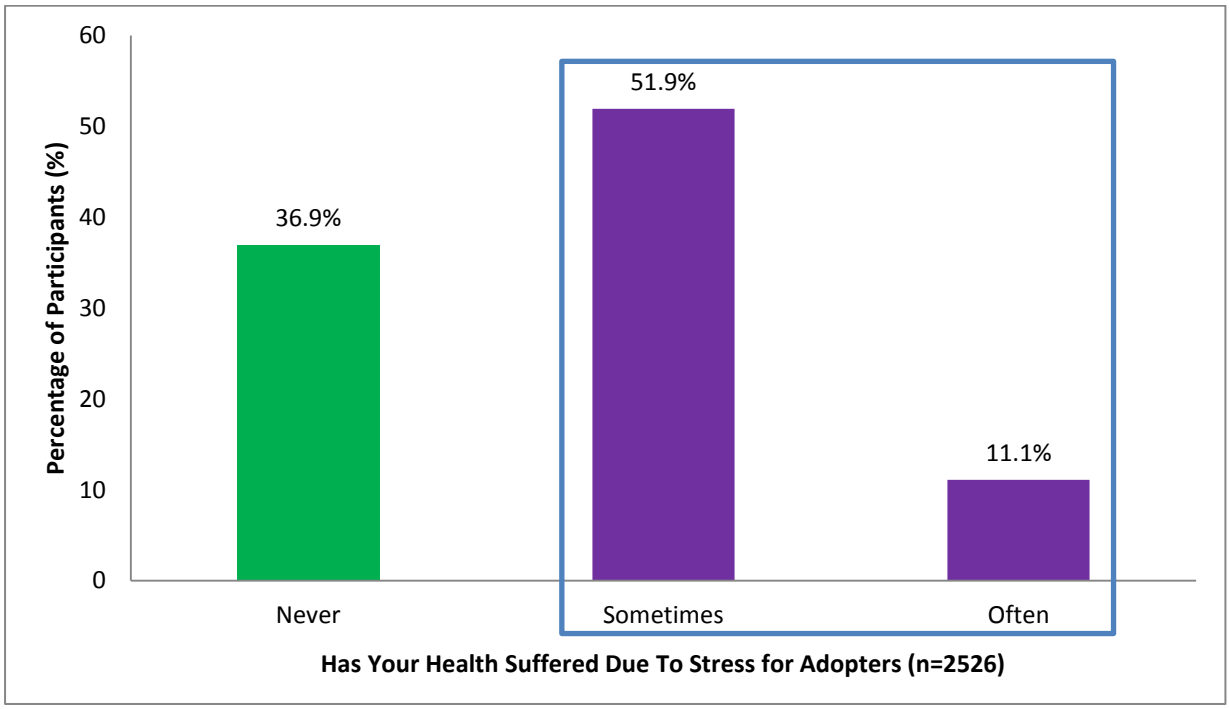
Figure 12: Sitting Category of Adopters



3.2.8. Stress Related Health of Adopters

Data on perceived stress was provided by n=2526 adopters (**Figure 13**). The number of adopters who reported that their health had suffered due to pressure and/or stress in the last month was over 63% (n=1593/2526). Adopters who did not meet the PA recommendations were at a three-fold elevated risk of reporting that their health had suffered as a result of stress compared to those who did meet the recommendations (χ^2= 95.37, p<.001) (OR= 3.18, 95%CI: 2.50-4.04). The risk of reporting that stress had adversely affected an adopters health was also considerably elevated by (a) having a poor diet (χ^2= 54.09, p<.001) (OR= 2.52, 95%CI: 1.96-3.24), (b) smoking (χ^2= 70.72, p<.001) (OR= 2.18, 95%CI: 1.81-2.62) and (c) exceeding alcohol recommendations (χ^2= 19.35, p<.001) (OR= 1.65, 95%CI: 1.32-2.07).

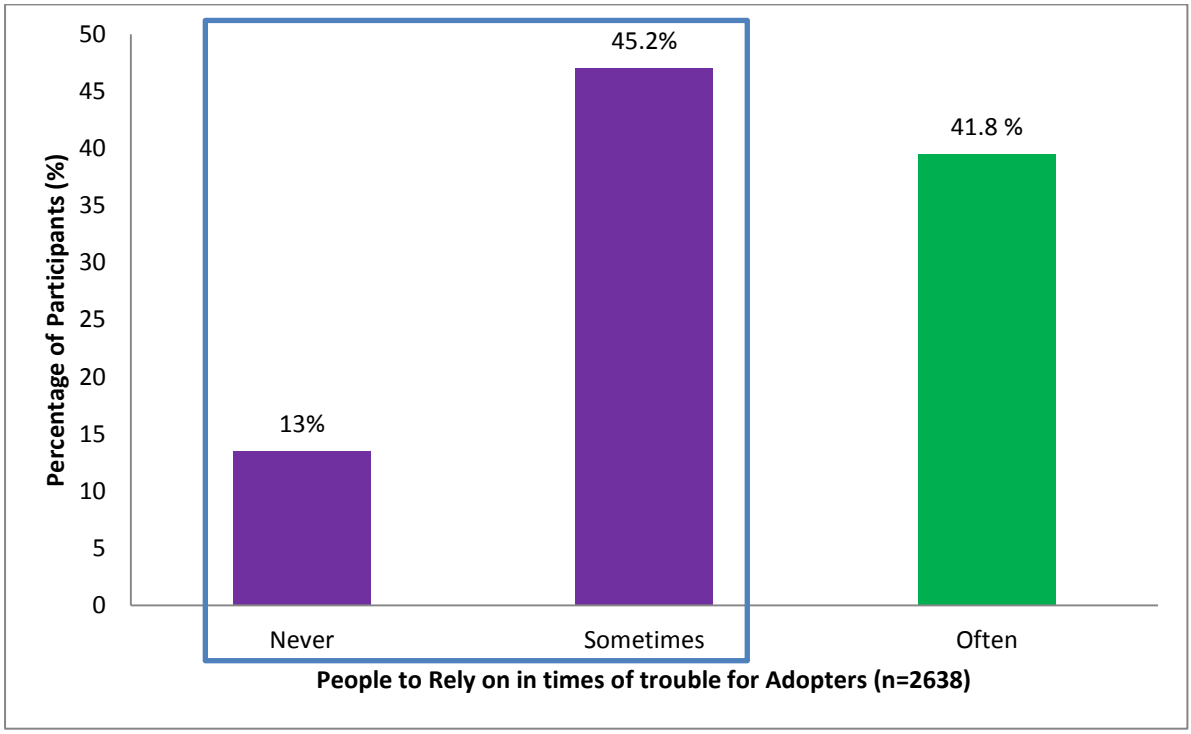
Figure 13: Perceived Health Deterioration Due to Stress for Adopters



3.2.9. Social Support Networks for Adopters

Data on social support was provided by n=2638 adopters (**Figure 14**). Approximately 58.1% of adopters (n=1535/2638) reported having no one, or a limited number of people who they could rely on in times of trouble. More positively, over 41% (n=1103/2638) reported that they had social support networks in place to help them in times of trouble. Further, adopters aged ≥35 years displayed an 34% elevated likelihood of having people they could rely on regularly in times of trouble compared to those aged 18-34 years (χ^2= 12.66, p<.001) (OR= 1.34, 95%CI: 1.14-1.57), suggesting that younger adopters were at a greater risk of being isolated.

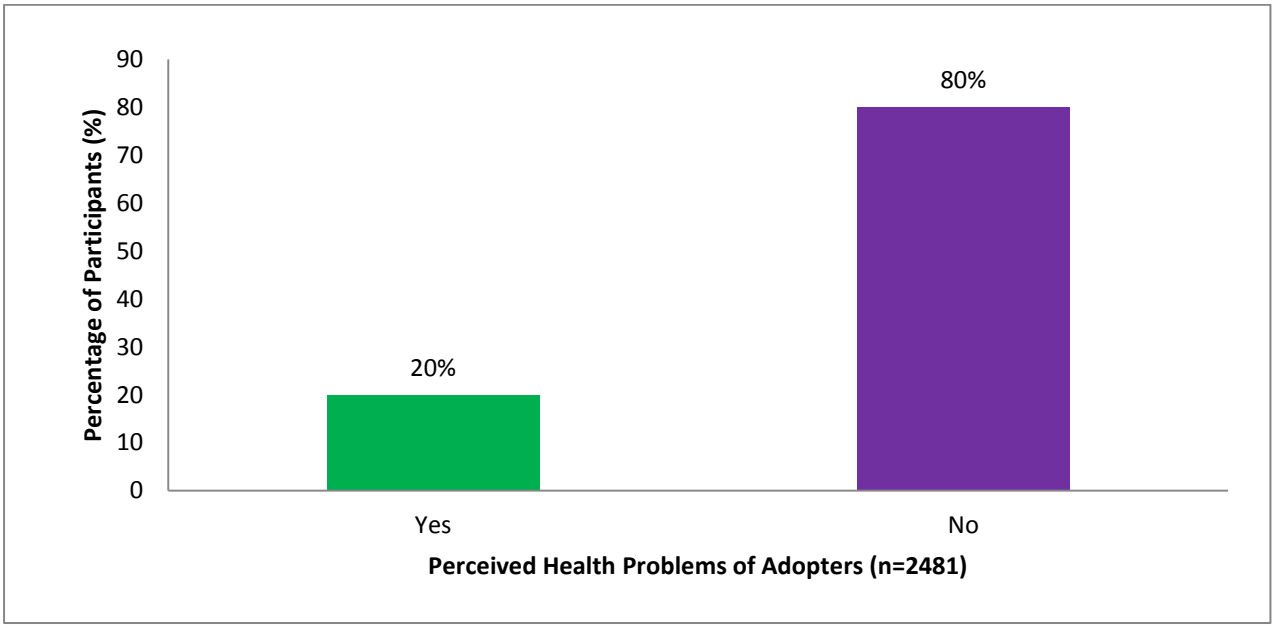
Figure 14: Social Support Networks for Adopters



3.2.10. Perceived Health Problems of Adopters

Data on perceived health problems were provided by n=2481 adopters (**Figure 15**). In spite of the health behaviours and profiles reported by participants adopting PLH interventions, 80% of men (n=1984/2481) did not consider that they had any health problems. Considerably more adopters aged ≥35 years reported perceived health problems compared to those aged 18-34 years (χ^2= 75.20, *p*<.001) (OR= 2.47, 95%CI: 2.01-3.03), even though there were no statistically significant differences in LRFs reported by age. **Case Study 5** reports the efforts of staff and players at Fulham in helping to raise awareness of health issues in men.

Figure 15: Perceived Health Problems of Adopters



Case Study 5: Fulham FC: Lambeth Man

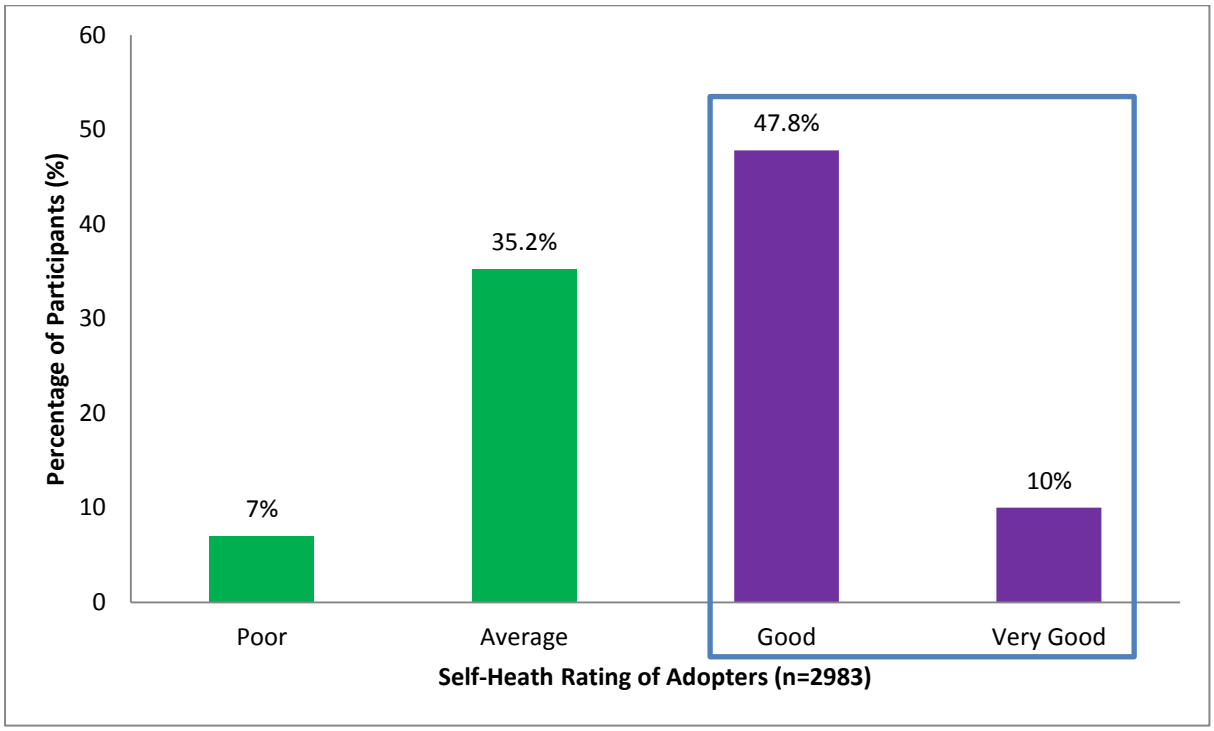
Fulham's intervention aims to reach men aged 18+ from the Lambeth area, at risk of multiple diseases as a result of health inequalities and deprivation.

- Media involvement and player interaction have helped to reach and increase the adoption.
- The project links into Fulham's "Places for Players" programme to help raise awareness, monitor and evaluate key issues relating to the health of participants. This awareness is facilitated by appointing health ambassadors from within the club.
- Current player Brede Hangeland and ex-club legend and World Cup winner, George Cohen, helped fulfil these roles and utilise their profile to attract participants to the intervention and raise awareness of key health messages and health issues in men.

3.2.11. Self-Health Rating of Adopters

Data on perceived health status was provided by n=2983 adopters. **Figure 16** shows the number of adopters who classified their own health between the ranges of poor and very good. Again, in spite of the health profiles and behaviours presented by adopters, over 57.8% (n=1723/2983) reported that they thought their health was at least good. Further, there was a statistically significant difference in adopter's self-health rating when adjusting for the number of LRFs they presented (χ^2= 33.26, p<.001). Adopters with 3-4 LRFs were less likely to report that their health was good/very good compared to those who rated their health as poor or average (OR= 0.56, 95%CI: 0.45-0.68). Further, those adopters who thought that their health had suffered as a result of stress were considerably less likely to report that their health was good/Very good compared to those that didn't (χ^2= 22.51, p<.001) (OR= 0.67, 95%CI: 0.57-0.79). This suggests that men were aware of their own health status even if they didn't consider it to be a problem.

Figure 16: Self-Health Rating of Adopters

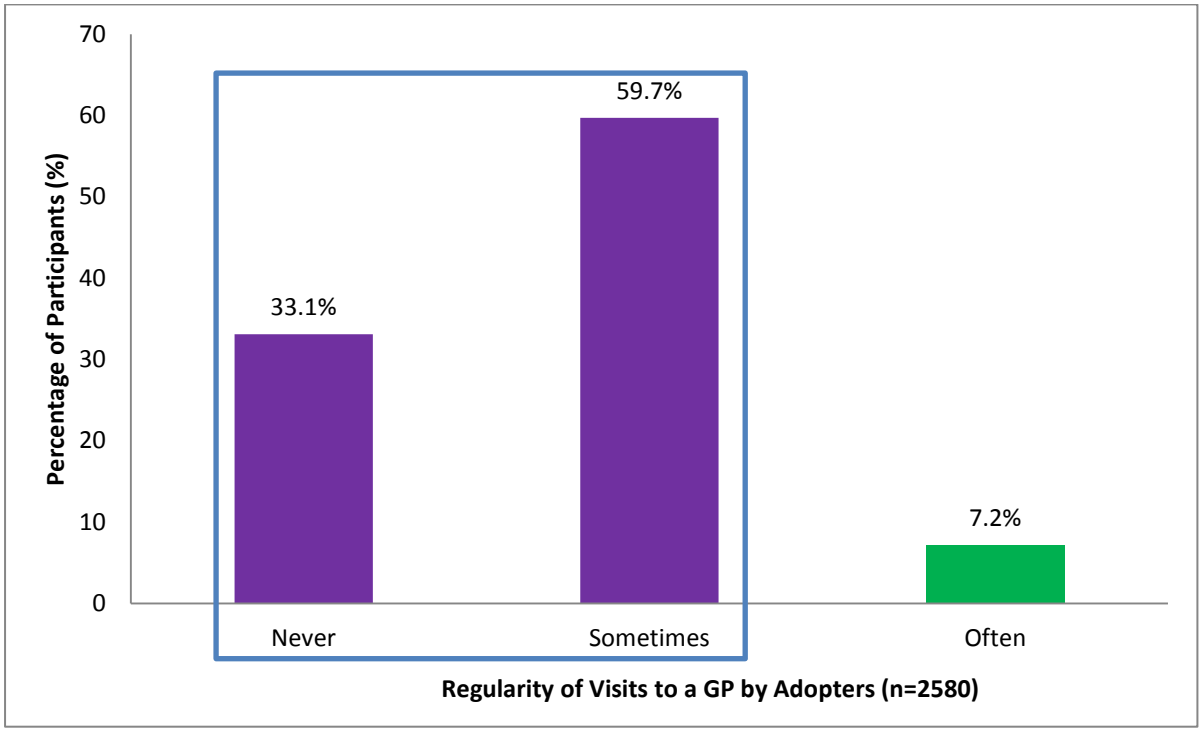


3.3. Use of Health Care Services by Adopters

3.3.1. Visits to a General Practitioner (GP) by Adopters

Data on visits to a GP were provided by n=2580 adopters (**Figure 17**). Just over 7% of adopters (n=187/2580) regularly visited their GP and over 33% (n=854/2580) never contacted their GP and as such were hard to connect to conventional health promotion. Adopters from BME backgrounds were substantially more likely to visit their GP compared to adopters who were white British (χ^2= 42.39, p<.001) (OR= 1.88, 95%CI: 1.55-2.28). However, there were no statistically significant differences in those who never visited their GP when compared with those who did when adjusting for age, employment or perceived health problems.

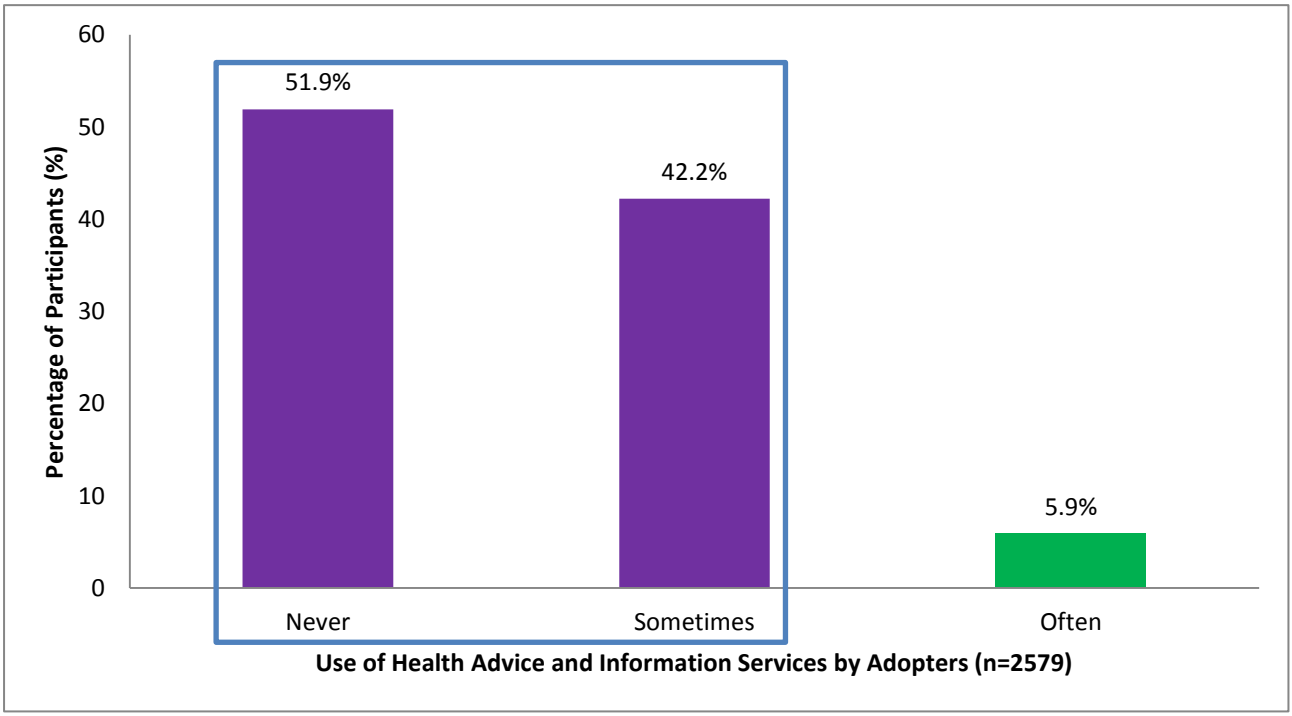
Figure 17: Frequency of Visits to a GP by Adopters



3.3.2. Use of Health Advice and Information Services by Adopters

Data on the use of health advice and information services was provided by n=2579 adopters (**Figure 18**). More than 51% of adopters (n=1339/2579) did not use them. Those adopters who visited their GP were four times more likely to use health advice and information services (χ^2= 279.96, p<.001) (OR= 4.60, 95%CI: 3.82-5.53). **Case Study 6** reports the issues associated with the uptake of health services by men.

Figure 18: Use of Health Advice and Information Services by Adopters



Case Study 6: Stoke City: Get Match Fit, Stay Loud and Proud

Get Match Fit, Stay Loud and Proud aims to reach men 18 years and older from across the City of Stoke-on-Trent and Staffordshire Moorlands.

- A programme of weekly evening exercise sessions are supported with health awareness activities including a cook and eat session, a cycling project, a fishing group and match day family walks.
- Activities aspired to increase men's awareness of the health services. Referral from 'Get Match Fit' encourages men to use smoking, alcohol and weight management services. A health trainer reported:

> *"Some of the men are so worried about wasting their GPs time; they need somebody who knows a bit about health, so they can feel validated in going to see their GP."*

4. Results for Men Completing Premier League Health

In this section, results are presented for completers relating to health and lifestyle behaviours and their use of health care services. Following the implementation of the instrumentation reported in section 2, a total n=875 completers provided post-intervention data from fifteen clubs.

Completers are those individuals who submitted data at pre-intervention (using the self-report questionnaire outlined in section 2), adopted a PLH intervention, and subsequently completed the same questionnaire post-intervention, typically at 12 week follow-up.

The post-intervention data is then matched to the participant's pre-intervention data sets using an anonymous coding system to allow analysis to be undertaken, assess for any change and predict any outcomes.

Wilcoxon signed rank tests and paired sample *t*-tests were undertaken to determine any statistically significant differences between pre and post-intervention data, and assess the probabilities of any change happening by chance. Multilevel logistic regression models were also used to estimate predictors for lifestyle risk factors post-intervention (See section 2).

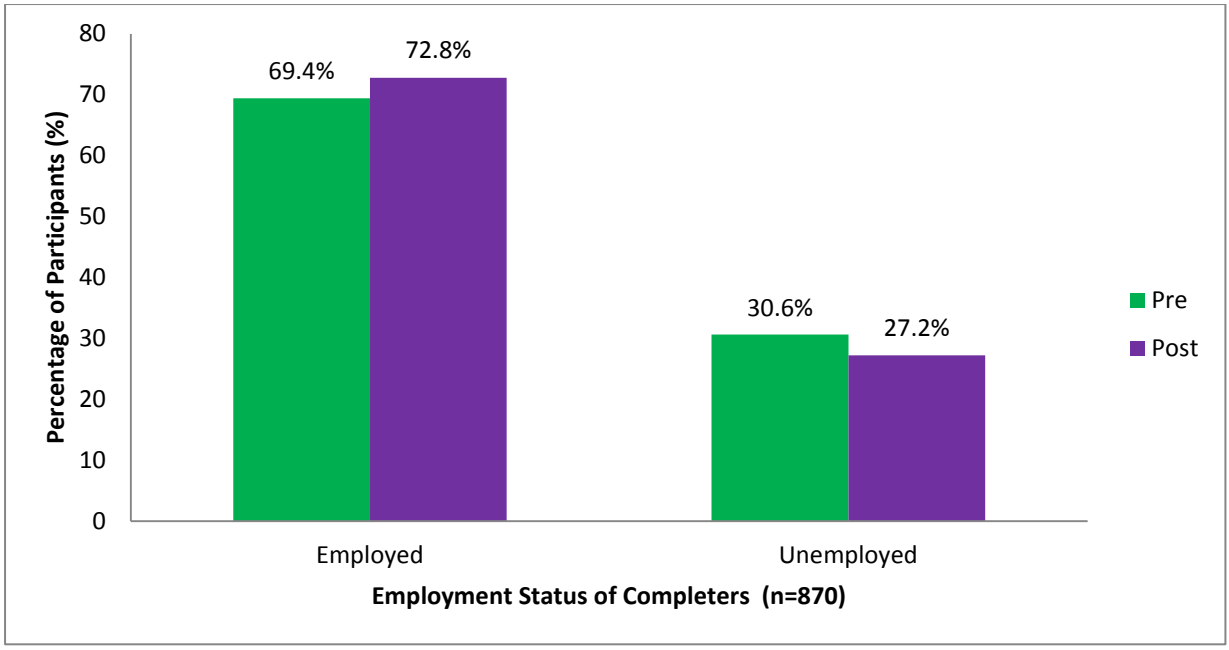
Further, differences in the sample size were found for each variable post-intervention when compared to the number of participants who engaged PLH pre-intervention. This is indicative of some data being collected through "one-off" match day type events, where it was not possible to collect post-intervention data. Additionally, participants are not forced to engage in the evaluation, and may withdraw at any time or leave the project before post-intervention data can be collected.

4.1. Data on Demographics, Health Behaviours and use of Health Care Services for Completers

4.1.1. Age, Ethnicity and Employment Status of Completers

Data on age was provided by n=870 completers. Over 52% of participants were aged 18-43 years at post-intervention. Considerably more completers were aged ≥35 years compared to adopters (χ^2= 8.49, p<.005). Data on ethnicity was provided by n=864 completers. Over 64% (n=554) were white British, yet substantially more completers were from a BME background compared to adopters (χ^2= 29.10, p<.001). Data on employment status was provided by n=787 completers, substantially more completers were in employment compared to adopters (χ^2= 26.44, *p*=<.000). **Figure 19** shows changes in employment status. There was a statistically significant reduction in unemployment from pre versus post-intervention (Z= -2.80, p<.005), of those completers who were unemployed pre-intervention 24.9% (n=60/241) went on to find employment. However, there were no statistically significant differences in post-intervention employment when adjusting for age and ethnicity. It is difficult to establish that any changes in employment were due to the effect of the intervention.

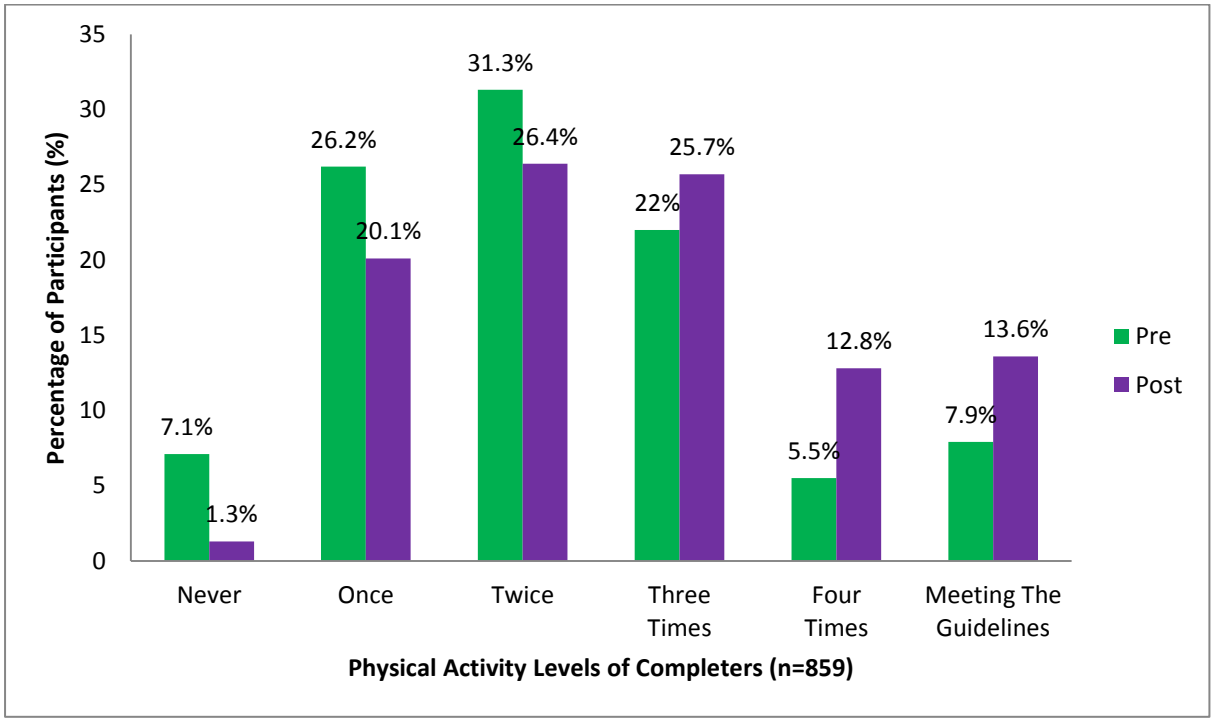
Figure 19: Changes in Employment Status of Completers



4.1.2. Changes in the Physical Activity Levels of Completers

PA data was provided by n=859 completers (**Figure 20**). There was a statistically significant improvement in PA from pre to post-intervention (Z= -13.71, p<.001), 7.5% (n=59/791) of completers who were insufficiently active pre-intervention were meeting the recommended guidelines post-intervention. Additionally, there was a 5.8% (n=50/859) decrease in those who were inactive and achieving no PA, and completers who increased their weekly PA (43.4% n=344/791) greatly outnumbered those who showed a reduction over the same period (7% n=56/798). Further, being in employment (β=2.04, p<.005) and having an unhealthy diet (β=11.38, p<.001) were statistically significant predictors of being insufficiently active (not meeting the guidelines), these factors amplified the risk by two, and eleven times respectively post-intervention.

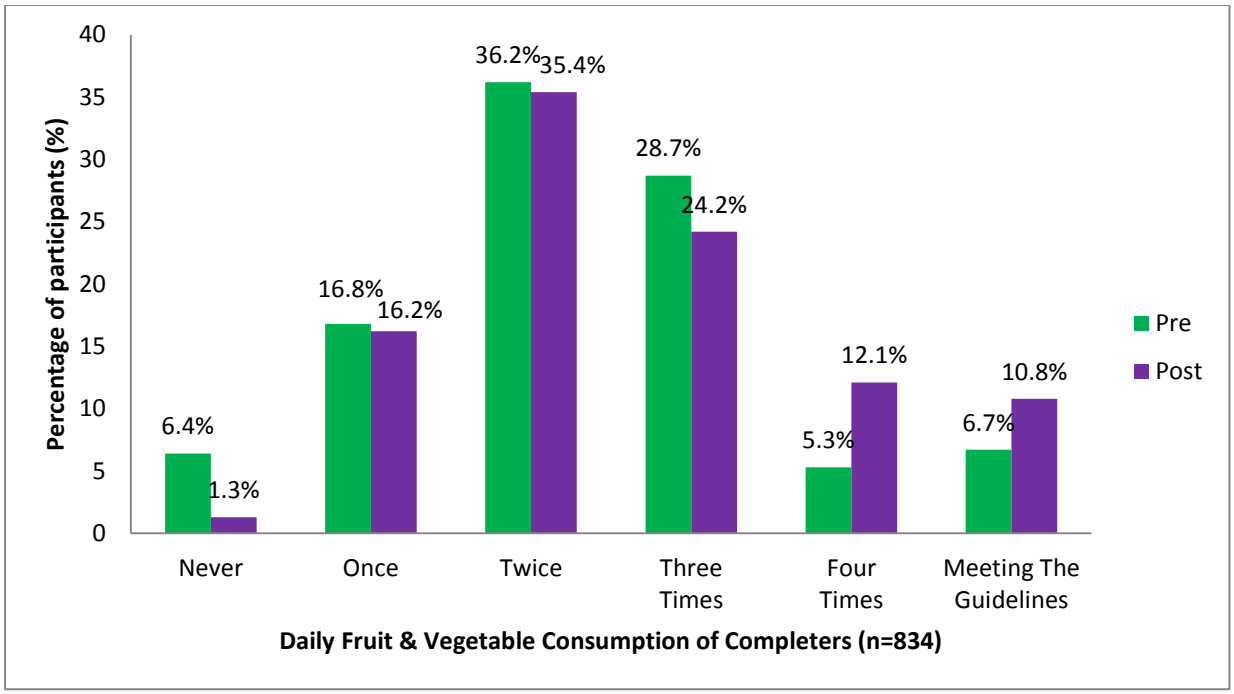
Figure 20: Changes in the Physical Activity Levels of Completers



4.1.3. Changes in Daily Consumption of Fruit and Vegetables of Completers

Data on the daily consumption of fruit and vegetables was provided by n=834 completers (**Figure 21**). There was a substantial improvement in the daily consumption of fruit and vegetables from pre to post-intervention (Z= -8.17, *p*<.001), 5.1% (n=40/778) of completers who had a poor diet pre-intervention were meeting the recommended guidelines post-intervention. Additionally, there was a 5.1% decrease in those who consumed no fruit and vegetables daily post-intervention (n=43/834), and completers who increased their daily consumption (34.8% n=271/778) greatly outnumbered those who showed a reduction (13.4% n=105/781) over the same period. Interestingly, having an unhealthy weight category considerably decreased the likelihood of presenting an unhealthy diet post-intervention (β=0.38, *p*<.001). Further, being physically inactive was predictive of a three-fold increased risk of not meeting the diet recommendations at post-intervention (β=3.01, *p*<.001).

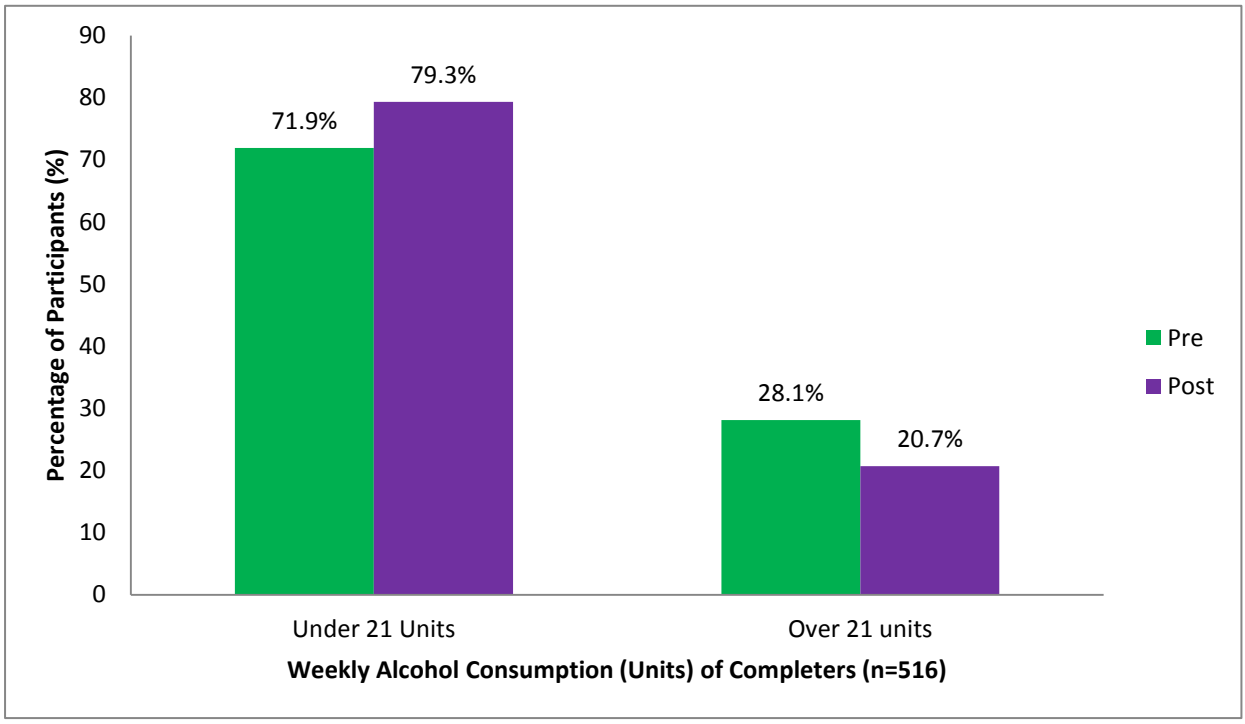
Figure 21: Changes in Daily Consumption of Fruit and Vegetables of Completers



4.1.4. Changes in Weekly Alcohol Consumption (Units) of Completers

Data on the weekly consumption of alcohol units was provided by n=516 completers. **Figure 22** shows those completers who met the guidelines and those who exceeded them. Around 17% (n=90/516) of completers reported that they never drank alcohol post-intervention. There was a statistically significant reduction in the weekly units of alcohol consumed from pre to post-intervention (15.39±15.15 - 13.07±12.84, p<.001), and in completers drinking excessively (Z= -5.37, *p*<.001). Further, a statistically significant number of completers, 30.3% (n=44/145), reduced their alcohol intake to meet the recommended guidelines at post-intervention, and only 1.6% (n=6/371) increased their intake to exceed them. Presenting an unhealthy diet was predictive of a fivefold increased likelihood of exceeding the recommended alcohol guidelines post-intervention (β=4.80, *p*<.001). Further, completers from a white British background were at a seven-fold increased likelihood of exceeding the alcohol recommendations (β=7.62, *p*<.001).

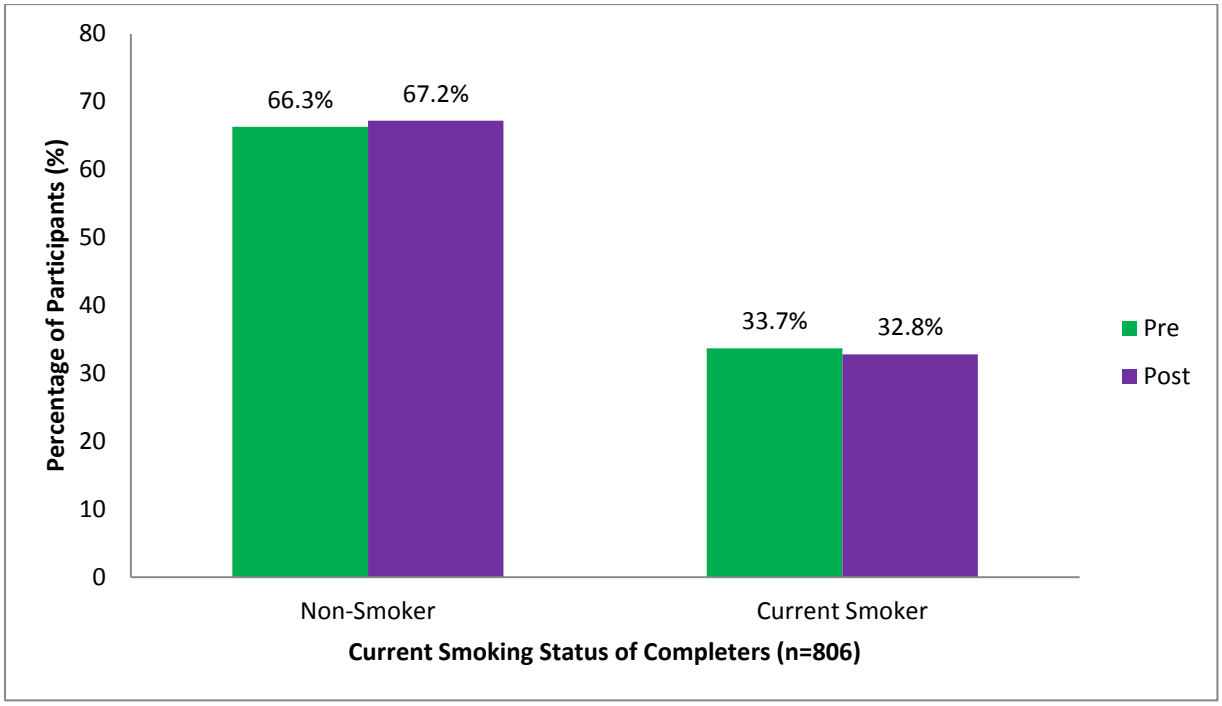
Figure 22: Changes in Weekly Alcohol Consumption (Units) of Completers



4.1.5. Changes in the Current Smoking Status of Completers

Data on smoking was provided by n=806 completers (**Figure 23**). Around 16.9% (n=46/272) of completers reported that they had stopped smoking over the course of the intervention compared to 7.1% (n=38/534) who reported that they had started smoking over the same period. There were no statistically significant differences in the smoking status of completers from pre to post-intervention. However, having a poor diet was predictive of a fourfold increased likelihood of smoking post-intervention (β=3.70, *p*<.001), whilst being aged 18-34 years was predictive of a 41% increased likelihood for smoking post-intervention (β=1.41, *p*<.05).

Figure 23: Changes in the Current Smoking Status of Completers



4.1.6. Changes in LRF Combinations of Completers

Data on the combinations of LRFs were provided by n=481 completers. LRFs were present if the completer did not undertake 150+ minutes of moderate PA per week, consumed <5 portions of fruit and vegetables per day, drank ≥21 units of alcohol per week or currently smoked. **Table 3** highlights the prevalence of the 16 possible combinations of LRFs. The benefits of having no LRFs can add up to 14 years to life expectancy, further, decreasing LRFs in young-adulthood can lead to lower CVD risk profiles when assessed 20 years later.

Table 3: Changes in LRF Combinations for Completers

Number of LRFs	**Identified LRFs**				**Occurrence**	
	Poor Diet	Physically Inactive	Current Smoker	Excessive Alcohol	**Pre % (n)**	**Post % (n)**
4	✓	✓	✓	✓	6.44 (31)	4.78 (23)
3	✓	✓	✓	X	16.63 (80)	14.35 (69)
	✓	✓	X	✓	18.09 (87)	12.06 (58)
	✓	X	✓	✓	0.62 (3)	0.21 (1)
	X	✓	✓	✓	0.21 (1)	0.00 (0)
					35.55 (171)	26.61 (128)
2	✓	✓	X	X	43.24 (208)	45.74 (220)
	✓	X	✓	X	0.83 (4)	1.66 (8)
	✓	X	X	✓	1.25 (6)	1.87 (9)
	X	✓	✓	X	0.62 (3)	0.83 (4)
	X	✓	X	✓	0.83 (4)	0.42 (2)
	X	X	✓	✓	0.21 (1)	0.00 (0)
					46.99 (226)	50.52 (243)
1	✓	X	X	X	3.53 (17)	4.99 (24)
	X	✓	X	X	5.20 (25)	5.61 (27)
	X	X	✓	X	0.21 (1)	0.83 (4)
	X	X	X	✓	0.00 (0)	0.42 (2)
					8.94 (43)	11.85 (57)
0	X	X	X	X	2.08 (10)	6.24 (30)

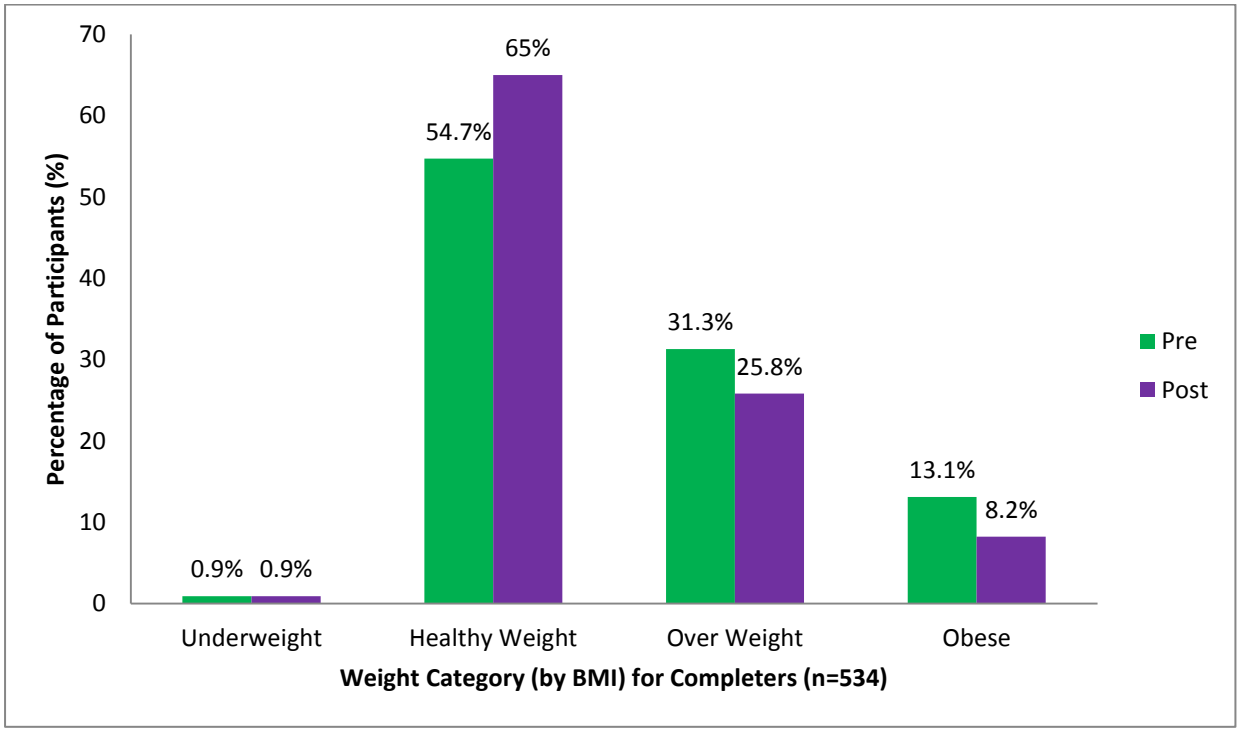
Note: ✓ = LRF present, x = LRF absent, Pre= LRF combinations pre-intervention, Post= LRF combinations post-intervention.

Of the completers providing data for analysis, **Table 3** shows that the most commonly occurring combination at pre and post-intervention was a poor diet with physical inactivity. Around 75% (n=362/481) of completers maintained their current behaviours and showed no change in the number of LRFs they presented from pre to post-intervention. However, they may still have undergone some change but not enough to meet the guidelines. Yet, over 16% (n=78/481) of completers reduced the number of LRFs they presented by one; over 4% (n=22/481) by two; under 1% (n=2/481) by three and under 1% (n=1/481) went from presenting all four LRFs to zero. Conversely, some increased the number of LRFs they presented over the course of the intervention; over 2% (n=13/481) increased by one, whilst under 1% (n=3/481) did by two. There was a statistically significant reduction in the number of LRFs reported by completers post-intervention ($Z= -7.49$, $p<.001$). Additionally, nearly 42% (n=202/481) of completers presented with combinations of three or four LRFs pre-intervention compared with just over 31% (n=151/481) at post-intervention - this was also a statistically significant reduction ($Z= -6.16$, $p<.001$). At post-intervention, white British completers were at a statistically significantly greater risk of reporting 3-4 LRFs compared to those from a BME background ($\chi^2= 4.66$, $p<.005$) (OR= 1.67, 95% CI: 1.05-2.67). Further, unemployed completers were at an elevated risk of reporting 3-4 LRFs compared to men in employment ($\chi^2= 4.62$, $p<.005$) (OR= 0.64, 95% CI: 0.43-0.96).

4.1.7. Changes in Weight Category for Completers

Data on weight category was provided by n=534 completers (**Figure 24**). There were statistically significant reductions in BMI from pre to post-intervention (25.48±5.04–24.33±4.12, *p*<.001), and statistically significant reductions in weight category from pre to post-intervention (Z= -7.53, *p*<.001). More than 35% (n=86/242) of completers moved to a healthier weight category and over 25% (n=62/242) of completers moved from a risky weight category pre-intervention to a healthy weight category post-intervention. Only 2.2% (n=10/459) of completers displayed a change in weight category that increased their health risk. Interestingly, having a poor diet was predictive of a reduced likelihood for an unhealthy weight category at post intervention (β=0.45, *p*<.005).

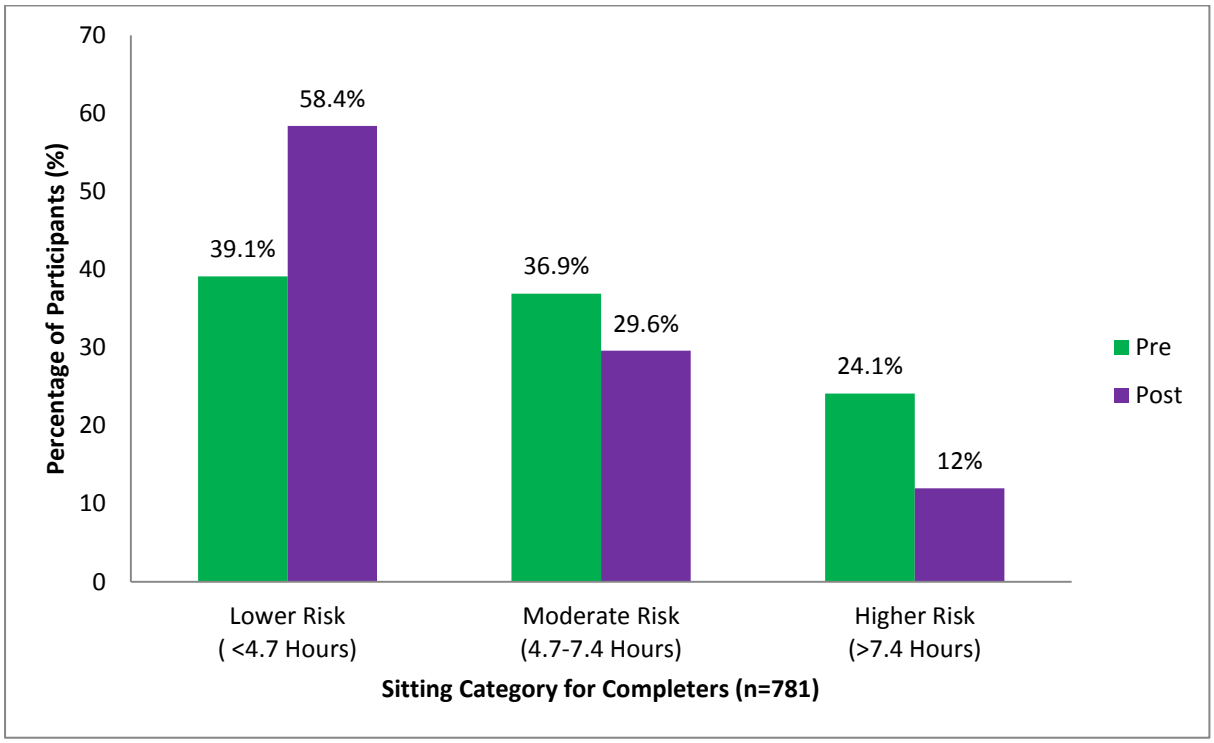
Figure 24: Changes in Weight Category for Completers



4.1.8. Changes in Sitting Category for Completers

Data on daily sitting time was provided by n=781 completers (**Figure 25**). There was a statistically significant reduction in mean sitting time from pre to post-intervention (5.62±2.54 - 4.51±2.25, *p*<.001), and statistically significant reductions in sitting category were witnessed from pre to post-intervention (Z= -11.58, *p*<.001). Over 34% (n=166/476) of completers moved into the lower risk category from a previously moderate/higher risk stratification. More than 43.7% (n=208/476) of completers showed a beneficial reduction in their sitting risk category compared to 3.7% (n=22/593) who increased their sitting category. Further, being in employment (β=0.43, p<.001) and coming from a BME background (β=0.64, p<.05) were statistically significant predictors of being at a lower risk due to time spent sitting daily. Additionally, men aged ≥35 years displayed an elevated likelihood of being at risk due to daily sitting time post-intervention (β=1.54, *p*<.005).

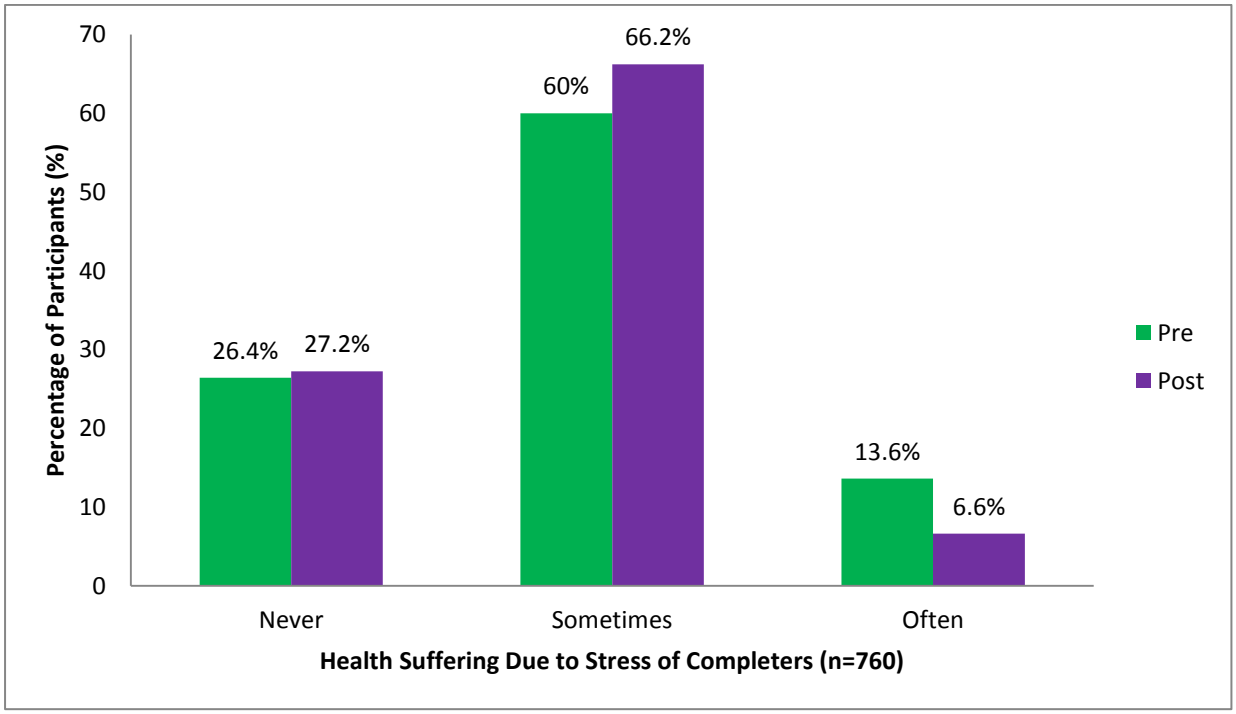
Figure 25: Changes in Sitting Category for Completers



4.1.9. Changes in Stress Related Health of Completers

Data on perceived stress was provided by n=760 completers. **Figure 26** shows changes in perceived health deterioration due to pressure and/or stress in the last month. Over 18% (n=104/559) of completers showed a reduction in health related stress with just under 9% (n=49/559) moving to a level where they felt that their health had not suffered as a result. Overall there were statistically significant reductions in the health related stress of completers from pre to post-intervention (Z= -4.40, *p*<.001).

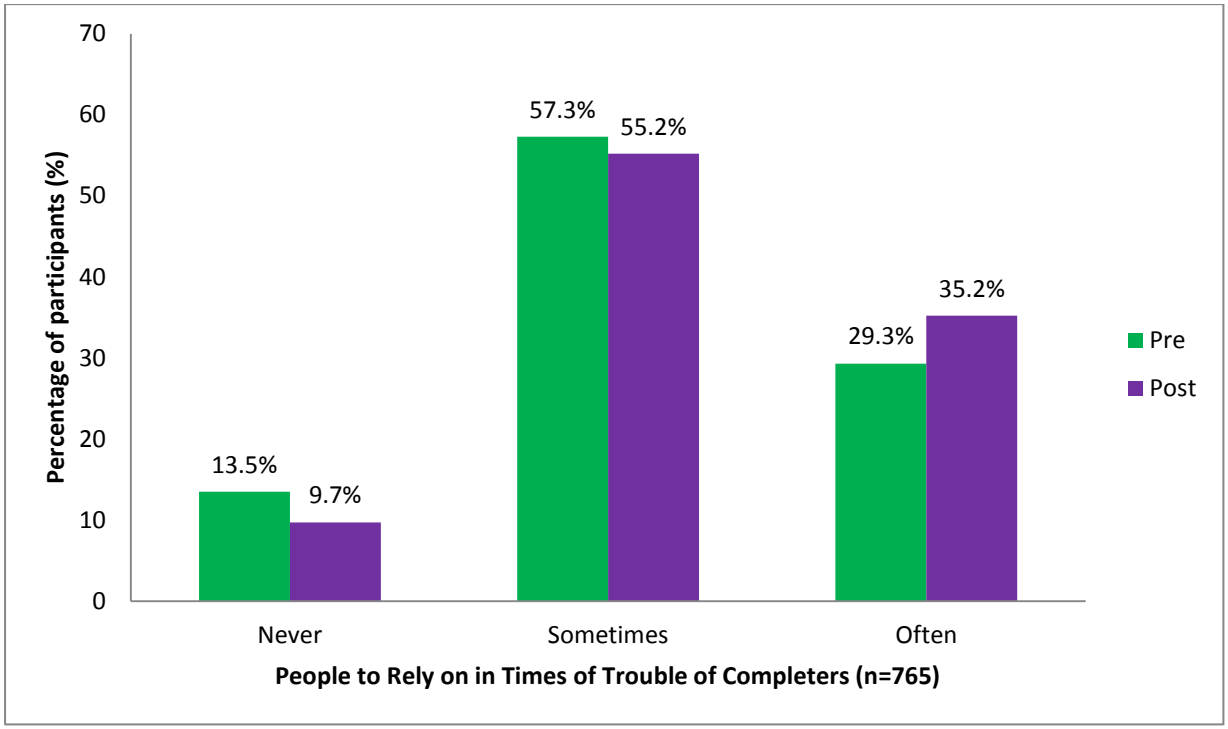
Figure 26: Changes in Stress Related Health of Completers



4.1.10. Changes in Social Support Networks of Completers

Data on social support networks was provided by n=765 completers (**Figure 27**). Over 15% of completers (n=101/662) showed a positive change in social support with nearly 7% (n=45/662) moving to a level where they felt that they had forged social support networks they could rely on in times of trouble. Conversely, around 6% (n=33/541) of completers felt that their social support networks had diminished over the duration of the programme. Overall, there was a statistically significant improvement in the social support networks of completers engaging PLH (Z= -5.76, *p*<.001).

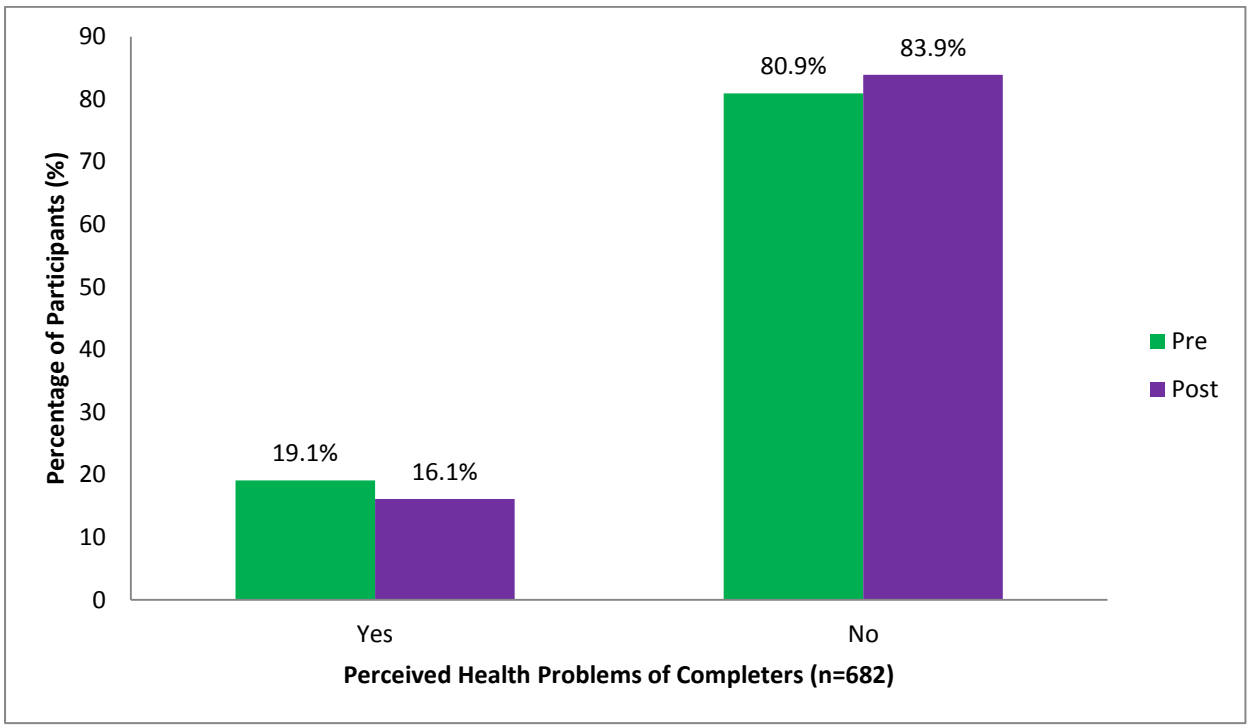
Figure 27: Changes in Social Support Networks of Completers



4.1.11. Changes in Perceived Health Problems of Completers

Data on perceived health problems was provided by n=682 completers (**Figure 28**). Nearly 30% of completers (n=39/130) changed from thinking that they had a health problem to thinking that they did not, and around 3% (n=19/552) moved in the opposite direction. Overall, there was a statistically significant reduction in the number of completers who considered themselves to have a health problem between pre and post-intervention (Z= -2.63, p<0.05). Interestingly, even though there was not a statistically significant difference in perceived health problems for completers reporting 0-2 LRFs against those reporting 3-4 post-intervention, there was when adjusting for age, suggesting that younger men (18-34 years) are considerably more likely not to consider themselves to have a health problem (χ^2= 26.36, p<.001) even when this may not be the case.

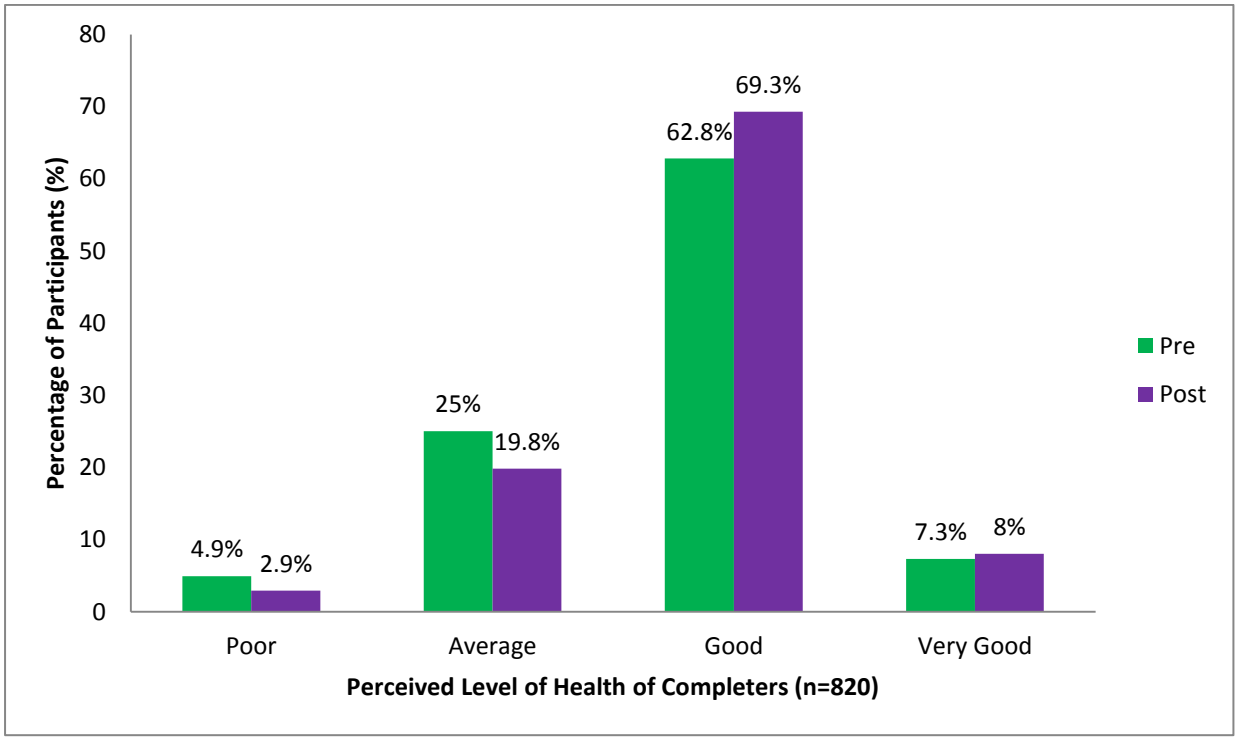
Figure 28: Changes in Perceived Health Problems of Completers



4.1.12. Changes in the Self-Health Rating of Completers

Data on health self-perception was provided by n=820 completers (**Figure 29**). Around 30% (n=245/820) of completers classed their own health as poor/average pre-intervention, compared to less than 23% post-intervention (n=186/820). More than 18% (n=143/760) felt their health had improved post-intervention compared to less than 9% of participants (n=76/780) who felt their health deteriorated over the same period. Overall there was a statistically significant reduction in completers reporting poorer health from pre to post-intervention (Z= -4.74, *p*<.001).

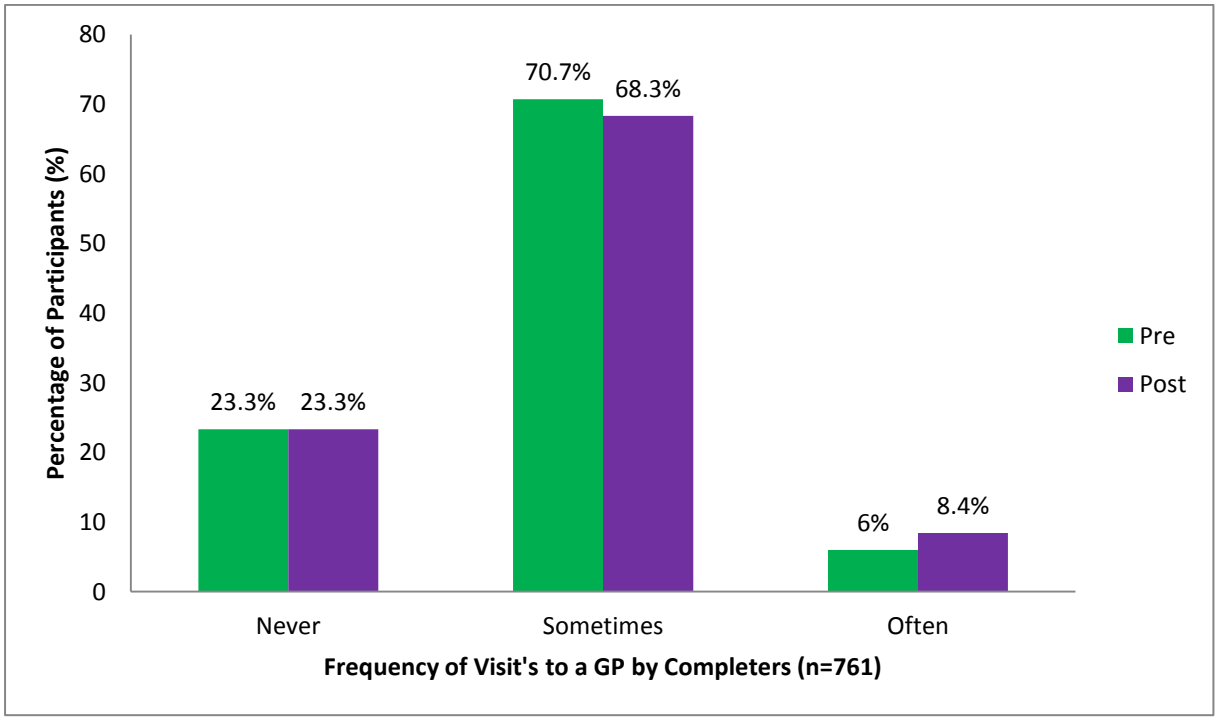
Figure 29: Changes in the Self-Health Rating of Completers



4.1.13. Changes in Visits to a General Practitioner by Completers

Data on the frequency of visits to a GP were provided by n=761 completers (**Figure 30**). Over 10% (n=73/715) of completers showed a positive change in their usage of GPs, nearly 4% (n=30/761) moved to a level where they visited a GPs surgery on a regular basis post-intervention. Conversely, around 10% (n=57/584) indicated that visits to a GP had decreased over the duration of the programme. Overall there were no statistically significant changes in the frequency of visits to a GP by completers from pre to post-intervention.

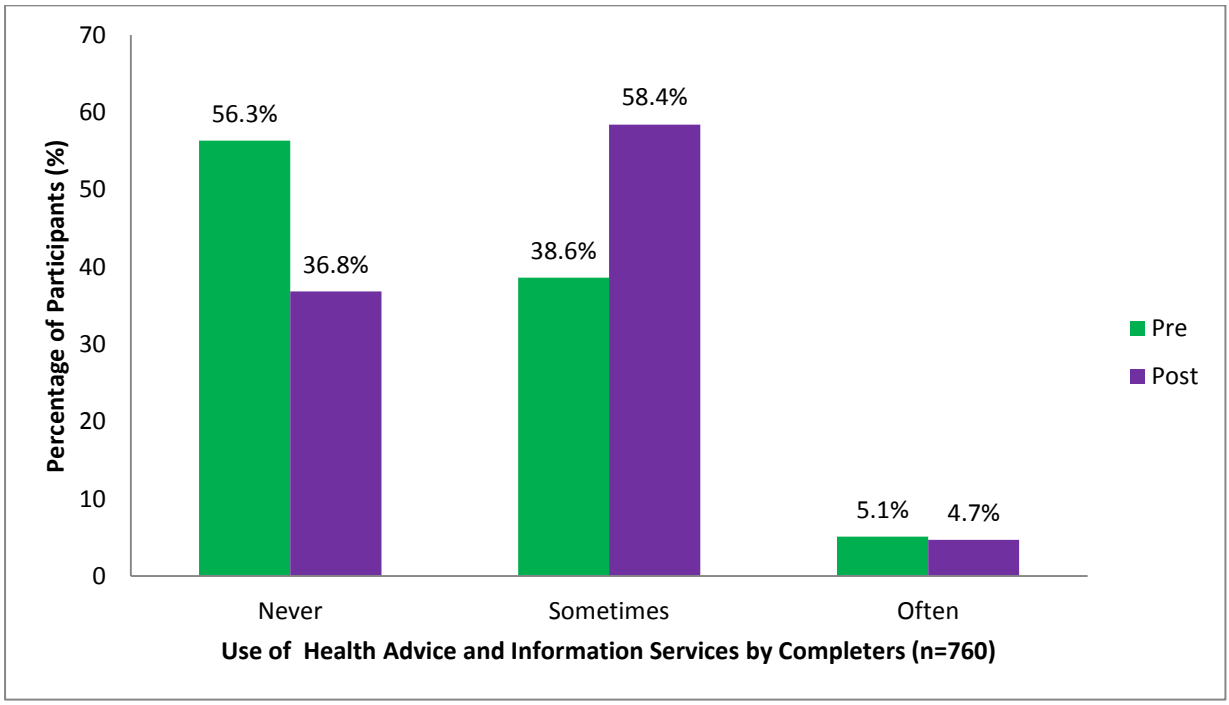
Figure 30: Changes in Visits to a General Practitioner by Completers



4.1.14. Changes in the Use of Health Advice and Information Services by Completers

Data on usage of health advice and information services was provided by n=760 completers (**Figure 31**). Over 24% (n=180/721) of completers showed a positive change in their usage, around 2% (n=17/721) moved to a level where they used health advice and information services on a regular basis post-intervention. Conversely, around 13% (n=43/332) indicated that their usage had decreased over the duration of the programme. There was a statistically significant reduction in completers never using health advice and information services from pre to post-intervention (Z= -8.92, p<.001).

Figure 31: Changes in Use of Health Advice and Information Services by completers



5. Implementation: Key Design Characteristics

In this section, results are presented for how interventions were implemented and the impact this had on reach, adoption, maintenance and the overall effectiveness of PLH (See RE-AIM framework, section 2). Following the implementation of the instrumentation reported in section 2, a total of n=58 male participants and n=18 PLH staff were interviewed from 16 clubs. Participant data from two of the 16 original clubs was not included due to on-going discussions with local partners around the evaluation protocol and one project having ended prior to the completion of data collection.

Semi-structured interviews were performed with male participants and PLH staff leading the interventions. Researchers adopted existing methodologies used in the evaluation of multi-site community health programmes (See section 2).

Both participant and PLH staff data sets were broken down into four further areas across the behavioural change continuum. These were for factors that facilitated (i) reach, (ii) adoption, (iii) change and (iv), maintenance of behaviour. In the analysis that follows a selection of quotes have been included from both male participants (text in red) and PLH staff (text in green)

When reporting results, a selection of brief case studies and quotes from participants and project leaders have been provided. These help to outline examples of key design characteristics that were implemented in the delivery, and participant experiences of PLH interventions.

5.1. Participant and PLH Staff Experiences of PLH

The following section highlights the four key areas of behavioural change and the key themes within each area relating to PLH. **Table 4** highlights the active design characteristics in each section for both participants and project staff.

Table 4: Key Design Characteristics of PLH

Stages of the Behavioural Continuum			
Reaching Men	**Adopting Interventions**	**Changing Behaviour**	**Maintenance**
Word of Mouth & Peer Approval	The Club, the Badge, the Brand	Filling in Gaps	Routine (Social Liberation)
Outreach Approaches	Non-Clinical Approach	Improved Self-Efficacy	Feel Comfortable Within the Group
Referrals	The Right Environment	Goal Setting	Self-evaluation
Internet & Social Media	To Improve Health, Fitness & Appearance	Social Support	Consciousness Raising
Posters & Fliers	The Staff	Health Awareness	A Tailored Approach
Match Day Events	Cost	Control Emotions	Developing Coping Strategies
	Self-Esteem	Flexible Participation	Fun and Enjoyable
	A Range of Activities and Sports	Opportunity & Forum to Discuss Health Matters	
	The Right Venue	Continuous Sessions	
	Partnership Working & Strategic Approach		

Note: Black text = Reported by both parties, Green text & Underlined = Reported by PLH Staff only

5.1.1. How Reach Was Developed

Word of Mouth and Peer Approval

Most men and PLH staff reported word of mouth from friends and family members as one of the primary sources of reach for the programme. Men often sought programme approval from their peers before they were willing to engage which could indicate some men have a fear of the unknown when it comes to accessing resources (Sinclair, 2012).

> *I think my friend emailed me or rang me and told me that they are doing a project, would I be interested? And I asked him about it and I said "yeah, why not, we'll go and have a look around and see what it is." (Alan, 47)*

I think a lot of guys are apprehensive about going to a project that they know nothing about. Getting somebody down to the first session is always most difficult because guys are unsure about what it is. Whereas with word of mouth, if they hear it from a friend, it's the whole trust thing, they trust their friend and obviously if they know their friend is at a session they may find it easier to go along with somebody rather than go down on your own. (PLH Staff)

Outreach Approaches

Reaching non-attending groups in activities through outreach work is becoming increasingly popular; face-to-face engagement is particularly effective for more "hard-to-contact" groups (Sinclair, 2012). Many men reported that outreach work helped raise awareness, overcome determinants to participation and helped build relationships that would enable adoption. Project staff actively sought referrals from local groups, centres and service providers where men typically congregate. In this research, men reported that they were receptive to messages or referrals from other groups they may attend. **Case Study 7** illustrates to good effect the use of outreach approaches when facilitating reach.

I saw the advert in a magazine but I was a bit sort of hesitant to get in touch. It's just maybe a confidence thing and with me being sort of put on the spot on the day: 'here's a leaflet, half an hour, get over there we'll run you ragged', I couldn't really say no. And I'm glad I did it really because it's been really rewarding. (Barry, 33)

We started to attend mosques and take information there, did stands with other partners to raise the awareness and get people down to sessions. We have linked into the more excluded members of the community and found out why they don't come to activities such as this. (PLH Staff)

Case Study 7: Liverpool FC: Action for Health

Action for Health aims to reach men aged 18-35 living in areas of high deprivation in North Liverpool. A programme of lifestyle and activity classes aims to reduce coronary heart disease, diabetes, some cancers and increase life expectancy.

- Sessions are held at community venues, including the Breckfield Centre in North Liverpool, delivered by a NHS Health Trainer seconded to Liverpool FC. One manager reported the influence that the football club have when taking activities into the parts of the community.

"We have a NHS Health Trainer given to the football club. The fact that they are sitting there in a [Liverpool FC] *tracksuit really does attract the guys over to him. They manage to get guys to agree their health plans that the rest of the Health Trainer team would not be able to do. There are not many agencies that can walk into North Liverpool and say 'I want a group of 18 year old lads', we got 20 of them and kept them for the full course."*

Outreach approaches often used the power of the club, the badge and the brand as a tool to reach and engage men. This will be discussed in more detail in the adoption stage.

Referrals

Using referrals has helped to reach participants in previous health promotion interventions using football as a setting (Pringle, 2006). The clubs are seen as active agents of lifestyle intervention delivery in the community and the NHS actively refer participants to the programme. Men appeared keen to listen to these health messages once they are aware of a health issue they might have. Evidence on the use of referrals is further reported in **Case study 8**.

Case Study 8: Chelsea FC: Westminster Men's Health Project

The intervention at Chelsea aims to reach males aged 18+ from the South Westminster area that are unemployed and engage in multiple unhealthy lifestyle behaviours.

- The project works in conjunction with the primary care trust to gain referrals on to the intervention.
- The Primary Care Trust in South Westminster allows Chelsea to advertise their Men's Health Programme in GP surgeries via the Life Channel. The advert runs on a continuous loop via plasma screens in GP waiting rooms and is interspersed with key health messages.
- In addition to this, staff at the primary care trust seek out and refer suitable participants to Chelsea FC's project.

I went for the NHS health check and they found out I was a 31% risk of having a heart attack or stroke, they offered me this chance to come here and I didn't take long to think about it, I just said 'yes'. I thought I was normal, but apparently I'm not. I mean it was a big shock when they told me. *(Colin, 54)*

We have had a few referrals over the years through GPs, we've worked really closely previously with the PCT, but the health organisations that actually went out and delivered and commissioned, they pushed the project through there, so we got referrals from GPs and from other health programmes. *(PLH Staff)*

Utilising referrals often incorporated elements of partnership working. This will be discussed in more detail in the adoption stage.

Internet & Social Media

Growing evidence shows the utility of web-based approaches for influencing health behaviours (Webb, 2010). However, project staff reported mixed views on the use of the internet and social media as a tool to reach men. PLH staff reported that some men had limited access to the internet, and were unsure as to the health seeking behaviours of those that did. Yet some reported successful reach through social media advertisements due to their wide reach and low cost.

> *We're trying to gauge where our target audience is and how they access health information. I think the people who we've got down at the sessions are people who probably won't have access to internet.* (PLH Staff)

> *A lot of our participants go on our Facebook page, and hopefully friends will see it and then ask the guys about the project. I think it's a good method. In the past month or so we've had five guys come down who actually saw it on Facebook through a friend. It's free as well. That's the beauty of it.* (PLH Staff)

Posters & Fliers

The use of posters and fliers to reach men has been shown to be effective elsewhere (Pringle, 2006). Project Staff generally reported that while posters and fliers were a good means of raising awareness, they were not as effective at reaching men and facilitating adoption of the interventions. Many reported the difficulty of conveying the principles of PLH in a poster or flier, and that other forms of advertising were more effective at reaching and facilitating adoption.

> *The people that we are targeting have different issues. They're unemployed; have mental health issues; on probation; and a lot of other things going on in their lives. I think sometimes it's a lack of confidence, a low self-esteem that can stop you doing something new in life. A poster doesn't really capture what the programme is about in essence.* (PLH Staff)

> *The initial engagement strategy we used was leafleting which didn't work at all… We did that at match day events and local cafes and restaurants and local shops, but when we got the feedback, not that many people had actually heard about the project through leaflets. The initial participants came from a newspaper article.* (PLH Staff)

Match Day Events

Match day events were undertaken at most of the clubs involved in PLH and there were mixed views on their effectiveness. Many reported that men were difficult to reach on a match day even though they were in effect a captive audience, that they were more interested in the football and less so in health awareness campaigns. Further, at many clubs the demographic of match day fans did not correlate to that of the men they were trying to reach.

> *If we were to start the programme again now, knowing what I know, I wouldn't be going to the matches trying to catch people and tell them about the programme there because it just went down like a lead balloon. (PLH Staff)*

> *It's so hard with a football club like ours, there's that much around on a match day you've got people coming from all over Britain and the world to watch, so capturing the people that were trying to target is difficult, there's only a small percentage at the match. (PLH Staff)*

Others were more positive about the impact of match day events highlighting their ability to reach a large number of men. However, they still reported a relatively small adoption rate from those reached on match days.

> *Definitely the match day, with the amount of people who come to the match, it is a good way to get the message out there. We use fan zone, we've got a big suite under one of the stands so it's a nice place where people can go before a game. It's a nice space to get a captive audience. (PLH Staff)*

> *We have done match day road shows, related it to health and tried to promote the different activities that we deliver. That's been the main way we initially gauge interest. The match day programme and events have been great to raise the awareness of health, but we have not had the amount of people we would have expected turning up to the sessions from it, but it has been a good vehicle to show people the work that we are doing. (PLH Staff)*

5.1.2. How Adoption Was Developed

The Football Club, the Brand, the Badge

The power of football clubs to reach men in the early stages of an intervention has been shown to be effective in similar interventions (Pringle, 2006). Research has shown that football clubs, their badge and the brand offer influential routes through which to connect male supporters (Brady et al., 2010), typically regarded as hard to reach (Gray et al., 2011) and with enduring health problems, into health

improvement programmes (Linnell, 2012). Most men and PLH staff reported the club itself, the brand or the power of the badge as one of the main reasons for adoption of the intervention. Given the interest that many men have in football and specific football clubs in particular, the potential that clubs had to connect with participants was seen by health trainers as an important design factor. **Case Studies 9 and 10** highlight this key design factor to good effect.

Well, for a good few weeks, my mate was telling me that he was coming to some football thing and it's quite enjoyable and you learn stuff, and it gets your fitness going, you get better at football, helps you lose weight, helps you cut down on smoking, even helps you stop smoking if you wanted to. So for weeks and weeks I was like, I don't know. Then he said its run by Manchester United coaches. I'm a United fan myself, I love United, and I thought why not. *(Dave, 21)*

It's like the pied piper, you show us the football club and we're there. *(Eddy, 41)*

I absolutely love the club. I mean not any day goes by where I do not wear the colours; this is how passionate they are to me. I mean you mention them to me I would fly, no matter where I am, I mean I live and breathe it, and if somebody mentioned Monday 10 o'clock, Friday half past six, I'd be there like that, I mean I put my shirt on, I've got it all, the badge, the scarf, you name it I've got it. With the team you follow if it's in your blood, it's in your blood. *(Frank, 43)*

The badge can be a massive plus because it's an attachment to a very successful club, seen throughout the world by a lot of people. There is this attachment, going to a training session coached by professional coaches; it has a lot of kudos. *(PLH Staff)*

Case Study 9: Manchester City: City in the Community

Manchester City's PLH intervention aims to reach sedentary males aged 18 years or older, who are at risk of numerous disease states due to health inequalities and deprivation in areas of Manchester.

- A programme of activities is held in several community venues across the week, both during the day and in an evening. This includes activity sessions and healthy lifestyle advice and support to men.
- One health trainer outlined the reach of the club when encouraging men to participate in PLH activities.

"People recognise the badge, and everywhere you attend, they go "this is great". Being part of the club always helps; it gives it a bit of extra pizzazz. On the launch day, we had a player turn up and it created a real buzz, a lot of those people have carried on coming along since that day."

Case Study 10: Portsmouth FC: Men's Health

Premier League Health at Portsmouth FC aims to improve the health and lifestyles of men aged 18 and over from across the region.

- The project comprises weekly weight management and smoking cessation groups that incorporate physical activity, health awareness sessions whilst developing coping strategies.
- The project reaches out to men through various different methods including radio advertisements. The project utilises the power of the club and ex-players to generate interest. A health trainer reported:

"Alan Knight the ex-Pompey goalie has quit smoking with us. He is my health ambassador now, it's well documented about his lifestyle; he's a recovering alcoholic and a smoker, so I approached him as a Pompey legend and we have done interviews with Talk Sport and Men's Health Forum."

However, for some men and PLH staff, the club was not an influential factor in facilitating adoption, and that relying on the club badge was not enough. Some men that reported no connection to the club welcomed the opportunity to engage in a local, convenient and gender-specific intervention delivered in a professional sporting environment. Yet, for other men, the potential reach of the club and its iconic standing within the community helped to facilitate adoption.

For me it doesn't really make much difference. When it was advertised in the local paper, it didn't actually say it had anything to do with the football club. It just said it was something for local men and so that's what drew me to it. When I found out it was going to be here, it didn't really bother me. *(Garry, 27)*

I don't follow football actually, but It's relevant because I'm part of this city through and through and it's nice to be here. So I'm quite chuffed it's at the ground even though I'm not a football fan. *(Colin, 54)*

I think the club relied on the badge. They thought people would come flocking but they didn't. We only had a couple that were coming on a regular basis. *(PLH Staff)*

The club has a big draw, because it's a big club whether they're fans or not. Everyone's a local resident and everyone is aware of us, so even if they're not a fan it still has a novelty factor of coming to the club. *(PLH Staff)*

Non Clinical Approach

Little is known about how men, as gendered individuals, are experiencing help seeking (Wenger, 2011). It is thought that individuals will more readily accept and

seek out information that they already believe to be true especially when it is conveyed by individuals that they can relate to (Kahan, 2007). A non-clinical approach to this intervention, and the delivery of key health messages was seen as important by many men (Gray, 2011). Participants reported that they could empathise more readily with lay individuals who were disseminating health messages as they had similar backgrounds with practical experience of living with, and overcoming comparable concerns.

> *I've used drugs since I was 12, you know. So this is a real kick, a big thing for me. I think I came to a point in my life where it was either time to get off or time to die. I wanted to live and I think the fact that I see the staff here and other people in that group, they're ordinary people not professionals giving me advice, do you know what I mean? These people are just like me and I think that goes a long way in my mind and helped me kind of accept what they were saying.* (Harry, 46)

> *I don't think anybody is pushing anything at you in terms of preaching or whatever but there is help there, there's support if you want it. You know they don't wanna hear from a doctor. No point in coming in and standing in a nice grey suit and preaching. I need to work with somebody who's been there and done it. They wanna talk to people who've been through the same thing, they don't want to talk to somebody who's very clever. They might appreciate some of that, but actually these guys in here are more likely to listen to each other than they are to a doctor.* (Harry, 46)

> *They're more likely to speak to me about health issues than NHS staff. I'm the one who is predominantly here with them each week. We did a questionnaire about GP visits recently and everyone mentioned that they went more based on coming to these sessions and being given more information about health. Here they don't feel like there sat in a GP waiting room, with everyone, predominantly women, staring at them wondering what's wrong.* (PLH Staff)

The Right Environment (Hegemonic Masculinity)

It is not enough to promote behaviour change, environmental changes are needed which promote and facilitate individual change efforts (Jackson, 1997). When men do seek help they tend to do so in an environment which allows them to maintain their masculinity (Farrimond, 2011). Sporting settings and elements of competitive behaviour appeared to conform to hegemonic masculinity for many men on the programme, this helped justify the adoption of PLH for many men and was capitalised on by many of the staff.

Football creates that atmosphere doesn't it? It's a talking sport. You've got to communicate well to know people's names. It's just a good way of getting to know people. (Ian, 24)

If you say we're now going to have a session on healthy eating, no one would stay. So I did a quiz and it got so competitive. So if the quiz on healthy eating is competitive can you imagine how it is with basketball or whatever? (PLH Staff)

The gym environment in particular was associated with feminine traits for many men who had previously attempted to engage in physical activity; this environment did not conform to their prior views of what should constitute an exercise environment and was therefore rejected by many as a setting (Kahan, 2007).

Well I joined a gym, I did, but they were prim donna's really. More interested in what they looked like rather than what they did. This is more down to earth. (James, 40)

I wanted to come because it was a fitness programme for people of a certain age, if you like, rather than go to a gym where you have sort of muscleman characters and all sort of things getting in the way. (Kenny, 37)

It's not something you can go to a gym and get. At the gym, I spoke to the coach of what I wanted and he put it all on a computer, and the work out was excessive, you know what I mean? And I thought, you know what I don't need that. (Liam, 33)

Many men emphasised how the right environment would allow them to develop social support networks and make new friends, this is discussed in more detail in the next phase of the behaviour change continuum.

To Improve Health, Fitness and Appearance

Help seeking is initiated by recognising a need, the presence of ill-health alone is not sufficient for seeking help, an individual will only seek out opportunities to improve their health for example when a situation is deemed problematic and intervention is required (Wenger, 2011). For most men, this programme facilitated a heightened awareness of the negative consequences associated with their current lifestyles, which can stimulate critical judgements about problem behaviours (Jackson, 1997). Men engaging in this intervention reported that improving health was a primary objective of adoption. Further, it also allowed participants to understand that they were in control of their own health and could make lifestyle changes that would help improve their longer term health outlook.

My granddad had a heart attack and it could be in the family. They're saying I might have it. But if I lose weight I might give myself a chance to live a bit longer so I can get old. Because if I had of got it, my mum said if I left it one or two years, I wouldn't get the weight off. But I try not to think about it. You don't wanna think about dying, not at my age, I'm only 35. (Mick, 35)

I don't need to rely on any medication now. I used to have to go to the chemist every day to get methadone off him you know? I don't need to do that anymore. I think that a healthy diet has made me feel healthier physically and exercise has made me feel better physically which in turn makes me feel better mentally. I don't know if that makes any sense. (Harry, 46)

Many men and PLH staff reported that the chance to improving general fitness was a key factor in adopting the intervention. Previous lifestyles had taken their toll and this was seen an opportunity to regain their fitness.

It's the fitness thing. I wanted to get fit because I'd been feeling it the last few years and you sort of feel that you're going downhill a bit, and regular gym work didn't really work for me. It's a bit boring. I've always enjoyed football and I've been out the loop really for about ten years. I haven't really played so much, so this is the perfect fit to be honest. (Barry, 33)

I've played football since I was a kid, when I was 13 I had trials but I started smoking and didn't carry on so I've never played football for quite a long time. I was playing every week but then as a teenager I started experimenting so when this came up I jumped at the chance straight away, to get involved with other lads, play football again and get fit. (Neil, 25)

Almost every person has improved something, whether it be their weight and body fat percentage and blood pressure, or it might be their general outlook, how they feel, their heart health or how many glasses of water they drink or going to the GP. Whatever it is I feel we have had some sort of impact on everyone, some of our past participants whole lifestyles have changed. (PLH Staff)

Image and appearance were influential determinants of change; some men reported that they engaged with the programme to enhance their appearance which would in turn allow them to become more confident and help them form relationships. This positive self-image was seen as synonymous with engaging in sport.

When you go out and you see all these like guys with like proper fit birds you know what I mean, they're all fit. Girls don't fall for chubby kids, do they? So I thought I'd get myself fit and maybe I'd find a girl. And I did, and now I'm having a baby with her. This programme helps people on a lot of things. It really does. (Dave, 21)

I was always getting skitted about my weight and being fat. And once I was asked to go on it, that was my target, to lose weight. (Oliver, 29)

The Staff

Equipping practitioners with the necessary competencies and skills to support behaviour change is essential (NICE, 2007). The staff and their ability to interact with the participants on a personal and social level were seen as key factors in facilitating adoption of PLH.

> *I've had an operation and the staff here have nursed me through that and gave me a whole lot of support. Rather than sitting at home doing nothing, they've actually said "come along we'll take you to where you are allowed to be and slowly progress", otherwise I'd have probably tried doing too much so they've kept me included.* (Liam, 33)

> *I've got post-traumatic stress disorder so getting out is not something I'm good at. Coming here I was dead nervous at first but the staff made me feel dead welcome and relaxed, and I stuck it out. There was no judging me If I didn't feel too good and couldn't come.* (Eddy, 41)

> *I deliver most of the sessions and getting involved in them is more beneficial than just standing around looking like a coach, who can look a bit mean, judging people all the time. It allows participants to see us as one of them rather that the overseer of the project. We play a really important part; a friendly face will get people coming back more and more frequently.* (PLH Staff)

The staff also allowed for flexible participation which was seen as a key facilitator for adopting the intervention. This is discussed in more detail in the next phase of the behaviour change continuum.

Cost

A lot of the men engaging the intervention were unemployed, on a low income or had very little disposable income. As a result, many men reported that they could not afford to join gyms and that free alternatives such as PLH were ideal. Further, PLH staff utilised the pull of zero cost health and fitness sessions to facilitate adoption. **Case study 11** provides a further example of this.

> *The fact it's free is the main one really. I've got six kids, four that are my step kids, and then two are mine, so providing for them it's hard really.* (Paul, 26)

> *It helps doesn't it? You know what I mean? Not on that much being on the dole so it's better off being free.* (Ryan, 31)

> *It doesn't cost anything. It's free. That's when people start listening.* (PLH Staff)

> *There's not a lot health wise that's free in the borough, not a lot of opportunities to do anything, so the fact that it's free is a massive hook for them.* (PLH Staff)

It's a no-brainer, isn't it? You know it's a free service. Everything I say to them it's all free. Your quit smoking group, everything, your one-to-one behaviour change it's free. There's no charge, and where do you get everything for free? (PLH Staff)

Case Study 11: West Ham United: The Men's Health Programme

The men's health programme is a free physical activity and lifestyle programme aimed at sedentary male Newham residents.

- The project enables participants to access a range of excellent facilities including a purpose-built gym at Upton Park and a 3G Astroturf pitch at no cost.
- The programme utilises qualified Health Trainers to deliver free interventions to men in the community so that lifestyle advice can be taken on board and passed down to family members and friends to promote healthy households. A health trainer reported:

"They feel that if we're putting it on for free, there must be a reason. We must genuinely want to help them, as oppose to a gym membership where they take your start-up fee and your monthly charge and they don't really care too much about your health and fitness."

However, for some men, the favourable effects of the intervention meant that they would, in future, be willing to pay a small amount towards it to keep it going. This notion was backed up by PLH staff.

I like that it's free but I think that it's something I'd be willing to pay for. (Simon, 22)

I'd pay if I had to. But it does make it a bit easier to come because you think I don't have to find the money for it. Being free is a lot better. (Thomas, 25)

Participants suggested that they'd be happy to pay a small fee, whether it would be paying to attend a session, or paying monthly or annually to the project. (PLH Staff)

Self Esteem

Non-clinical depressive symptoms are common in many populations with men being typically less likely than women to contact health services due to mental health problems (White, 2011). PA has the potential to aid in the prevention and management of depressive symptoms (Teychenne, 2008). Help seeking can be rationalised as a voluntary, logical decision that is made by informed individuals (Wenger, 2011). PLH induced a positive mental outlook for many men who reported a lower self-esteem prior to the intervention, the chance to improve their mental health and wellbeing was seen as a key factor in adoption.

Recently there has been a big dip. You wanna get a job, but can't. There's nothing much out there. This helps in many ways, and it shapes things to make you think "well yes ok! You're doing your bit, you know you can't do any more than what you are doing." This is just another opportunity to bond, to meet other people who you don't necessarily meet, and most important is that this is just the way of letting off steam. If you say to yourself that you ain't a bad person, you've done all you can, you're doing it because you genuinely want to have a bit of confidence in yourself. (Frank, 43)

I attend another group that sort of helps you, you know, narcotics anonymous, but I have attended that group in the past, and that alone never really enabled me to manage to remain abstinent from, sort of chemicals really. I think this works in conjunction, just the factor of exercising and I'm much healthier. I think the factor of exercising, it seems to have done something that isn't tangible, that I can't put into words so it's made me feel much better in myself, I feel a wee bit of self-esteem. I don't really like using that term but you know I feel better about myself. (Harry, 46)

The programme gives you everything you need. You build your self-esteem up, and you interact with other groups who aren't quite as fortunate as you. I've come to terms with being an amputee having 3 heart attacks and a bypass. It's about helping people and this course does that. It gives you tools to deal with life. (Vinny, 48)

It's about feeling better in yourself, getting fitter, getting a different focus and seeing few fresh ideas. One of the things I always say to them when we've been to the training ground or played at opposing stadia, is that these are the kinds of things that can happen to you when you help yourself. (PLH Staff)

Range of Activities and Sports

Many health trainers and project leaders reported the necessity to "mix up" the sessions and offer the participant's a range of activities instead of offering football as standard due to participant preferences, ability and injury. Men further reported that the opportunity to do other activities allowed them to adopt the intervention with greater ease.

I do boxing and circuit training. I'd like to do football but I've got a cartilage tear in my knee so I can't because of the injury. I really like it. It's very organised, it gives you a chance to try and improve every session. (Wayne, 38)

It would be easy to centre our project on football and only football but it's not really what the community wanted and it also helped engage the harder to reach people. (PLH Staff)

Don't stick to football! That for me that would be number one. We're running as football clubs everybody thinks it's got to be football based. It hasn't, you know, far from it. That

shows how diverse you can be as a football club if you're willing to tackle and do something else. *(PLH Staff)*

Even though many PLH staff identified the need to offer a range of activities rather than just football to facilitate the adoption of PLH from a wide range of men, some still reported that football was the primary interest of many on the programme.

It is the five-a-side football, that's the biggest thing. We tried to introduce other sports, and some people are very good but that's what they want to do. They do play badminton and basketball but they are like "when we have done that, then can we play?" *(PLH Staff)*

This diversification of activities that were offered by PLH staff to participants further links into a tailored approach. This is discussed in more detail in the maintenance section.

The Right Venue

PLH staff reported using local and familiar venues to hold interventions. This helped increase the likelihood that participants would adopt activities. Venues included the use of club facilities such as football stadia and training venues, as well as local community centres and recreational facilities. Men adopting PLH also reported that the venue and its location were important factors.

Facilities are important. This one is fine and I like the environment we have got, it's just a good friendly non committed resource. *(Adam, 44)*

Before I used to play a lot of football and do a lot of keep fit things, but now I haven't got the time. So when I heard about it it's quite convenient for me, I only live round the corner so it's good. *(Ben, 28)*

People from the south Asian community seem to live in the more economically deprived areas, you can't expect them to travel 10 miles. We try to take the project to the community and alleviate as many barriers as possible. We go right to their doorstep, find the most inclusive facility available. *(PLH Staff)*

Some people who come down the project have transport issues. We thought if we had all our sessions at the same place, we'd be targeting the same people, whereas we target as much of the city as we possibly can. So by having sessions in different parts of the city, it allows everybody to get involved. *(PLH Staff)*

Partnership Working & Strategic Approach

Most PLH staff reported that PLH fit into a broader local strategy for health promotion/health improvement and part of a broader city wide/borough wide collaboration. It was thought that working as part of a strategic alliance increased the likelihood that programmes would be sustained. Alliances with a range of partners in the health, education and community settings provided opportunities to secure resources which helped to promote the adoption of health enhancing behaviours and opportunities. **Case Study 12** provides an example of the broader community partnerships which have been created through PLH.

We try to engage different partners in the local area to help with our delivery. The NHS have come in and done the health checks. It's little things like that which help people. *(PLH Staff)*

The badge is used as a hook and as a marketing tool and a tool to get our foot in the door of other funding partners and other partners. *(PLH Staff)*

Case Study 12: Tottenham Hotspur: Guys and Goals

The PLH intervention at Spurs aims to reach and encourage the adoption of men aged 18-50 from the Enfield & Haringey areas and who display multiple risk factors for disease conditions due to sedentary and unhealthy lifestyles.

- This intervention aims to harness the power of partnership working with the chance to assign participants to join up interventions. Linking in with the "Change for Life" programme, the intervention aspires to tackle issues in four main areas: Exercise, Health, Education and Community.

- One example shows how the intervention works in partnership with local further and higher education providers to offer participants an opportunity to study for qualifications. Participants can undertake NVQs, delivered by staff as the Club is an accredited City and Guilds provider. In addition to this, the Club is working in partnership with Middlesex University, which offers a foundation degree in Applied Sport and Community Development.

Clubs also reported working in collaboration with their Primary Care Trust and this provided an opportunity to secure a range of resources when supporting interventions. Such collaborations also provided the opportunity to connect with participants who had been engaged by local primary care services. Others worked in partnership with local community groups to target men that they may not be able to engage. **Case study 13** provides a further example of community partnership working.

The local PCT not only help us on the men's health project, but also a variety of health projects that we run. They've been invaluable. (PLH Staff)

Case Study 13: Bolton Wanderers: Men's Health Sessions

Bolton Wanderers intervention aims to reach isolated young men aged 18+ and runs in conjunction with Bolton wise, Bolton Dads, Be Strong and Breightmet UCAN Centre.

- A programme of weekly activity and health education sessions are delivered to a range of men across the community.
- Partnerships developed with key groups within the community where men congregate such as the local primary care trust and "Be strong" (A rehab project) helped to keep the programme going by. A project leader reported:

"We work in partnership with 'Be strong' dealing with ex-convicts and drug addicts through a 12-week lifestyle programme. It would be very difficult to engage these men by ourselves."

5.1.3. How Change Was Developed

Filling in Gaps

Most men and PLH staff reported that opportunities to engage in PA and sport within their communities was limited due to a number of factors. The main determinants preventing participation were the lack of facilities, lack of suitable programmes in the local area, and work, which have been identified elsewhere (Buckworth, 2002). However, PLH, with its flexible scheduling and array of multi sports, has alleviated many barriers faced by this cohort.

I used to be extremely fit, but work life, business meals, sat in cars, long hours and you lifestyle, don't help. Sometimes you just need to push yourself and in this game you can push yourself as long as you want, I'll play the full 2 hours if I can. (Adam, 44)

I was just looking for something around but couldn't get it, and it wasn't easy for me. I used to do swimming, but that was not enough for me, I wanted to do something more. And then I found this programme. It was quite impressive for me. (Chris, 47)

PLH also helped to fill in gaps in participants lives outside of the sessions. It gave some men the opportunity to connect with family members and bridge gaps in their day to day lives.

It's not just about the football on Monday and Wednesday, we try and help their whole life. Like I say, we've got people there who've got kids, the kids have never been to a football match. They might not necessarily support the club but it gives them an opportunity to spend some time together. (PLH Staff)

These new opportunities also helped participants to create new routines to help with change. This is discussed in more detail in the next stage of the behaviour change continuum.

Improved Self-Efficacy

Self-efficacy is an important component of any behaviour and relates to an individual's belief in their ability to organise and execute a course of action required to achieve a goal (Prochaska & DiClemente 1983). Increased efficacy can help foster change. Most PLH staff and men reported that they had seen improvements in self-efficacy that assisted change towards more favourable behaviours. These behaviours were seen to be rewarding, and as a result, men were able to see their personal successes translate into improved health and a positive mental outlook. Further, improved self-efficacy allowed men to feel part of the group, at ease in their surroundings and had knock on effects outside of the sessions. This is further highlighted in **Case study 14**.

I had never played at school at all, ever, I had played with my brother, and he comes here as well. So I wasn't knowledgeable with the game but I have learnt a lot since I have been coming down here to a point now where I'm just comfortable and everyone else turns up and is fine. (Chris, 47)

Each week I was getting more and more done. I built up from 5 to 10 minutes, 10 to 15 and so on, doing more and more each week. The encouragement was there, no cattle prods. It was designed for every person, we started to believe we could do it. (Eddy, 41)

Go back six or seven months, the sessions were so quiet, they wouldn't talk to each other, but now they're all talking. I mean none of them knew each other a while ago. Some of them are like addicts, they don't do anything but just sit at home and watch the telly and for them to come out here and talk to other people, it gives them confidence and they go out and use that elsewhere, so it's good for them. (PLH Staff)

Case Study 14: West Bromwich Albion: Premier League Health

Premier League Health at West Bromwich Albion is aimed at unemployed physically inactive males aged 18+ who are low on confidence and looking to get back into employment.

- The project works in partnership with "Pertemps", a recruitment agency in West Bromwich with a view to getting unemployed men out of the house and building up their confidence to get back into work.
- Participants engage twice weekly activity and health sessions at the Albion Foundation. A health trainer reported:

"They find it hard to get the confidence up to come but once they do they enjoy it. They look at this session as their escape. They come down get a bit of fitness build their confidence up, it doesn't take long to see a difference."

Goal Setting

Individuals are not passive responders and are proactive in their own behaviour change (Jackson, 1997). Goal setting and self-monitoring have been shown to be effective methods to increase PA and improve health behaviours (Conn, 2011). Some participants reported the beneficial effects of goal setting in facilitating positive change.

> *I have some targets like losing weight to be honest. I said to myself by coming to this I have to lose weight, and I said to myself I have to lose maybe like five kilo by six months, and I have to do it, I have to be here every Wednesday. I think the fact that we had to be aware of gaining weight and eating less helped, I say ok I'm just going to give myself a target and I have to reach it.* (Danny, 32)

> *I'd smoked for thirty years. Lighting a ciggy for my dad when he was in bed, drunk from the night before, that's what started it. It was very hard to quit, but obviously with the support here, because they, you know, fitness, fitness, fitness, you know you're doing so good with this, why do you wanna go back to that?* (Liam, 33)

However, some men reported that unrealistic goal setting leading to over exertion during sessions could actually have a detrimental effect on their lifestyle, or at least impair mobility and function.

> *It helps workwise if I can actually physically get out of bed. And some of the goals that I've set myself while I've been in this gym have left me like incapacitated for a couple of days, my work's physical and I don't wanna be as stiff as an ironing board if I have to move around.* (Wayne, 38)

PLH staff reported that it took time to build relationships with participants and develop an understanding of what they wanted to take from PLH. This time was deemed necessary to help formulate methods and mechanisms to assist in the setting, and ultimately achievement of goals.

> *We found it was taking up to four maybe six weeks to get to know somebody, and get to gain their respect before you actually start working with them and developing any plans.* (PLH Staff)

Increase Social Support networks and Make New Friends

The presence and interest of other people provides reinforcement and keeps the behaviour prominent. Behaviour change can be stressful, and therefore, maintaining social support for individuals and groups is essential (Naidoo, 2005). Further, behaviour is not independent of the context in which it occurs. Participants are

influenced by their social environments (Jackson, 1997). Most reported that the positive social elements of the programme helped them to deal with adversity. The sporting setting can facilitate an environment for male bonding and social interactions that does not occur in everyday situations, allowing them to make new friends and develop social support networks more readily. Many men engaging in the intervention reported that they forged strong social support networks that they were able to rely on in times of trouble.

> *I get a lot out of this. Various people have become really good personal friends of mine you know. That'll keep me involved. Last year I split up with my girlfriend and I rung one of the lads I met here, and he was there, he was there soon. He took my stuff, we went to his house for a few days, and it was brilliant. I would have been lost without him. I wouldn't have been able to go back home. (Elliott, 40)*

> *I can't put enough emphasis on this, a big motivating factor for me coming along here and doing a lot, I've found that Paul, especially, he's got a lot of time, you know, I'll meet him sometimes in the week just to have a cup of coffee and a chat, you know? I find him quite inspiring and motivating, you know he's kind of kept me. Well it's been part of the parcel that kept me off heroin and crack for six months. I haven't smoked for six months. My diet's much healthier, my whole wellbeing and outlook, the way I think is much healthier as well. (Harry, 46)*

A sense of belonging to the group was also important. The degree to which an individual is integrated into society and has social support networks have been shown to have a significant impact on health (Naidoo, 2005). Men who may have previously felt socially excluded were given the chance to mix with like-minded individuals.

> *It's like fun, fitness and football really. Sort of team bonding, get to know other people with similar interests. If you were having a few problems with like say Job Seekers Allowance, having a few problems, inside the box, outside the box, finding jobs things like that, this helps. (Frank, 43)*

> *I've never been really a confidence person, and as I say, the initial trying to get into the scheme was quite a big step for me, just for meeting new people. I don't really find that easy, but everyone sort of made me feel so welcome. It's a really nice atmosphere. (Barry, 33)*

> *Historically, people with learning disabilities, nobody bothers to think about the social circle that they're involved in. This has enabled a lot of people to meet up with people that they've known from ages back. It's enabled people to make new friends and that's one of the things people said that they wanted, was to meet new people and to expand their social network. (PLH Staff)*

Further, for those men that lacked the social support networks to engage in activities requiring a partner, or preferred being physically active in a group setting, PLH provided opportunities to alleviate this barrier.

> *To book a badminton court with my brother we had to match our diaries up. I was all over the country so it was difficult booking and trying to get a specific time at a specific place. Whereas here you don't need to rely on peoples diaries. Everyone moves round so there is constantly someone for you to play with. It doesn't matter if my brother doesn't turn up. You are always gonna get a game, it's constantly rotating.* (Adam, 44)

> *I did 20 odd years in the army and I miss exercising with other people, I miss the fun of doing it. I come from a very male environment and I've been out of the army now ten years so I'm looking for a little bit more than just, you know, going for a run down the sea front. That's great and whatever, but actually you're on your own all the time and so on, I like to mix in with a different group of people and so on, and it's actually quite fun.* (Harry, 46)

Some participants reported that even though they were willing to change and adapt behaviours, their social circles outside of this programme made it difficult, PLH staff tried to find ways to alleviate these issues.

> *I'm 29 now and I've smoked since I was 15, my mum and my dad smoke, my partner smokes, my sister smokes so it's hard. Everywhere I go there is that smell of smoke enticing me.* (Neil, 25)

> *We help them in so many different ways. The programme is a stepping stone to a new them. They get all kinds of interaction, they make friends and it's their focal point in the week, whereas before they might not have had one. It has knock on effect with their families, so stuff that they're picking up here, they can pass on to partners, family and friends.* (PLH Staff)

Increase Health Awareness

Decision balance is important in the process of change (Prochaska & DiClemente 1983), having the information available to help weigh up the pros and cons of a new lifestyle choice is key. There was a strong feeling that interventions involving health awareness talks, seminars and informational approaches to promoting health were beneficial and well received. However, sessions had to be brief and delivered in a manner that was deemed non-threatening or too formal. People delivering the sessions that participants could relate to and empathise with were essential.

> *When we first started we tried workshops, and basically it didn't happen. The lads felt very, like they were being taught and that they were wrong and we were right and so we don't tend to do workshops unless there's a specific need for it.* (PLH Staff)

I went to some sort of group thing about 2 years ago, and this bloke was like what I would call an Old Catholic priest. It was like fire and brimstone and I was like, if you think I'm coming back here mate, forget it. But this lot, and this is why, because initially I'm like, oh ok, smoking group, you know we're gunna sit there, their gunna tell me I shouldn't be doing this, but it was nothing like that. And we had eight at ours, and four of them quit. So I mean I think that speaks for itself. (Fred, 58)

I've stopped doing what I was normally doing, just coming home and sitting on the couch veging out and having a couple of cans. Even the missus said about the alcohol that I needed to cut down, but I just shipped it off from her, probably because she didn't explain it the way the course did. (Gordon, 46)

It's difficult to retain their attention span. I'd say it's about 20 minutes before they start itching to be out. We put various things on but it's got to be short, sharp and punchy, no drawn out things, because they can't sit them through. (PLH Staff)

Further, the sessions helped men to lean about contemporary health issues they were previously unaware of, but affected their health directly.

You think you have a healthy diet till someone says what do you actually eat and you write it down and you think hold on its not that healthy. You're given an option, no one forces you to do anything, and this is the beauty of the course, you make the decision, you're in charge all the way along but you don't realise it. (Vinny, 48)

It's about bringing it to the fore-front of their minds, and letting them know that it's not impossible, it's very much achievable. All you have to do is make small alterations to the lifestyle and the changes can be huge. Seeing that its only tweaks that need to be made as oppose to wholesale changes. (PLH Staff)

However, some reported that the prospect of health talks or poorly delivered sessions would have a negative effect. The information had to be delivered in a way that was non-threatening to the men or the sessions themselves. An example of this is provided in **Case Study 15**.

If we were going to have any kind of discussion it would have to be when we're putting the stuff away at the end. We do hang around for 5-10 minutes after and general chat. We have a laugh, that kind of stuff which is great. It would put me off having a formal chat. (Chris, 47)

I got somebody in on men specific cancers and I should have stopped her but I just felt so awkward that she had made the journey; she wanted to give a PowerPoint presentation. There were a couple of people in the group who said that I tricked them, that I lured them with football and then give them all health. (PLH Staff)

Case Study 15: Everton FC: Premier League Health

Everton's intervention aims to provide men aged 18-35 with a pathway towards a more positive and healthier lifestyle.

- The project tackles health themes covering: Obesity, exercise, smoking cessation, cancer awareness, substance and alcohol misuse, mental and sexual health.
- By taking part in the scheme, participants can access a wide range of resources such as gym facilities, regular health checks one-to-one mentoring and advice from trained coaches which aim to encourage a healthier lifestyle.
- One such session aims to raise awareness of good heart health. A member of staff reported:

"We're keeping it informal. There's no point getting them in a room and sitting them down for half an hour. We gather them round on the pitch and talk to them for five ten minutes, that's all their attention span really. It really just key messages they'll take in hopefully rather than being bored for two hours"

Sporting Setting to Help Control Emotions

Many reported that aggression and anger were prominent issues prior to the intervention. However, the camaraderie and networks formed in the group allow them to temper this and become more rounded individuals in and out of the intervention.

I came here and I did have a bit of an anger problem at first, but I've got passed that stage. I don't lose my temper as much. (Dave, 21)

It takes my mind off everything else. When I were younger, and I got into loads more trouble walking round the streets, especially on like a Friday night looking for trouble. (Paul, 26)

When we first started, there were a few instances where we walked off, shut the gate and left them to mass brawl. After they got it out their systems there was nothing but respect for everyone, that's happened once and it's never happened again. (PLH Staff)

Allowing Flexible Participation

Interventions that focus on a lifestyle approach rather than structured exercise are likely to engender lower attrition and greater degrees of transformation (Marcus, 2000). The more beneficial and rewarding the experience, the more likely it is to be repeated (Jackson, 1997), and many men on this programme benefited from being able to dip in and out of the sessions and take it at their own pace. Further, as there are many health recommendations, participants can find it hard to discover

reinforcing factors for all behaviours. Therefore, developing programmes that specifically breed positive perceptions and nurture self-monitoring allow for a more potentially durable change strategy.

> *If somebody pushes me, I still lose my temper and the older I get I think the worse it is. If he's telling me I've got to do it, I've never liked being told what to do anyway so if they advise me and they show me that's ok.* (Colin, 54)

> *You're not pressurised to try and be better than someone else. There's not somebody screaming at you, "more effort, more effort, more effort." It's all like, "you do what you can do" but also they'll push your boundaries but not over step the boundary. They understand what you need.* (Simon, 22)

> *I'll always stress to them, "look if you want to come, just stay and watch, no big deal. You've walked to the venue haven't you? You've got out your car, you know? You're physically active in some way, coming up the stairs." I think that's quite important, because there's no membership, you can drop in, drop out when you like.* (PLH Staff)

Flexible participation was also seen as beneficial at other points in the behavioural change continuum, participants reported that it also helped them to adopt and maintain new behaviours.

Opportunity & Forum to Discuss Health matters

Men typically tend to dismiss their health needs and risk taking behaviours by legitimising themselves as the stronger sex (Courtenay, 2000). However, health improvement programmes that build on an understanding of social factors underpinning men's decision making and health practices are likely to achieve greater success (Robinson, 2010). Help seeking behaviour through open discussions around health have been seen by many men and PLH staff as a facilitator of change.

> *Men in general are known to be bad at talking about their own health or anything else that's not football or rugby. This group has given men the chance to come together and to maybe have conversations and look at issues that perhaps they wouldn't have done before, around their health. You know some of the guys here smoke, and we've had opportunity to look at whether they want input dealing with those sort of things or not.* (PLH Staff)

> *They ask if we have any problems at home, and it's helpful. It's easier here because you kind of get to know them and you can speak to them more about stuff.* (Howard, 25)

I suppose we come down here and we talk about it in front of others, you know find triggers that might alter you. At home my diet is determined by my wife! (Alan, 47)

Continuous Sessions

Many PLH staff recognised that it was more participant friendly to run continuous sessions that did not have pre-defined engagement periods (i.e. 12 weeks) to help facilitate participants change, adoption and maintenance of new lifestyle choices. It was thought that a 12 week period was not long enough to gain the trust of participants or develop methods and the necessary skills to fully integrate new health behaviours into lifestyle habits.

When we first set the project up it was supposed to be a 12 week intervention, but I think we learnt very early on that as soon people got involved they didn't really want to leave. We very quickly established on-going sessions; because it isn't just 12 weeks. There is more going on, they've made friendship groups and support networks. (PLH Staff)

If we were to do the project again I wouldn't have done it as a six week course, I'd have straight away done it as a continuous session because with a six week course a lot of the guys feel a little bit more pressure and they think there's some kind of pass fail element to it. That's not what we're about at all. (PLH Staff)

5.1.4. How Maintenance Was Developed

Routine (Social Liberation)

Acquiring a new behaviour is a process not an event. It was therefore important for the men to be able to change gradually and develop coping strategies that were specific to each stage of the behaviour change process (Jackson, 1997). Many men reported that PA had become routine over the course of the intervention and that they actively sought out healthy alternatives to problem behaviours in conjunction with PLH staff advice.

It's even helped me in my like day to day lifestyle, like, before I used to come here I just used to stay at home smoke drugs and play on my PlayStation. Now I come here I do whatever. I go home see my girlfriend and keep busy round the house. It keeps me active every single day. There's not a day goes by that I'm not active now. I used to go to bed at early hours in the morning and get up whenever in the afternoon, same thing every day, and my routine is so different now. (Dave, 21)

I was in a detox unit, detoxing for heroin and crack cocaine. And the gentleman who runs this group would give advice on healthy diet, healthy eating, cheap living as well, which is quite important to me because I wasn't working or doing anything so my budget wasn't very good. When I left the detox unit I found out about the healthy living class here and I started, you know structure, which was really important to me to have a structure you know, somewhere to go, to take part in things really. (Harry, 46)

They've got more autonomous with what they're doing, they've got really confident and that sense of self-belief it really thrives in the gym. We start them off on week one, and we give them lots of direction, lots of information, and gradually over the course we try and make them more autonomous so if we take them out of here they would know the basic exercises and techniques. So we're giving them skills that they can take out. (PLH Staff)

The thinking of putting the sessions on in the morning is to give them a bit of structure in their lives, they have to get up, they have to get out of bed. We don't necessarily tailor stuff like that around the individual, we don't think, "they'll be in bed so we'll put it on in the afternoon we'll catch them when they are awake." We're very proactive, this is when it is, it's early in the morning, you're going to have to get out of bed. (PLH Staff)

Feeling Comfortable Within the Group

Social relationships and social norms have a substantial and persistent influence on how people behave (Jackson, 1997). Social learning theory (Bandura, 1977) explains how social norms and social influence affect individual behaviour. The stronger ones affiliation to the group the more responsive an individual will be to the normative expectations of that group. Many men and PLH staff reported that once men felt comfortable within the group, it enabled them to overcome barriers and maintain behaviours.

I'm not a big fan of the gym. I feel a bit embarrassed because I went in the weight room and that and I'm not a big lad anyway. I eat a lot, I do but I just can't seem to put no weight on. You go into a weight room, try and pick some weights up and you've got some big blokes and I'm there struggling. I feel embarrassed but I fit in here, it feels right. (Neil, 25)

We have created a whole environment where people feel comfortable just being here. They aren't scared to ask for advice, be it from me or one of the NHS nurses or health trainers. A few of them even speak to each other about health issues. (PLH Staff)

Self-evaluate

Assessing how individuals think and feel about themselves with respect to a problem is a key factor in changing and maintaining new behaviours (Prochaska, 1992).

Being able to clarify values regarding behaviour, using imagery and corrective emotional experience are important. Participants can commit to changing or believing they can change, and generate resolutions and commitments to facilitate that change (Prochaska, 1992). Self-evaluation has been shown to be effective in modifying health behaviours elsewhere (Conn, 2011), here men reported that this project gave them the opportunity to self-evaluate and work towards achieving goals.

> *I set goals every year like New Year's resolutions. I always did that every single year but I always cheated by the end of the year. This year my resolution was to get a job, get a nice girlfriend, settle down and have another clean year. Done every single one of them, absolutely every single one and it's down to this.* (Dave, 21)

> *I said to my girlfriend "oh my legs are knackered". And she said "you'll give it up anyway, you never stick at anything." And I said to her "No, you cow!' I said "I'll bloody show her", and I've been coming ever since.* (Elliott, 40)

> *I was enjoying the training because I knew I was losing a bit of weight and I was surprised when I got on the scales after 8 weeks and I had lost a stone and a pound and a couple of inches of the waist, it makes you wanna keep doing more.* (Oliver, 29)

> *They want to see progression and they want to see exactly what they're going to be doing, so there's a bit of structure to it there. So we come up with like their main goals, for example, it might be that they want to lose a stone in weight, and we monitor goals to help achieve that. It could be exercise, it could be diet, whatever suits them really.* (PLH Staff)

Consciousness Raising

This links to the cognitive processes of change and is typically beneficial for participants in the earlier stages of change but can also help with maintaining new behaviours (Prochaska, 1992). This process allows participants to gather information about the problem through observations and interpret the findings by weighing up the pros and cons of change (Janis, 1977). Here men were able to assimilate the information provided and put it into practice to modify and maintain new behaviours.

> *There have been a couple of instances where I have had problems with my health and it has caused me to go to the doctors early, normally I would have left that. But that Cancer play [put on by the club to raise awareness] was a scare for me. You watch it on the adverts and things like that but the fella who done the play here was someone that did actually have cancer.* (Justin, 36)

> *Well it's the scare factor. Finding out what a unit of alcohol was and what it was doing to your body, my perception of what a unit is, was well off. I thought it was ok to drink every*

night, you know a few cans and a whisky or two. It was the scare factor, finding out the truth about something that you had been doing for years. (Gordon, 46)

I've had guys who you probably wouldn't like to see in a dark place, with tattoos and they look very menacing. Given them a simple health check and they come back weeks later, shook your hand and say, "I've got Type 2 diabetes, but I wouldn't have known that if it wasn't for you guys". That's the impact this project has had. I think it's been amazing. (PLH Staff)

We've had people come up to us during these sessions with completely unrelated issues that they've wanted to discuss. And by us being here it's giving people access to external advocacy support that they need, or, you know, a bit of support with something at home or issues with their health which we can help with, which they may not have access to otherwise. (PLH Staff)

A Tailored Approach

Engendering positive aspects of compliance for the individual is paramount. Therefore, having varying versions of programme content to account for individual differences of what is rewarding or punishing is essential (Jackson, 1997). Interventions were tailored to meet the needs of the group. An example of this would be regarding competition. Many men displayed mixed views towards the element of competition and the effect it had on maintenance of newly acquired behaviours. Some men relished a competitive edge to sessions, whilst others thought it detracted from the spirit of the intervention and that it would in fact increase rates of attrition.

It's a chance to come down with the lads, play different away games with local rivals so the competition side is good. When you're out there playing football it is competitive and stuff but everyone goes home with a smile on their face and enjoys the game. No one likes losing, do they? Especially with your mates. (Kevin, 30)

If it started getting a bit too focused on competition I think we would lose a lot of what it's about really, the spirit of this place, its open to all people of all abilities. It's just the fact that there is no clutter, no league tables or five divisions. I just want to come down play, and get better at it by working hard and enjoying the journey. (Chris, 47)

It was therefore necessary for the delivery staff to be aware of the needs of individuals within the group and ensure that specific fears and barriers could be addressed to allow participants to work towards, and maintain their newly acquired behaviours. PLH staff used a range of techniques to help tailor the interventions to the participants. This is further illustrated in **Case study 16**.

We started to deliver traditional rules volleyball sessions starting at eight at night in a local area and nobody turned up for three weeks. So I spoke to the community and they said they were at the mosque until 9pm, so we changed the time to fit around their commitment. (PLH Staff)

Case Study 16: Newcastle United: Tackle It

Newcastle United's intervention, "Tackle it" aims to reach diverse communities of sedentary men in the town of Ashington, and men from the West End of the City of Newcastle-Upon-Tyne.

- A programme of weekly activity and health education sessions, including those on an evening aimed at taxi drivers from BME communities, and other men employed in occupations which involve anti-social hours. A health trainer reported a popular initiative:

"We've got a local based badminton group on a Monday night for the BME community and that runs from midnight to 2am just to cater for taxi drivers, restaurant and takeaway employees"

Developing Coping Strategies

Developing coping strategies such as counter conditioning and stimulus control to aid in the process of behaviour change can facilitate maintenance of new behaviours (Prochaska, 1992). Participants were given alternatives for problem behaviours, many displaying positive self-statements regarding change. Participants were able to counter stimuli that previously elicited problem behaviours to help deal with change.

I've always been sporty. I've played rugby and football so becoming an amputee was a bit of an inconvenience for me but not the end of the world. I look at it like this, I can't paint the ceiling but I can paint the skirting boards. There is no point at looking at what you can't do. Look at what you can do and this is what this course does. It shows you what you can do. It's about technique. This programme shows you a technique that you can use and develop to do what you want to do. (Vinny, 48)

I was in and out of prison for a few years because of drinking, smoking cannabis and taking ecstasy. This sort of keeps my mind away from certain things. I'm not tempted to go out and do stuff. It's like a security, gets you away from anything else that is going on. (Ian 24)

We run seminars on different health topics, but the one they get the most benefit from is around nutrition. It was a bit of an eye opener for the guys. We try to explain to them that if you can make small subtle changes to your diet that you can implement every single day for the rest of your life you will see massive benefits. It's about giving them that information and supporting them when they need it. (PLH Staff)

We can help them in so many different ways. The programme itself is a stepping stone to a new them. They get all kinds of interaction, they make friends and it's their focal point in the

week, whereas before they might not have had one. It has knock on effect with their families, we do talks for them, so stuff that they're picking up here, they can pass on to partners, family and friends. *(PLH Staff)*

Fun, Enjoyable and Relaxed

The goal of most interventions is to establish a habit, and the preparation and action stages do not deal with difficulties maintaining behaviour over a longer term. Sessions that are fun and enjoyable, relaxed and alleviate boredom are important for maintaining a new behaviour and preventing regression and relapse (Prochaska, 1992). Many men reported that the fun, enjoyable and relaxed atmosphere of the interventions allowed them to establish new habits and maintain new behaviours.

It's more enjoyable. I thought it was gonna be loads of hard work, but it's enjoyable. The things you do it's different every week so you're not getting bored of it. It's made me more active and I want to be out more now. *(Mark, 23)*

It makes it easy for you to come along because it's so relaxed and enjoyable. You start laughing and joking and the barriers come right down. It makes you feel like you're not doing it because you have to but brecause you want to. It doesn't even feel like you're learning anything sometimes, you're just having a laugh. *(Eddy, 41)*

To keep them engaged in the project, we need to make it as fun and enjoyable as possible. *(PLH Staff)*

6. Card Sort Technique

The Card Sort Technique (CST) is used to generate information about the associations and grouping of specific data items. The piloting process informed the pictorial representations and wording of the 2 sets of cards generated for the project leaders and men engaging in the programme. Participants were asked to organize individual, unsorted items shown in card form into groups and rank them in order of importance.

6.1.1. *Card sort with Male Participants Adopting Premier League Health*

Using the method outlined in section 2, a convenience sample of n=58 participants from 14 different clubs engaging in PLH took part in the card sort exercise. They were each given the same set of cards which contained 24 different statements and pictorial representations of the interventions in which they had engaged. These 24 cards were designed in the piloting process and further refined using the semi-structured interviews.

Having been given the cards, each participant was asked to look through them and given an opportunity to ask any questions regarding the cards and what they represented. Once the participants were happy with the process they were asked to select any cards that represented what they had experienced whilst engaging in PLH, and they were asked to select the five most important and rank those five in order of most important to least important. Once all scores were collated, the cards with the highest frequency of selections were determined.

The five most important factors about PLH for men engaging the interventions are shown below in **Table 5**. For more information on each factor, a link to its related section from the interview data in section 5 is reported.

Table 5: Most Important Factors about PLH for Men Adopting Interventions

	The Five Most Important Factors About PLH For Men Engaging In Interventions				
	1st	**2nd**	**=3rd**	**=3rd**	**=3rd**
Factor	" Get Fitter & Healthier"	"It's Fun & Enjoyable"	"The Club"	"It Builds Confidence"	"To Make New Friends"
Frequency	79% (n=46/58)	55% (n=32/58)	36% (n=21/58)	36% (n=21/58)	36% (n=21/58)
Explanation	Section 5.1.2 (Adoption)	Section 5.1.4 (Maintenance)	Section 5.1.2 (Adoption)	Section 5.1.3 (Change)	Section 5.1.3 (Change)

Getting fitter and healthier was the card that was reported most frequently and therefore deemed most important. This is especially interesting given that over 80% of adopters (see section 3) self-reported that they did not consider themselves to have a health problem. It may well be that the card sort exercise acts as a conduit for men to express their true feelings about their health and fitness whereas a questionnaire may not.

6.1.2. *Card Sort with PLH Staff*

Using the method outlined in section 2, n=15 PLH staff who were interviewed on the key design characteristics of PLH (See section 5), from 14 different clubs took part in the card sort exercise. They were each given the same set of cards which contained 47 different statements with pictorial representations of the design characteristics of the interventions they had put in place.

Once the master list was generated, PLH staff undertook the card sort exercise using the following steps:

(a): Look through the list of cards. If there are any key design characteristics not listed in the pack, three blank cards are available for PLH staff to write and illustrate the design characteristic.

(b): PLH staff were then requested to identify the key design characteristics across the four stages of behaviour change, how hard-to-reach men learn (Reach), start (Adopt), adapt (Change) and stick (Maintain) with PLH interventions.

(c): PLH staff were then be asked to report the five most important design characteristics in the (above) four stages using the following scale (1 = Most Important- 5 = Least Important).

Table 6 highlights the top five most frequently reported design characteristics across the four stages of behavioural change. In some instances there are more than five factors in each category, this is due to some having had the same frequency of reporting

Table 6: Key Design Characteristics in the 4 Stages of Behaviour Change: PLH Staff

The Five Most Important Design Characteristics Across the Four Stages of Behavioural Change			
Learn (Reach)	**Start (Adopt)**	**Adapt (Change)**	**Stick (Maintain)**
(1): The Club, the Badge, the Brand	(1): Weekly Programme	(1): Goal Setting & Self-Monitoring	(1): Allow Flexible Participation
(2): Incentives	(1): Allow Flexible Participation	(2): Build Self-Confidence	(2): Follow-Up Men Who Miss Sessions
(3): Local Paper Advert	(1): Build Self-Confidence	(3): Project Staff Deliver Sessions	(3): Build Social Support
(4): Use Existing Channels for "Hard to Reach" Men	(1): Build Social Support	(4): Talk Through Needs	(4): Project Staff Deliver Sessions
(4): Link to Local Interventions	(5): Competitions	(4): Allow Flexible Participation	(5): Partner Local Health Agencies
(4): Partner Local Health Agencies	(5): Mixed Programme	(4): Delivered Direct to Men	
	(5): Respond to Men's Other Commitments		
	(5): Make Participation Comfortable		
	(5): Project Staff Deliver Sessions		

7. Conclusions

PLH represented a major opportunity to assess the impact of a men's health promotion initiative delivered in and by English Premier League and championship football clubs. The findings show that professional football clubs have a powerful effect on reaching men typically regarded as hard-to-connect with and who are viewed as resistant to change. PLH was adopted by men demonstrating multiple problematic lifestyle behaviours, each of which contribute to chronic health conditions that ultimately convert into a substantial burden on NHS services. However, at the outset many of these adopters did not view themselves as having poor health. Indeed, over a third of these men never consulted their GP, and over half never used health advice and information services such as NHS Direct. Therefore, despite their substantial and diverse needs, these adopters were unlikely to be exposed to orthodox health promotion opportunities made available through conventional channels.

The unconventional approach adopted by PLH was underpinned by staff being trained in contemporary behaviour change approaches. This enabled nearly three quarters of completers to make one or more positive changes to their health. Sustained, these changes can help moderate the substantial inequalities in mortality and morbidity rates that blight the futures of many such men. Moreover, these findings fill many of the gaps in the evidence about how these effects can be achieved.

However, even though PLH was well-targeted, and elicited positive short term changes in lifestyle behaviours, it was not as effective at achieving substantial longer-term effects. This was in part due to the relatively low response rate of the follow-up questionnaires when compared to the pre-intervention measures. This loss of data is common place on community settings and can be attributed to participant attrition, poor literacy and apprehensions regarding surveillance.

Nevertheless, PLH represents a unique contribution to understanding both the effects of football-based interventions and the most important active design

characteristics for engaging, and keeping men involved in health promotion interventions. These have been drawn together to form a toolkit to inform practitioners on how to assess needs, plan, implement and evaluate gender-specific health interventions implemented in and by professional football clubs. A selection of the most important lessons learnt from PLH can be found in Box 1.

Box 1: Lessons from Premier League Health:

PLH provided a unique opportunity to explore how the power of elite football clubs can influence the health of men. We have outlined a selection of ten of the most important lessons learnt from the PLH. These should be seen as key considerations for planning, implementing and evaluating men's health interventions delivered in and by professional football clubs.

1. Use all the assets the club has to offer: Utilise the badge, players (where possible) branding, communication channels, and mascots to get publicity. Further, make use of facilities and fully engage volunteers and supporters groups.
2. Consult your target audience when designing interventions. Use social marketing to understand what will motivate - and discourage - potential participants.
3. Build support networks, make it a social event. This is a key aspect of widening men's social capital and a real help in times of crisis.
4. On-going activities with no pre-defined engagement periods (i.e. 12 weeks) are more participant-friendly. They are more likely to induce change.
5. Recognise the importance of identifying and working with partners that have access to your target audience. Businesses and settings with a high proportion of males (construction sites, taxi ranks, pubs, betting shops, takeaways etc.), and voluntary organisations or charities can reach out to those who are unemployed, socially excluded and most health-needy.
6. Don't preach health messages. Have open and frank discussions in short bursts (around 10 minutes), and make it relevant to what the men are doing.
7. Don't restrict activities to just football. Provide an array of fun and enjoyable sports and inclusive activities that may be more suitable for all participants.
8. Don't put out too much complex information. Simple messages and language work best. You can refer people to other sources if they want more detail.
9. Don't expect everything to happen all at once and work first time. It takes time to get established, and requires momentum for word-of-mouth to work.
10. Evaluate and follow up all projects so you can show impact and lessons learnt. Think about this from the start, set realistic aims and objectives, and keep on top of data collection and input.

8. Recommendations

Based on the evidence from PLH, the following recommendations are proposed:

Recommendations for Commissioning Agencies

- Commission men's health interventions delivered in and by professional sporting clubs. These have the power to be effective at reaching and facilitating the adoption of working age men, including those regarded as hard-to-connect with. Interventions further have the power to facilitate health improvement with an initial intervention period.
- Ensure that all staff delivering interventions are adequately trained in men's health and contemporary behavioural change techniques.
- Undertake evaluation and longitudinal research. Explore how engagement and short-term change can be maintained over the longer-term. Use current health guidelines as yardsticks and explore multiple problematic behaviours.

Recommendations for Delivery and Evaluation Agencies

- Develop men's health promotion interventions in partnership with a range of other organisations from the health, physical activity and sports sectors. They can provide resources, advice and knowledge as well as sustainable exit routes for participants.
- Implement men's health interventions in and by professional football clubs using the active design characteristics and key lessons identified in this study. They are important because they clearly facilitate change for lifestyle behaviours in men across the behavioural continuum.
- Be timely and efficient about managing the data collection and evaluation protocol. Build this in to the day to day running of the intervention.

For further information on the recommendations, please see the following document. *Premier League Health, Guidance, Good practice and Lessons:* This guidance has emerged from PLH and is a valuable resource that offers advice on how to assess needs, plan, implement and evaluate gender specific health interventions implemented in and delivered by professional football clubs.

9. Dissemination

As requested by the steering group, we have circulated the findings of the PLH programme to a wider audience, including health professionals, researchers, academics and practitioners of men's health promotion. One channel for reaching such groups are the peer reviewed international journals and international conferences which also help to raise the profile of the effects of the programme. With that in mind, we have produced the following outputs:

Journal Articles-

Pringle, A. Zwolinsky, S. Smith, A. McKenna, J. Robertson, S. White, A. (2011). ***The pre-adoption demographic and health profiles of men participating in a programme of men's health delivered in English Premier League football clubs.*** Journal of Public Health, 125 (7): 411-416.

Zwolinsky, S. Pringle, A. McKenna, J. Smith, A. Robertson, S. & White, A. (2012). ***Associations between daily sitting time and the combinations of lifestyle risk factors in men.*** Journal of Men's Health. In Press: http://dx.doi.org/10.1016/j.jomh.2012.02.003

Abstracts-

Zwolinsky, S. Pringle, A. McKenna, J. Daly-Smith, A. Robertson, S. & White, A. (2012). ***Associations between sitting time and the prevalence and clustering of lifestyle risk factors in me***. Medicine and Science in Sports and Exercise, 44 (5): 2631.

Smith, A. Zwolinsky, S. Pringle, A. McKenna, J. Robertson, S. & White, A. (2012) ***The importance of sitting time and physical activity on BMI in hard to reach men.*** Medicine and Science in Sport and Exercise, 44 (5): 2625.

Pringle, A. Zwolinsky, S. McKenna, J. Smith, A. Robertson, S. & White, A. (2012). ***Initial Effects of a National Men's Health Programme Delivered in English Premier League Football Clubs.*** Medicine and Science in Sport and Exercise, 44 (5): 2229.

Zwolinsky, S. Pringle, A. White, A, Smith, A. and McKenna, J. (2011) ***The prevalence of multiple risk factors for CVD: A study of a national programme of men's health promotion in professional soccer clubs in the UK***. Medicine and Science in Sports and Exercise, 43 (5): 785.

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Zwolinsky, S. Pringle, A. McKenna, J. Daly-Smith, A. Robertson, S. & White, A. (2012). ***Associations between sitting time and the prevalence and clustering of lifestyle risk factors in me***. May 29th – 2nd June 2012: American College of Sports Medicine – 59th Annual meeting and 3rd World Congress on Exercise is Medicine: San-Francisco, California.

Smith, A. Zwolinsky, S. Pringle, A. McKenna, J. Robertson, S. & White, A. (2012) ***The importance of sitting time and physical activity on BMI in hard to reach men.*** May 29th – 2nd June 2012: American College of Sports Medicine – 59th Annual meeting and 3rd World Congress on Exercise is Medicine: San-Francisco, California.

Pringle, A. Zwolinsky, S. McKenna, J. Smith, A. Robertson, S. & White, A. (2012). ***Initial Effects of a National Men's Health Programme Delivered in English Premier League Football Clubs.*** May 29th – 2nd June 2012: American College of Sports Medicine – 59th Annual meeting and 3rd World Congress on Exercise is Medicine: San-Francisco, California.

Zwolinsky, S. Pringle, A. White, A. Smith, A. Robertson, S. & McKenna, J. ***The Prevalence of Multiple Risk Factors for CVD: Men's Health Promotion in Professional Soccer Clubs.*** June 1-4 2011: American College of Sports Medicine – 58th Annual meeting and 2nd World Congress on Exercise is Medicine: Denver, Colorado.

Morgan, S. ***The Creating Chances Programme.*** UK Faculty of Public Health Annual Conference, Birmingham University, July 5, 2011.

Pringle A, White A, Zwolinsky S, Smith A, Robertson S, McKenna. ***Men's health interventions in settings.*** World Congress on Men's Health, Vienna, Austria, October 3-6, 2011.

Pringle, A. White, A. Zwolinsky, S. Smith, A. Robertson, S. McKenna, J. ***The Impact of Premier League Health: The first 45 minutes. Football as an Agent of Social Change.*** European College of Sport Science Annual Meeting, Liverpool, July 7-9, 2011 (with Richardson D., (Liverpool JMU) and Ottesen L. (Universitet Kobenhavins, Denmark).

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