**Title: The role of peer physical activity champions in the workplace: a qualitative study**

**Abstract**

**Aims:** Peer health champions have been suggested as an important component of multilevel workplace interventions to promote healthy behaviours such as physical activity. There is accumulating quantitative evidence of their effectiveness but as yet little exploration of why and how champions influence peer behaviour. The current study explores the role of peer physical activity champions (PPACs) in influencing colleagues’ physical activity behaviour from the perspectives of both champions and colleagues.

**Methods:** Seven months after the introduction of a workplace physical activity programme in 17 small and medium sized enterprises (SMEs) two focus groups were held with PPACs and four with programme participants. Data were analysed using inductive thematic analysis.

**Results:** Three overarching themes were developed: how PPACs encourage physical activity; valuable PPAC characteristics; and sustaining motivation for the PPAC role. Both direct encouragement from PPACs and facilitation of wider physical activity supportive social networks within the workplace encouraged behaviour change. Physical activity behaviour change is a delicate subject and it was important that PPACs provided enthusiastic and persistent encouragement without seeming judgemental. Being a physical activity role model was also a valuable characteristic. The PPACs found it satisfying to see positive changes in their colleagues who had become more active. However, colleagues often did not engage in suggested activities and PPACs required resilience to maintain personal motivation for the role despite this.

**Conclusions:** Incorporating PPACs into SME based physical activity interventions is acceptable to employees. It is recommended that PPAC training includes suggestions for facilitating social connections between colleagues. Sensitivity is required when initiating and engaging in conversations with colleagues about increasing their physical activity. Programmes should ensure PPACs themselves are provided with social support, especially from others in the same role, to help sustain motivation for their role. These findings will be useful to health-promotion professionals developing workplace health programmes.

**Key Words**

Workplace, physical activity, peer health champion, intervention, social support

**Introduction**

Despite compelling evidence about the health benefits of physical activity (PA) ([1](#_ENREF_1)), data suggest that 31% of the world’s population are not meeting the minimum PA recommendations ([2](#_ENREF_2)). Increasing PA levels is thus an important element of public health policy in the UK ([3](#_ENREF_3)) and internationally ([4](#_ENREF_4)). The greatest improvements in health status are seen when individuals with the lowest PA levels become active ([5](#_ENREF_5)).

The workplace provides a useful setting for promoting PA as there is the potential to reach a broad and captive audience and existing social structures provide a framework around which to build interventions. Meta-analyses of workplace PA interventions have found small but significant increases in physical activity ([6-8](#_ENREF_6)) and a reduction in body weight and BMI ([9](#_ENREF_9)). , However, recent systematic reviews highlight the heterogeneity among study outcomes with some interventions reporting positive effects, but others null effects on PA ([10](#_ENREF_10)) worker productivity ([11](#_ENREF_11)) and mental well-being ([12](#_ENREF_12)). Interventions which target PA exclusively are more effective than interventions that target PA as one behaviour in a broader health promotion intervention ([7](#_ENREF_7), [8](#_ENREF_8)). A review comparing the effectiveness of different six types of PA intervention (counselling, exercise training, active commuting, walking, stair use and multicomponent) found only active commuting was effective for physical activity outcomes and only exercise training was effective for physical fitness outcomes ([13](#_ENREF_13)). Participation levels in workplace health promotion programmes vary widely; uptake rates of between 10-64 per cent with a median participation rate of 33 per cent have been reported ([14](#_ENREF_14)). There has also been some suggestion that programmes are mostly attended by individuals who are already active or are highly motivated to do so ([15](#_ENREF_15)). Furthermore, research has mainly been conducted in large organisations and less is known about PA promotion in small and medium sized organisations ([16](#_ENREF_16)).

*Health champions in the workplace*

Health champion interventions are used as a strategy to intervene at the social network level and promote social support for behaviour change ([17](#_ENREF_17)). They have been suggested as an important component of multilevel workplace interventions to promote healthy behaviours such as PA ([18](#_ENREF_18), [19](#_ENREF_19)). Interventions using this approach typically train a number of employees from within the organisation as champions, who then take on the role of providing support to their peers to engage in healthy behaviours ([18](#_ENREF_18)).

The majority of studies examining the role of health champions and peer support have done so outwith the workplace context and have focussed on chronic disease management where they have been shown to be an effective approach ([18](#_ENREF_18)). A review focussing specifically on peer delivered PA interventions identified ten such studies ([20](#_ENREF_20)). Of these five focussed on older adults, two on children, two on adults with chronic illness and one on adults with developmental disabilities. The peer delivered interventions were effective at increasing physical activity, and when compared to alternative intervention approaches peer delivered interventions were as effective as professionally delivered interventions and more effective than control conditions.

There is some quantitative evidence of the effectiveness of health champion interventions to increase PA and healthy eating in a workplace setting ([21](#_ENREF_21), [22](#_ENREF_22)). Employee PA and fruit and vegetable intake significantly increased in workplaces randomly allocated to receive a peer health champion intervention compared to employees in workplaces allocated to a waiting list control group. Furthermore, in a review of PA interventions Conn et al. ([6](#_ENREF_6)) found employee interventionists were more effective than external interventionists at promoting behaviour change.

However, qualitative evaluations that explore in depth the processes by which workplace health champions influence the health related behaviours of their colleagues are rarely reported. Capturing this information is important in order to identify the key ways in which champions positively influence colleagues’ health behaviour and so in turn to enhance workplace health champion recruitment and training. To our knowledge only three such studies have been published to date ([23-25](#_ENREF_23)). A literature search identified no qualitative studies which evaluated workplace champions who focussed solely on promoting PA. Furthermore the previously described studies report the perspectives of workplace health champions, but the perspectives of their colleagues who receive peer support have not been explored. The current study is original in exploring the role of health champions in influencing colleagues’ motivation for PA from the perspectives of both champions and colleagues.

We recently published outcome data from a multi-level intervention which targeted low active employees in small and medium sized enterprises (SMEs). There were significant increases over six months in PA, physical health and psychological well-being ([26](#_ENREF_26)). The intervention was based on the social-ecological framework for behaviour change (27, 28). A key feature was the use of health champions. These were individuals within each organisation who took on the role of encouraging and supporting their peers to participate in PA. As they focussed solely on PA promotion they were called peer PA champions (PPACs) in our study. The current paper reports the experiences of PPACs and programme participants.

**Methods**

*Overview of the PA intervention*

Seventeen SMEs were recruited to the intervention; all had office-based staff and were located within a 20 minute walk of one Central London gym facility. A purposive sampling strategy was used and we sought maximum diversity in organisational type, 9 were private sector employers, 2 public sector and 6 from the 3rd sector. Recruitment was via a telephone call or email to a member of the SME management or human resources staff. Low active employees (defined as <5x30 minutes moderate intensity PA per week) were eligible for the intervention. Participants were recruited via email; PA levels were self-reported. Ninety-nine females and 49 males participated in the programme, mean age 34.6±8.9 years. Further details of the method are available in Edmunds et al. (2013).

Central YMCA developed a PPAC job description to help organisations recruit suitable individuals. Requisite personality characteristics included: strong communication and interpersonal skills; confident, organised, interest and commitment to PA. The PPAC role was unpaid but those who took it on were offered a year’s free gym membership as an incentive. A senior member of human resources or management in each organisation invited individuals to take on the PPAC role. Thirty-one PPACs (23 female, 8 male) were recruited, their mean age was 33.6±6.8 years. Fourteen organisations had two PPACs, and three organisations had one.

Prior to starting their role PPACs attended a one day group training session. Material covered included: an overview of workplace health; benefits of PA; principles of behaviour change; listening and communication skills; and suggestions for activities to organise in the workplace. Ongoing support was provided via a nominated individual within Central YMCA. All PPACs were also invited to two social functions where they received peer support from other PPACs and an opportunity to share their experiences.

The intervention was delivered by Central YMCA which is a charity with experience of promoting PA. During the initial 6 months Central YMCA provided participants with various opportunities for PA. Described as a ‘Well-being Package’, these opportunities included: access to a web portal with information on the benefits of PA and how to begin exercising; 3 months free gym membership and access to dedicated exercise classes suitable for beginners or those returning to exercise, followed by a subsidised gym membership rate for a further 3 months; a free pedometer; and the chance to participate in an inter-organisational team pedometer challenge. The role of the PPAC was to motivate participants to engage in PA opportunities and to sustain this behaviour change over a 12 month period.. PPACs took part in the PA opportunities themselves as well as encouraging others to join in.

*Evaluation of the PPAC role*

A qualitative evaluation of the PPAC role was conducted through the use of focus groups held 7 months after the start of the intervention. Participants were purposively sampled. Two focus groups were held with highly engaged participants (defined as those who were still members of the Central YMCA gym), two with less engaged participants (defined as those who were no longer members of the Central YMCA gym) and two with PPACs (representing the range of organisational types in the study). Demographic characteristics of the focus group participants are provided in table 1. Focus groups were conducted in a private room in a building adjoining the gym used during the intervention, and lasted between 40 and 65 minutes. The facilitator was known to participants as a member of the trial team, but was not directly involved in delivering the intervention. Each participant received £10 as a token of appreciation for taking part.

The discussions were semi-structured. The topic guide for participants covered: the influence of the PPAC on their PA over the past 6 months, the influence of colleagues on their PA over the past 6 months; the influence of wider programme components on their PA. The topic guide for PPACs covered: feelings about the PPAC role, characteristics of an effective PPAC; what their role has involved, adequacy of the support they have been provided. All focus groups also covered the impact of the intervention on participants’ health and well-being, this has been reported in Edmunds et al. ([26](#_ENREF_26)). Focus groups were recorded, transcribed verbatim and entered into NVivo 8. Ethical approval for this evaluation of the intervention was obtained from the University Ethics Committee.

*Data analysis:*

Data were analysed using thematic analysis. This method is widely used within psychology and related fields for identifying, analysing, reporting and interpreting patterns (themes) within data. It provides a flexible and useful research tool which can provide a rich and detailed, yet complex account of data ([29](#_ENREF_29)). Braun and Clarke ([29](#_ENREF_29)) argue thematic analysis is compatible with both realist and constructionist paradigms. A realist approach considers there are real experiences and true facts to be reported whereas a constructionist approach considers meanings are socially produced and thus influenced by the sociocultural context. In our study we took a contextualist approach, this sits between the two extremes of realism and constructionism and considers both the experiences and facts that individuals report, and the ways in which the broader social context influences those meanings.

The first stage of the analysis involved reading and re-reading transcripts to become familiar with the data, and noting any initial ideas. These were used to create initial codes which were in turn used to organise the data into meaningful groups. Once all data had been initially coded and collated, codes were sorted into broader overarching themes and more specific primary and secondary sub-themes. These were reviewed and refined through a process of reading the collated data extracts for each theme to ensure they formed a coherent pattern. Themes were also reviewed in relation to the entire data set to ensure the themes accurately reflected the meanings in the data set as a whole. An inductive approach to the analysis was taken, meaning that the data were coded without trying to fit them into a pre-existing coding frame or the researcher’s analytic preconceptions. The primary analysis was conducted by the first author. A sample of the coding was checked for consistency and coherence by the second author and discrepancies were discussed to evolve the coding framework.

**Results**

The researchers developed three overarching themes based on the participant and PPAC data: 1) how PPACs encourage PA; 2) valuable characteristics of PPACs; and 3) sustaining motivation for the PPAC role. These are listed in table 2 along with their primary and secondary subthemes. Quotations which illustrate each of the subthemes are provided in table 3. Some of the themes were relevant to participants or PPACs only. Themes that emerged from both participant and the PPAC data have been grouped together in the analysis. This allows similarities and differences between the views of each group to be described and highlighted. Table 2 shows which data sources were coded at each theme.

**Theme 1: How PPACs encourage PA**

*Direct encouragement:* The PPACs promoted PA through direct communication with the participants and by facilitating social interactions between participants which resulted in a peer support network. Direct communication was by email and face-to-face conversations. Face-to-face conversations were perceived by PPACs as having more impact than email (excerpt 1). Participants agreed that face-to-face conversations were important however, in contrast to PPAC perceptions they also found receiving regular emails about PA was a useful reinforcement (excerpt 2). In terms of the content of communications from PPACs, inviting participants to join in an exercise class was valued (excerpt 2) as was initiating conversations about PA (excerpt 3). However, the social support offered by PPACs was not specific enough to overcome the concerns of participants with specific exercise barriers such as a pre-existing injury (excerpt 4).

*Facilitate workplace social support:* Facilitating social interactions, or a social network, between participants also emerged as important to encouraging PA. Participants used their new social network to find exercise companions (excerpt 5) and were also motivated by the sense of exercise group identity, shared experience and camaraderie with colleagues which belonging to the social network gave them (excerpts 6 and 7). The main criticism voiced about PPACs was that they had not worked hard enough to encourage social interactions among participants (excerpt 8), thus reinforcing that peer support for PA was desired by participants and that they saw it as the PPACs role to facilitate this.

**Theme 2: Valuable characteristics of PPACs**

*Non-judgemental:* The focus groups highlighted the sensitivity of PA behaviour change and some of the challenges of promoting PA in a workplace context that result from this. Participants explained that initially they had been concerned that if they did not keep up the recommended amount of PA PPACs might speak to them in a judgemental or patronising way, which would just compound the feelings of guilt or inadequacy that they already had regarding PA. However, these fears had not been realised (excerpts 10 &11). The need for well-developed social skills and sensitivity on the part of the PPACs is evident. PPACs were aware of this and consciously tried to remain positive and non-threatening when engaging with participants (excerpt 9).

*Enthusiasm and persistence:* PPACs viewed enthusiasm and persistence in their role as key for engaging participants in PA and reflected that they had sometimes been perceived as irritating by participants as a result (excerpt 12). The importance of these characteristics was echoed in the participant focus groups (excerpt 13).

*Physical activity role model:*Furthermore PPACs felt that initiating and sustaining personal exercise habits influenced the exercise habits of their colleagues and several had become more active since taking on the PPAC role (excerpt 14). Again, these PPAC perceptions were accurate in that participants described seeing the PPACs exercising as a factor that helped sustain their motivation (excerpt 15). The desire for congruence between what they advised others to do and their own behaviour was another motivating factor for PPACs to personally engage in PA.

**Theme 3: Sustaining motivation for the PPAC role**

*Challenges to motivation:* PPACs found their role challenging and required resilience to sustain their own motivation. Feeling disheartened as a result of limited or little engagement from participants emerged strongly as a theme (excerpts 16 & 17). Difficulty balancing the demands of the PPAC role with their paid role at work was another source of challenge and could result in feeling guilty about having let the participants down (excerpt 18).

*Sources of resilience:* Two important sources of resilience in PPACs were: feelings of pride and satisfaction from seeing positive changes in individuals who had taken up PA as a result of the PPAC efforts (excerpt 19); and social support from other PPACs (excerpt 20).

**Discussion**

This study provides a novel insight into the role of PPACs in encouraging their fellow employees to engage in increased PA. Analysis of the views of both PPACs and participants allows exploration of similarities and differences in how the PPAC role was perceived, and highlights areas where attention should be focused during future PPAC programme development and training.

Programme participants reported that both social support which came directly from the PPAC and social support which came from other workplace peers, were valuable in enhancing their motivation for PA. Overall, developing an identity as someone who was part of a group whose common goal was to become more active appeared to be linked to sustained motivation and enjoyment of PA. The finding that PPACs encouraged their peers to become more active through both direct and indirect strategies is consistent with Heaney and Israel’s ([17](#_ENREF_17)) definition of health champions as individuals who provide social support to their peers directly and enhance social networks by linking members to each other and to resources outside the network. Previous studies which have reported on how peer workplace health champions engage colleagues have examined the experience only from the health champion’s perspective ([23-25](#_ENREF_23)). These primarily focus on the direct support champions provide to colleagues rather than how champions link employees interested in health behaviour change to each other. Exploring the experiences of programme participants has highlighted that enhancing wider social networks for PA within the workplace is a key factor for success in the PPAC’s role. As the current study focussed solely on PA it remains to be seen whether the importance of champions facilitating social networks is specific to PA behaviour change or if it is common to other health behaviour interventions.

The participants’ views highlighted a challenge inherent within the PPAC role. On the one hand participants valued PPACs’ enthusiasm and persistence, but on the other hand participants were concerned that the support of a PPAC did not feel judgemental or patronising. Focus groups with PPACs revealed they were aware that behaviour change is a sensitive subject and tried to tread a fine line between providing support and encouragement for PA, yet not being perceived as critical of individuals who did not engage in planned PA. This awareness is consistent with previous findings in relation to workplace diet and PA interventions ([23](#_ENREF_23), [24](#_ENREF_24)). Both these studies found that champions tended to wait for their peers to approach them with questions about health, or made opportunistic use of conversations that arose spontaneously in the workplace. Our data showed PPACs were taking a more proactive, yet still sensitive, approach and that this was perceived positively by programme participants.

An unanticipated finding was the extent to which PPACs found their role disheartening due to participants not engaging in PA despite encouragement. Satisfaction from seeing positive changes in those participants who did increase their PA levels mitigated these negative feelings for some, but other PPACs were demotivated for continuing in the role. Our study was designed so that each PPAC targeted a specific group of low active employees who had volunteered to participate in the intervention programme. There is some evidence that this targeted approach has advantages over general workplace health promotion programmes as encouragement from peer health champions can be directed at those most in need and reach and engage them effectively ([18](#_ENREF_18)). Furthermore broad health promotion programmes at work may not reach those at highest risk ([30](#_ENREF_30)). However, our data suggest that a targeted approach comes at a cost to PPAC motivation when encouragement to exercise is rebuffed repeatedly. A broad intervention approach, on the other hand, encourages PPACs to engage with anyone in the workplace who is interested in increasing their PA and this may be a more motivating role. Future research is required to understand whether the PPAC role is most effective if implemented in a targeted or non-targeted way in workplaces.

The limitations of this study should be acknowledged. In common with most qualitative research, data are generated from a relatively small number of individuals who all participated in the same intervention programme within one geographical location, and thus findings are context bound and not intended to represent, or generalise to all workplaces ([31](#_ENREF_31)). However, the study does provide rich and detailed information about this small group of individuals which may be transferable to other similar contexts.

Thus several implications for practitioners have been extrapolated from the study findings. The first is that findings indicate that multilevel PA interventions which incorporate PPACs are an acceptable way to promote PA within SMEs with office based staff. Given the importance participants attached to feeling part of a group of individuals with a common aim of increasing their PA, PPAC training should include suggestions for facilitating social connections between individuals at the workplace in order to provide a PA social network. It is also recommended that employee and PPAC expectations are appropriately managed. For example some participants in our study expected PPACs to provide individualised exercise training advice or lead a group workout in the gym which they were not qualified to do. Furthermore, some PPACs optimistically expected that all participants would become active and sustain this behaviour change, and were demotivated when this did not happen.

PPAC training should also emphasise the need to be sensitive during conversations with peers about increasing their PA. PPAC training in the current study included communication and listening skills and PPACs reported that they found these helpful in practice. However, in light of the challenges to motivation described by PPACs in our programme, it is suggested that the training could be extended to include brief motivational interviewing skills. Motivational interviewing is a guiding, non-confrontational communication style which aims to elicit the client’s own motivation for change ([32](#_ENREF_32)) and has been shown to be an effective approach when working with individuals to promote a range of health behaviours, including exercise ([33](#_ENREF_33)). Motivational interviewing skills may be particularly helpful where PPAC efforts are targeted to specific low active peers. Although we are not aware of any study which has used this approach with workplace peer health champions, it has been used successfully with community peer health champions who were supporting weight management ([34](#_ENREF_34)).

A final implication for practitioners is that workplace PA interventions which recruit PPACs should incorporate a support system which provides them with emotional and informational social support. Our data showed that sharing their experiences with other PPACs at social events was important for maintaining PPAC’s own motivation and confidence. When working with SMEs inter-organisational support systems should be developed.

**Conclusions**

Overall, the findings from this study contribute to the literature on the use of peer champions to promote PA in SMEs. We found that both direct encouragement and facilitating social networks for PA within the workplace were effective PPAC strategies. Being non-judgemental, enthusiastic, persistent, and a physical activity role model emerged as valuable characteristics for PPACs. Lastly, the importance of providing support to PPACs so that they maintain their own motivation was highlighted. These findings will be useful to health-promotion professionals developing workplace health programmes in SMEs with office based staff and may have transferability to wider workplace and health promotion contexts, for example self-management of chronic illness. Future research should explore the processes by which peer health champions facilitate changes across a range of employee health behaviours such as healthy eating and smoking cessation to identify common and behaviour specific recommendations.

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*Table 1: Demographic characteristics of the focus group participants*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Gender | Age (years) | Ethnicity | Company | Role | Focus group | Code |
| Female | 28 | White | E | PPAC | 1 | F1 |
| Female | 41 | White | F | PPAC | 1 | F2 |
| Female | 46 | White | J | PPAC | 1 | F3 |
| Female | 35 | White | A | PPAC | 1 | F4 |
| Female | 30 | White | C | PPAC | 1 | F5 |
| Male | 44 | White | F | PPAC | 2 | M1 |
| Female | 32 | White | B | PPAC | 2 | F6 |
| Female | 36 | White | B | PPAC | 2 | F7 |
| Female | 28 | White | D | PPAC | 2 | F8 |
| Female | - | White | I | PPAC | 2 | F9 |
| Female | 27 | White | H | HEP | 3 | F10 |
| Female | 48 | Mixed | J | HEP | 3 | F11 |
| Female | 28 | White | E | HEP | 3 | F12 |
| Female | 27 | White | C | HEP | 3 | F13 |
| Male | 29 | White | C | HEP | 3 | M2 |
| Male | 28 | White | G | HEP | 3 | M3 |
| Female | 32 | White | D | HEP | 4 | F14 |
| Female | 41 | Black | F | HEP | 4 | F15 |
| Female | 55 | White | I | HEP | 4 | F16 |
| Female | 53 | White | I | HEP | 4 | F17 |
| Female | 41 | White | H | HEP | 4 | F18 |
| Male | 27 | Asian | D | HEP | 4 | M4 |
| Male | 29 | White | F | HEP | 4 | M5 |
| Female | 30 | White | E | LEP | 5 | F19 |
| Female | 55 | White | E | LEP | 5 | F20 |
| Female | 25 | White | H | LEP | 6 | F21 |
| Female | 57 | White | E | LEP | 6 | F22 |

HEP=Highly Engaged Participant; LEP=Less Engaged Participant; PPAC Peer Physical Activity Champion

*Table 2: List of overarching themes, their subthemes and the number of references coded to each*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Overarching Theme** | **Primary Subtheme** | **Source (type)**  | **Sources (n)** | **Refs (n)** | **Secondary Subtheme** | **Source (type)** | **Sources (n)** | **Refs (n)** |
| 1. How PPACs encourage physical activity | a. Direct encouragement | All | 6 | 21 | 1. insufficient personalised advice
 | All | 3 | 5 |
| PPAC | 2 | 13 | PPAC | 0 | 0 |
| HEP  | 2 | 3 | HEP | 2 | 4 |
| LEP  | 2 | 5 | LEP | 1 | 1 |
| 1. Facilitate workplace social support
 | All | 6 | 42 | 1. disappointment when expectations not met
 | All | 2 | 7 |
| PPAC | 2 | 10 | PPAC | 0 | 0 |
| HEP | 2 | 16 | HEP | 2 | 7 |
| LEP | 2 | 16 | LEP | 0 | 0 |
| 2. Valuable PPAC characteristics | 1. Non-judgemental
 | All | 5 | 8 |  |  |  |  |
| PPAC | 2 | 4 |
| HEP | 1 | 1 |  |
| LEP | 2 | 3 |  |
| 1. Enthusiasm and persistence
 | All | 6 | 25 |  |  |  |  |
| PPAC | 2 | 7 |
| HEP | 2 | 11 |  |
| LEP | 2 | 7 |  |
| 1. Physical activity role model
 | All | 4 | 25 |  |  |  |  |
| PPAC | 2 | 19 |
| HEP | 1 | 5 |  |
| LEP | 1 | 1 |  |
| 3. Sustaining motivation for PPAC role | 1. Challenges to motivation
 | All | 2 | 24 |  |  |  |  |
| PPAC  | 2 | 24 |
| HEP | 0 | 0 |  |
| LEP | 0 | 0 |  |
| 1. Sources of resilience
 | All | 2 | 29 |  |  |  |  |
| PPAC  | 2  | 29 |
| HEP | 0 | 0 |  |
| LEP | 0 | 0 |  |

Sources= number of focus groups/interviews in which theme was coded; Refs= number of references coded at each theme; PPAC = Peer Physical Activity Champion; HEP = Highly Engaged Participant; LEP = Less Engaged Participant.

*Table 3: Quotations illustrating each of the subthemes*

|  |  |
| --- | --- |
| **Themes** | **Quotations** |
| 1. **How PPACs encourage promote physical activity**
 |
| a. Direct encouragement | * “I probably send out emails just as a, just as a rule, like a general reminder or, that I’m free if they want to come and chat to me or if they want any more goals setting up. But to be honest I find that I don’t get a huge response out of that so I tend then just to approach people as and when I see them round the office which just works much better.” (Excerpt 1, PPAC, F9)
* “I mean mine, yeah she was great. She emailed and so you had that reinforcement all the time. But when the classes stopped and she was still emailing saying which classes she was going to, did anyone want to come, and so that was good” (Excerpt 2, HEP, F18 )
* “They have been quite subtle in a way because it’s, just the contact you have with them reminds you that you’re part of a group that’s doing this thing and that helps with your perception of yourself as somebody who’s an exercising person. And actually that’s a big change. Regardless of how much I do I think of myself as somebody who does do things to keep themself, myself fit. So it’s kind of that perception’s reinforced every time you have a conversation with somebody in the lift or in passing about what you are doing or what you might do.” (Excerpt 3, HEP, F16)
 |
| a.i. insufficient personalised advice | * “And in retrospect doing, I did yoga and I did circuits and that seemed like a very good idea, but I really felt like I was floundering and I wanted more personal information. Particularly because I started off with knee problems and foot problems and I wasn’t quite sure should I be doing this or shouldn’t I be doing it so that would have been helpful early on.” (Excerpt 4, HEP, F17)
 |
| b. Facilitate wider workplace social support | * “I've never been to this gym for example by myself, like every single time you come you come with somebody from the office, because now there's this sort of like idea that you go with somebody else and if you're going to go you're going to encourage somebody else to go, and that's nice.” (Excerpt 5, PPAC, F4)
* “….and it was just that, it was a nice sense of, oh this is something bigger than just me going to the gym if there was a group of us trying to do this.” (Excerpt 6, HEP, M3)
* “I think people are different though in what they want to do. I was really surprised that I enjoyed the companionship of it. I didn’t expect to want to do classes with other people, and especially not the people from work. But in fact I liked doing classes with them and then the camaraderie around it at work.” (Excerpt 7, HEP, F17)
 |
| b.i. disappointment when expectations not met | * “he [PPAC] was useful in that he co-ordinated messages from the program, would email everyone, but there wasn’t, there wasn’t any sustained, there wasn’t anything more than that. So, I mean, I didn’t feel I needed additional motivation, I’m sure extra accountability and a bit of a shove would have helped, but it tended then just to be, oh you know there’s this resource, this is how to get onto the network. He would regularly do a cycle class, so he’d say, oh one or two of us are going up for that. But it, what I was hoping for is a bit, much more of things, oh let’s a group of us go down together.” (Excerpt 8, HEP, M2)
 |
| 1. **Valuable PPAC characteristics**
 |
| a. Non-judgemental | * “I guess someone that people can open up to and feel comfortable talking to and discussing things with because for some people it’s quite deeply buried the reasons why they’re not active and I think there is, or there can be a sense of guilt that they’re not doing as much as they should and again it’s just about not being judgemental and not making someone feel bad but looking at the positive and looking forward rather than just focusing on the difficulties which is easier said than done.” (Excerpt 9, PPAC, F8)
* “if they come and say, oh how’s it going and you say that you’ve not been doing anything different you’ve still sat on your bum, then sometimes what you don’t need is somebody telling you off you’d actually need the support of working out why you’re not doing it. Rather than making you feel even smaller than you’re already feeling by them asking the question, I think that’s quite important as well. (Excerpt 10, LEP, F19)
* “…..she’d always tell you what was going on and ask you to go, but then she’d never check up and say did you go or anything. And I think that’s, you don’t need to do that, so you don’t feel pressurised. Like, oh, no, I’m going to go into work now, I haven’t been to the gym, [PPAC name] is going to ask me. It wasn’t that kind of feeling.” (Excerpt 11, LEP, F21)
 |
| b. Enthusiasm and persistence | * Facilitator: “What would you say are the most important characteristics of a Workplace Activator, having been in the role?”

M1: “Enthusiasm”F8: “Not afraid of being seen as irritating” *Laughter* “You have to be fairly persistent. And active I think helps, I think leading by example. (Excerpt 12, PPACs M1 & F8)* “For me [Name of PPAC] was quite motivating and pushy, sometimes I think it’s fair to say, but it did give me the kick that I needed because one of the reasons as I say was laziness for me. So to actually have somebody there encouraging me to be more active and to actually get out and do things and walk places and, that was actually quite good for me and actually got me into more activity.” (Excerpt 13, LEP, F19)
 |
| c. Physical activity role model | * “So if you're never going to the gym, if you're never going out for a walk they, while they might not say something directly other than like in a bit of a jokey way they are probably thinking, oh, if she’s not doing it I can get away with not doing it maybe. So you don’t want to be the one pushing them away or discouraging them.” (Excerpt 14, PPAC, F4)
* “I think one of the Activators was often going to the gym so that helped us to see the other person going to the gym and continuing so that helped us to go along and then our, we might, we used to talk about how things are going and what are the things that you’re doing and sharing along so it was pretty good.” (Excerpt 15, HEP, M4)
 |
| **3. Sustaining motivation for PPAC role** |
| a. Challenges to motivation | * “ like before Christmas I tried to get people walking, I tried to get them to go down to, we’ve got a, sort of like a social room with a Wii in it and everything else, I said, well let’s go and have a game. And nothing, and then I went of walking I came back … well it took me 20 minutes to get here, there, anyone who wants to try and beat me? Nothing. Yeah people I do have, I have actually seem people turn around when they see me coming, go the other way, so I've sort of thought, urgh. But then I must admit it didn’t help because I got disheartened as well, and then it's sort of a bit like, oh, it's all just going to pieces.” (Excerpt 16, PPAC, F3)
* “But I just feel that you put in so much and you get nothing back, and like it does take time out of your working week to think about the stuff to do and like write the email, blah, blah, blah, then you just get nothing. And I just, I've given up to be honest with you” (Excerpt 17, PPAC, F5)
* “I think for me I’ve got a really hectic job and it sometimes feels a bit of a luxury to be emailing out about going to the gym or activator and so I have tended to go for the easy people, those who are, you know, I’m seeing in the kitchen or whatever and can ask, are you going to the gym tonight? That rather than focusing on the people who are less involved and who perhaps work offsite and I don’t see regularly and there is that feeling of guilt about just going for the easy option and not being particularly helpful to those that are maybe struggling and not that keen in the first place.” (Excerpt 18, PPAC, F8)
 |
| b. Sources of resilience | * “The most enjoyable thing for me is seeing people who are getting a lot out of it and clearly really enjoying being more active and recognising it themselves, what the benefits have been and going to the gym regularly or getting involved in more aerobics or whatever it happens to be.” (Excerpt 19, PPAC, F8)
* “I really, I think I found I’m more confident especially after we had the sessions where we met up and spoke about how we were getting on with the programme and I’d come in and I was re-engaging with that almost and then going back to my people and speaking to them.” (Excerpt 20, PPAC, F9)
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PPAC = Peer Physical Activity Champion; HEP = Highly Engaged Participant; LEP = Less Engaged Participant; F= Female; M= Male

**References**

1. World Health Organization. *Global recommendations on physical activity for health*. Geneva, World Health Organisation, 2010.

2. Hallal PC, Andersen LB, Bull FC, et al. Global physical activity levels: surveillance progress, pitfalls, and prospects. *Lancet* 2012; 380: 247-57.

3. Cabinet Office. *Moving More, Living More. The Physical Activity Olympic and Paralympic Legacy for the Nation.* London, 2014.

4. World Health Organisation. *Global strategy on diet, physical activity and health*. Geneva, World Health Organisation, 2004.

5. Department of Health PA, Health Improvement and Protection,. *Start Active, Stay Active: A report on physical activity from the four home countries’ Chief Medical Officers*. London, Department of Health, 2011.

6. Conn VS, Hafdahl AR, Cooper PS, et al. Meta-Analysis of Workplace Physical Activity Interventions. *Am J Prev Med* 2009; 37: 330-9.

7. Abraham C and Graham-Rowe E. Are worksite interventions effective in increasing physical activity? A systematic review and meta-analysis. *Health Psychol Rev* 2009; 3: 108-44.

8. Hutchinson AD and Wilson C. Improving nutrition and physical activity in the workplace: a meta-analysis of intervention studies. *Health Prom Int* 2012; 27: 238-49.

9. Verweij LM, Coffeng J, van Mechelen W, et al. Meta-analyses of workplace physical activity and dietary behaviour interventions on weight outcomes. *Obes Rev* 2011; 12: 406-29.

10. Malik SH, Blake H and Suggs LS. A systematic review of workplace health promotion interventions for increasing physical activity. *British Journal of Health Psychology* 2014; 19: 149-80.

11. Pereira MJ, Coombes BK, Comans TA, et al. The impact of onsite workplace health-enhancing physical activity interventions on worker productivity: a systematic review. *Occup Environ Med* 2015; 72: 401-12.

12. Chu AH, Koh D, Moy FM, et al. Do workplace physical activity interventions improve mental health outcomes? *Occup Med* 2014; 64: 235-45.

13. Vuillemin A, Rostami C, Maes L, et al. Worksite physical activity interventions and obesity: a review of European studies (the HOPE project). *Obes Facts* 2011; 4: 479-88.

14. Robroek SJW, van Lenthe FJ, van Empelen P, et al. Determinants of participation in worksite health promotion programmes: a systematic review. *Int J Behav Nutr Phy* [Internet]. 2009 29th Septermber 2010; 6(26). Available from: <http://www.ijbnpa.org/content/6/1/26>.

15. Marshall AL. Challenges and opportunities for promoting physical activity in the workplace. *J Sci Med Sport* 2004; 7: 60-6.

16. Dugdill L, Brettle A, Hulme C, et al. Workplace physical activity interventions: a systematic review. *Int J Workplace Health Manage* 2008; 1: 20-40.

17. Heaney CA and Israel BA. Social networks and social support. In: Glanz K, Rimer BK, Viswanath K, (eds). *Health behavior and health education: theory, research, and practice*. 4th ed. San Francisco: Jossey-Bass, 2008, pp. 189-210.

18. Linnan L, Fisher EB and Hood S. The power and potential of peer support in workplace interventions. *Am J Health Promot* 2013; 28: TAHP2-10.

19. Blake H and Chambers D. Supporting nurse health champions: Developing a ‘new generation’ of health improvement facilitators. *Health Educ J* 2012; 71: 205-10.

20. Ginis KAM, Nigg CR and Smith AL. Peer-delivered physical activity interventions: an overlooked opportunity for physical activity promotion. *Translational Behavioral Medicine* 2013; 3: 434-43.

21. Campbell MK, Tessaro I, DeVellis B, et al. Effects of a tailored health promotion program for female blue-collar workers: health works for women. *Prev Med* 2002; 34: 313-23.

22. Buller DB, Morrill C, Taren D, et al. Randomized trial testing the effect of peer education at increasing fruit and vegetable intake. *J Natl Cancer Inst* 1999; 91: 1491-500.

23. de Souza R, Dauner KN, Goei R, et al. An Evaluation of the Peer Helper Component of Go !: A Multimessage, Multi-“step” Obesity Prevention Intervention. *Am J Health Ed* 2014; 45: 12-9.

24. Tessaro IA, Taylor S, Belton L, et al. Adapting a natural (lay) helpers model of change for worksite health promotion for women. *Health Educ Res* 2000; 15: 603-14.

25. Hopkins JM, Glenn BA, Cole BL, et al. Implementing organizational physical activity and healthy eating strategies on paid time: process evaluation of the UCLA WORKING pilot study. *Health Educ Res* 2012; 27: 385-98.

26. Edmunds S, Stephenson D and Clow A. The effects of a physical activity intervention on employees in small and medium enterprises: a mixed methods study. *WORK: A Journal of Prevention, Assessment & Rehabilitation* 2013; 46: 39-49.

27. McLeroy KR, Bibeau D, Steckler A, et al. An ecological perspective on health promotion programs. *Health Educ Q* 1988; 15: 351-77.

28. Sallis JF, Owen N and Fisher EB. Ecological models of health behavior. In: Glanz K, Rimer BK, Viswanath K, (eds). *Health behavior and health education: theory, research, and practice*. 4th ed. San Francisco: Jossey-Bass, 2008, pp. 465-85.

29. Braun V and Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006; 3: 77-101.

30. Thompson SE, Smith BA and Bybee RF. Factors Influencing Participation in Worksite Wellness Programs Among Minority and Underserved Populations. *Fam Community Health* 2005; 28: 267-73.

31. Jones I, Brown L and Holloway I. *Qualitative research in sport and physical activity*. London: SAGE; 2013.

32. Miller WR and Rollnick S. *Motivational Interviewing*. New York: The Guilford Press; 2013.

33. Martins RK and McNeil DW. Review of Motivational Interviewing in promoting health behaviors. *Clin Psychol Rev* 2009; 29: 283-93.

34. Allicock M, Haynes-Maslow L, Carr C, et al. Training veterans to provide peer support in a weight-management program: MOVE! *Preventing chronic disease* 2013; 10: E185.