
Maintaining momentum: the challenge of a workplace physical activity program to sustain motivation and activity

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ABSTRACT

Physical inactivity is one of the major contributors to ill health and, hence, productivity costs in Australia. While the workplace is increasingly recognised as an appropriate site for promoting healthy behaviour, the effectiveness of workplace physical activity programs remains to be demonstrated, particularly with regards to participants' motivation to achieve sustained positive physical activity behaviour change. This exploratory study examined how participation in the Global Corporate Challenge (GCC) affected participants' motivation to sustain regular physical activity. The GCC is a commercially operated four-month program based on the 10,000 steps-a-day concept. Three distinct phases in terms of participant motivation were identified over the duration of the challenge: (1) raising self-awareness of low activity level and strategy development to increase physical activity; (2) implementation of strategies and increasing of activity levels; and (3) maintaining a healthy activity level. While initial motivation was high, resulting in positive physical activity behaviour changes in the short term, findings highlight the difficulty in achieving sustained positive physical activity behaviour, particularly with sedentary participants.

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Introduction

Physical inactivity can be bad for your health and participation in physical activity can contribute to improve an individual's health and wellbeing. To achieve the health benefits of physical activity, the US and Australian governments and the World Health Organisation have adopted physical activity guidelines for adults which recommend at least 30 minutes of moderate intensity physical activity on five or more days per week (Department of Health and Aged Care 1999; Haskell et al. 2007; WHO 2008). Although the importance of physical activity is generally understood and acknowledged at a population level, this understanding has not yet translated into more physically active populations (Arora et al. 2006).

In a workplace context, positive health behaviour changes in employees may result in reduced stress levels and in particular in a decrease in absenteeism due to illness and thus could result in considerable direct cost savings for employers. Strong physical and mental health is also commonly reported to positively affect an employee's performance and productivity, energy and concentration levels, motivation and morale, team spirit, loyalty and staff-turnover and creativity (Global Corporate Challenge 2007).

Externally organised physical activity programs and events provide an easily accessible platform for organisations to encourage and support staff participation in physical activity. However, the effectiveness of worksite physical activity programs even on physical activity, fitness and health remains to be demonstrated, with the current scientific evidence still inconclusive or limited (Proper et al. 2003). From a health perspective, the ultimate aim of any such program should be the achievement and transition of participants' positive physical activity behaviours into their long-term non-program environment.

This exploratory study used self-reflection techniques with participants in the Global Corporate Challenge (GCC) to document how participants feel and behave when publicly committed in a workplace context to be more physically active. The GCC is a virtual around-the-world team race based on daily step-count entries by participants. It is a commercially operated four-month program which targets employers to enter workplace teams under the banner of their organisation. Run annually, the program has grown rapidly since its inception in Australia in 2004 and in 2008 it expanded to the United Kingdom and the United States.

Specifically, this study asked the question: How does participating in a workplace and team initiative such as the GCC affect participants' motivation to sustain a physical activity program?

Methods

The GCC 2007 was a 125 day (18 week) program that ran from 14 May to 25 September 2007. As a general goal or benchmark for all participants, the GCC encouraged people to achieve a daily step count of 10,000 steps. All participants in the GCC from a single organisation (i.e. 56 GCC participants grouped in eight teams) in Perth, Western Australia, were invited via email to participate in this study. A total of 27 out of the 56 GCC participants (i.e. 48%) agreed to participate in the study and responded to at least one of four requests for information in the form of email diaries. Twenty-three participants completed at least three diaries.

Study participants were invited to complete four email diaries over the course of the GCC, each requesting them to reflect on their current thoughts and feelings:

- as the Challenge commenced, the participants were prompted for feelings of anticipation, mastery or apprehension;
- in the first month of the Challenge, the participants were prompted for early impressions, team cohesion and competitive feelings;
- in the third month of the Challenge, the participants were prompted for experiences and feelings towards the Challenge, and on sustaining or improving early levels of physical activity; and
- one week after the end of the Challenge, the participants were prompted for assessments of their own levels of physical activity (increased, decreased or stayed the same?), the value of being part of a workplace initiative, the value of being part of a team, and their strategies, if any, for being more physically active, and on sustaining of physical activity levels achieved during the Challenge.

Findings

Results from this study highlight three overarching issues influencing the success of a healthy workplace program in achieving lasting positive behaviour change in terms of participation in physical activity: (1) the importance of individual activity level prior to program

commencement; (2) the difficulty of creating behaviour change; and (3) the challenge of maintaining momentum.

Importance of individual activity level prior to challenge

In this study, eight out of 27 participants reported a level of physical activity below the National Physical Activity Guidelines of a total of about 2.5 hours of moderate intensity activity a week at the beginning of the GCC. Another 18 participants reported levels at or above the guidelines, while one participant did not respond to this question. The physical activity patterns of these two groups, as measured by reported step counts, varied considerably throughout the entire period of the challenge. Average step counts of previously 'active' participants commenced at the 10,000 step benchmark, rapidly increasing to the overall peak of almost 14,000 steps which was reached by week three and remained well above the initial step count and the 10,000 step benchmark for the duration of the challenge. Average step counts of previously 'sedentary' people, on the other hand, experienced a much slower increase, reaching an overall peak by week four of the 18 week challenge, before gradually declining to below initial levels (week five) until reaching a plateau sustained between week eight and 16, followed by a renewed decline.

These descriptive measures indicate that in terms of the main physical activity measure of the program (number of steps), the goal of achieving a sustained increase in physical activity of 'sedentary' people was not achieved. Setting a universal step goal may not be the best approach, particularly with inactive people. Instead, the use of individually relevant incremental goals that are regularly reviewed, taking into consideration starting levels of physical activity, general fitness and activity patterns of the individuals may be more appropriate and effective (Le Masurier et al. 2003). In addition, a goal of 10,000 steps per day may not be sustainable for some groups, such as chronic disease sufferers or older adults, while at the same time being too low for children (Tudor-Locke and Bassett 2004).

According to GCC promotional materials, the program is generally targeted at increasing everyday physical activity by physically inactive people, thus achieving positive behaviour change where it most counts: moving people from high risk to moderate or low risk (Global Corporate Challenge 2007). The organisers deliberately do not use the term race to describe the GCC, though the structure of the challenge with teams being ranked against each other as well as against a pacer team, clearly relies on the 'race' aspects to motivate people. This has resulted in a competition where in 2007 the top twenty teams achieved average daily counts of above 19,000 steps, with the leading team averaging above 30,000 steps a day, three times the target benchmark of 10,000. While such results reflect a remarkable achievement by these individuals and teams, it raises questions about how the program is faring in terms of its original target group of inactive people. While this study was not focussed specifically on inactive people but included individuals at a range of levels, results highlight the variations in motivations, experiences and perceptions of the challenge by individuals from different baseline physical activity levels and the importance of matching the baseline activity levels of team members. For example, some 'sedentary' and 'active' participants reported perceived pressure to 'not let the team down'. This was a motivator for some, but resulted in de-motivation for others, particularly where the baseline activity of team members differed strongly. Further, for physically active people, there were some negative effects of limiting 'countable' activities to walking and cycling and not considering intensity.

Changing habits is difficult and takes time

For people in full-time employment, the time spent at work and getting to and from work constitutes at least one third to half of a 24 hour day, for five days a week. The workplace and routines associated with the workplace context thus provide an ideal platform for achieving changes in habits relating to physical activity. The incorporation of positive behaviours into the workday routine and people's everyday lives and environments could help to achieve a healthy minimum level of physical activity. Thus if good physical activity changes established during the program have not been adopted as habits, participants are likely to revert to lower levels of physical activity after the conclusion of the program. Hence the ultimate aim of raising the long-term baseline physical activity level of participants will not have been achieved and the effects of the program will likely be short-lived. However, changing habits is not an easy or speedy process, and the four month duration of the GCC is an acknowledgement of that. Results from this study have identified three phases that participants went through which should be addressed sequentially in any physical activity program aimed at achieving long-term outcomes: (1) raise self-awareness of low activity level; (2) increase activity level; and (3) maintain healthy activity level.

Phase one - Raising self-awareness of low activity level

The most important result of the simple process of monitoring and recording their step counts was raising participants' self-awareness of actual physical activity levels. Overall, there was a sense of surprise (particularly in participants ranking at the low end of the activity scale) at the low step counts achieved at the beginning of the challenge. Similarly, even participants who already had established a pattern of regular activity on some days and thus considered the 10,000 step benchmark a relatively easy target, gained awareness of the effect of days with low activity on their average.

A reality check and awareness of the difference between actual physical activity levels compared to their expectations and the recommended levels provides the first step to positive behaviour change and is a strong motivator for change. Thus, the realisation of shortcomings compared to the benchmark of 10,000 steps can act as a motivator for positive behaviour change, commencing with the development of strategies and hopefully resulting in eventual behaviour change:

I have certainly been more conscious of my activity levels and of ways I can increase my activity as part of my everyday life.

Phase two – Raising the activity level supported by motivation through individual challenges and goals, team support and monitoring

Once the need for change has been acknowledged, there is a good opportunity, backed by motivation, to achieve positive behaviour change. The first step is the development of strategies and ways to increase physical activity. This may involve strategies as simple as choosing the stairs over using the lift to access the office, gaining a few extra steps every day, or replacing the daily drive to work with a walk or bicycle ride.

The second step is to implement the strategies, thus increasing physical activity. While there was generally a strong reported increase in the first few weeks of the challenge, increases by 'active' participants were immediate and bigger compared to the delayed and smaller increases by 'sedentary' participants. During this period, participants reported on a general 'buzz' and high motivation as they implemented their strategies and monitored an increase in their activity.

The monitoring of daily step counts as well as the individual and team averages provides a key motivator to increase or maintain participants' step count levels. In fact, as one

participant explained, the groundwork towards maintaining healthy physical activity behaviour beyond the challenge is being laid with a better perception of inactive days:

My activity has certainly increased ... Wearing a pedometer and monitoring this activity on daily basis gives me the push to increase the activity level. ... I am now able to judge the days I have not partaken in much exercise and attempt to be more active the following day.

Nevertheless, for others, monitoring alone may not be sufficient to achieve a considerable increase in physical activity, though the process does assist in identifying activity gaps. Support and encouragement from colleagues and team members, partners or friends, including pets, provide additional motivation and a social element essential to some: *"I still have to be pushed or push myself to go – the thought of going on a group activity is fun. I still don't view walking as something to be really enjoyed but if I can combine it with others at least the activity is more enjoyable"*.

Phase three - Maintaining activity level at healthy level

In terms of long-term health benefits, the third observed phase is the most important as it is about maintaining a healthy activity level for the long term and beyond the program. Thus it should also be about the transition from participation in a program such as GCC to healthy daily personal physical activity behaviours and habits.

The main motivation to GCC participants during the first two phases, apart from the novelty value, was to see measurable improvement in physical activity participation. However, as time progressed, the novelty effect of engagement in the GCC as well as the initial boost and enthusiasm generated by setting personal best step counts and raising the average waned. A continuing increase in activity level could not be sustained because of limited time in a day and other commitments. As activity began to plateau, the loss of the main motivator - improvement - was inevitable. At the same time, cracks started appearing in the functioning of some teams: *"The team bonding has broken down a little bit as we all get on with things"*. Further, bad habits by individuals affected the motivation of fellow team members: *"When members delay their entries for long (sometime me too) time I loose competitive sprit"*.

In addition, maintaining a routine was difficult for some due to making work and other commitments a higher priority. Thus the key challenge to a healthy workplace program such as the GCC is to maintain momentum despite the loss of novelty and motivation of continuing improvement in terms of the measure monitored, in this case the number of steps.

Challenge of maintaining momentum

The transition from being driven by observing a continuing increase to accepting and maintaining a steady but healthy level of physical activity is an important step in the process of forming healthy long-term physical activity habits. Study participants reported a marked decline in motivation over the duration of the GCC: *"I have found that my motivation was really high at the start of the challenge and although I am still motivated it has definitely declined"*.

Looking beyond the challenge, some participants reported a distinct decline in physical activity: *"... my exercise levels have really dropped off since it finished!"*. Another participant reported that strategies engaged to increase physical activity were no longer maintained after the completion of the GCC: *"I started to go walking in the evening more with my partner – that was my main strategy. However, since the challenge has ended this strategy has also seemed to end as other activities in our lives have taken precedence"*. Nevertheless, there were also some positive reports, indicating that the GCC approach did indeed help

individuals overcome boundaries and provide a platform for positive longer term behaviour change. At the very least, the lasting benefit of participation in the GCC is an increased awareness of inactivity.

Conclusions

The findings of this study highlight the importance of regular review and evaluation of the effectiveness of physical activity workplace programs, particularly with respect to engagement, participation and focus on sedentary people. In this study, while the program achieved an increase in awareness of participants' (in)activity, it did not achieve a sustained increase in the actual physical activity level of sedentary people. In light of evidence from this and other studies relating to the baseline activity of sedentary people, employing an increasing stepped target in the GCC depending on baseline activity, culminating in the achievement and maintenance of the recommended 10,000 steps per day benchmark, may be a more successful approach than the current 'one-size-fits-all' target. Similarly, to provide ongoing motivation and achieve improvements in physical activity for the duration of the challenge (and hopefully beyond) in the described target group of sedentary people, organisers could consider introducing ways to provide a level playing field and real opportunities for all teams, including those of less active participants. Maintaining motivation for the full duration of the program would go a long way towards developing lasting changes in behaviour and the implementation of positive physical activity habits, which would provide the foundation for long-term changes beyond the structure and motivation of a workplace team program.

Health and social benefits, and their perceived links to improved workplace productivity, are two common elements used to promote externally organised physical activity programs and events, particularly where employers rather than individuals are targeted to facilitate participation. The main purpose, nonetheless, of such programs and events is commonly to raise funds (for not-for-profit organisations) or make profit (for commercial organisations), with the added benefit of increasing general public awareness of health issues and promoting their organisation and cause. Thus in general, the organisers have little direct gain from evaluating the effectiveness of these programs and events beyond demonstrating some positive results for promotional purposes. The findings of this study highlight that employers genuinely wanting to shift sedentary workers to become more active may need to look at alternative strategies that go beyond externally organised physical activity programs.

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