

The Physical Activity Loyalty Card Scheme: Financial Incentives to Encourage Physical Activity

Why is physical activity so important?

Increasing participation in physical activity has great potential for improving public health. The current guidelines recommend that all adults should undertake a minimum of 150 minutes per week of at least moderate-intensity physical activity (makes you slightly out of breath). Past attempts to increase physical activity have only been modestly effective for short periods of time. Therefore, we need to re-think our approach to physical activity and develop new, innovative interventions that encourage people to do more activity. The Government is encouraging the use of financial incentives for promoting healthy lifestyles. However, little is known about how effective they are.

What is a “physical activity loyalty card”?

Learning from the retail industry, existing “proven” mechanisms, such as well known high-street loyalty card schemes that deliver behaviour change in the private sector can be applied to public health. We have developed a novel “physical activity loyalty card” which works in the same way as high-street loyalty cards. In the business sector, loyalty card schemes encourage repeated behaviour (i.e. loyalty), such as shopping at a particular retailer, by rewarding participants for their repeated custom by collecting points and subsequent rewards. We have applied this concept in public health whereby participants can earn points for minutes of physical activity which can be reimbursed for rewards (financial incentives).

What did we want to find out?

We wanted to pilot test whether it would be feasible to roll the Physical Activity Loyalty Scheme out along the Connswater Community Greenway once it is completed in order to encourage people to be more active. Therefore, we were interested in finding out if people wanted to participate in the study, the technology used to deliver the scheme worked, and whether the use of rewards (financial incentives) encouraged people to do more physical activity.

What did we do?

Our scheme used sensors placed along footpaths and in gyms. When users went for a walk, they swiped their loyalty card across the sensors. This collected information on the time that the card was scanned, and was sent to our study website and processed. Participants logged onto their private user account to get feedback on the amount of activity that they undertook. Participants “earned” 1 point for each minute of activity that they completed and collected points could be redeemed for rewards which were retail vouchers (e.g. free cinema pass, free sandwich voucher) sponsored by local businesses (see Table 1).



We recruited 406 civil servants based at Stormont Estate to take part in the 12-week study. Participants were selected at random to be in one of two groups; 1) the *Incentive Group* where they used their loyalty card to monitor their activity levels and earned points and rewards for the minutes of activity that they completed; or 2) the *No Incentive Group* where they used the card to monitor their activity levels but did not earn points or collect rewards. This allowed us to test how effective the rewards were in encouraging physical activity. We examined whether the intervention resulted

in increased physical activity levels at the end of the 12-week intervention and if this effect was maintained 3 months after the scheme ended.

What did we find?

The average age of participants was 43 years old, and over 60% were female (see Table 2). Participants completed around 60 minutes of physical activity in the first week of the scheme, and approximately 20 minutes of activity in the final week of the scheme (see Figure 1). Also, both groups completed approximately the same amount of activity over the 12-week study showing that the rewards on offer did not encourage participants to do more physical activity than those who did not receive rewards.

This study showed us that: 1) the technology worked; 2) people were very interested to take part; 3) the intervention has the potential to increase physical activity; 4) local businesses will sponsor the rewards which creates a sustainable business model. The study demonstrated a high uptake and participation rate, particularly among those who were inactive.

Why is this important?

This study has important implications for public health and the development of future strategies for promoting physical activity. The next stage is to do a much larger study which will involve rolling the Physical Activity Loyalty Card Scheme out to approximately 10,000 people who live in the nearby vicinity of the Connswater Community Greenway. This scheme will be available once the construction of the Greenway is completed. Such schemes could provide a sustainable business model by offering modest financial incentives, for example retail vouchers, in return for increased number of customers for local retailers.

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Table 1: Example of the types of rewards on offer

Incentive	Points Value	Minutes of Physical Activity Completed
Free sandwich (Buy 1 get 1 free)	75 points	75 minutes
Free exercise class pass	120 points	120 minutes
Free cinema pass	150 points	150 minutes
Free session of bowling / skating	150 points	150 minutes
£10 Sports shop voucher	300 points	300 minutes
£10 Spa & Beauty voucher (massage, facial)	300 points	300 minutes
Free exercise class pass x 5	600 points	600 minutes
£20 Spa & Beauty voucher (massage, facial)	600 points	600 minutes
Free personal training session	750 points	750 minutes
Free month gym membership for you and a guest	1200 points	1200 minutes

Table 2: Characteristics of those who took part

Characteristic	Incentive Group (n=199)	No Incentive Group (n=207)
Average age (years)	43.3 (SD 9.6)	43.3 (SD 9.2)
Gender	66% female	68% female
Physical activity level	20.1% High 23.1% Moderate 56.8% Low	20.8% High 30.4% Moderate 48.8% Low

Figure 1: Graph showing the minutes of physical activity over the 12 week study

