Western Cape Government

ideas 42

Healthy Lifestyles Pilot

Designing a Culture of Wellness

SEPTEMBER 2014

Summary

In September 2013, the Western Cape Government (WCG) created the "Walk4 Health" initiative—a partnership between the WCG, ideas42, the Sports Science Institute of South Africa, the Heart and Stroke Foundation for South Africa, ICAS\HealthInSite e|Care, and the University of Cape Town (UCT). The initiative had the goal of promoting a culture of health and wellness in the Western Cape.

ideas42 and UCT applied insights from the behavioural sciences to design a friendly competition between the 13 departments of the WCG offices, called Walk4Health. The goal was to make it both more salient and more enjoyable for people to be active while at work by promoting increased physical activity for improved health and introducing a competitive aspect to daily activities.

The intervention was tested through a six-week pilot, and we gauged the effectiveness of our challenge in aiding in weight loss and physical fitness by taking opt-in participants' pre and post biometric assessments. We found that the pilot did appear to effectively help participants lose weight, as well as lead to other improvements in standard makers of health such as BMI, cholesterol level, and blood pressure, as measured through comparison of pre- and post-challenge biometric assessments of participants. While the sample for this pilot was small, and contained no true control group, the results are suggestive of positive effects. The success of the six-week pilot program led the Department of the Premier (DOTP) within the WCG to instigate a second Walk4Health program that would run over the entire course of the year.

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The Walk4Health pilot offered preliminary evidence that the application of behavioural science can be a powerful remedy to everyday social problems. In a busy modern workplace where employees have little time or cognitive bandwidth to think about their health, the impact of small tweaks that nudge them to engage in healthy behaviours without requiring a lot of attention is real and measurable. The potential for targeting the obesity epidemic and resulting diseases through workplace-based wellness is significant and should be explored further.

Defining the Problem: Sedentary workplaces are key barriers to active lifestyles

As societies around the world become more affluent, health problems arising from malnutrition and hunger are being joined by a new problem—rising obesity rates. In the case of South Africa, a recent World Health Organisation survey found that 41% of females and 21% of males are obese. The rising rates of obesity are related to increases in obesity-related disease and healthcare costs. This is particularly true amongst the rising population of skilled office workers, whose jobs offer little opportunity for physical activity throughout the work week.

For office workers and other individuals not employed in physically demanding industries, the workplace is in a sedentary environment. This is contributing to a spike in waistlines—and illnesses. Moreover, from an employer perspective, obesity-related diseases can have a significant impact on workplace productivity, absenteeism, and premature turnover.

Since people in many mid- to high-income countries spend most of their day in the workplace, focusing on a worksite-based intervention was identified by the WCG as a potential way to positively affect the health of a population.

Problem Diagnosis: Mental models were found to be barriers to healthy choices in the WCG

Qualitative research conducted with members of the WCG identified the routines and social norms present in the culture of government workers. Through these conversations we discovered the underlying mechanisms and behavioural barriers informing healthy (or unhealthy) choices. We found:

Behavioural barriers to healthy choices in the WCG workplace

Employees tended to underestimate the impact of small changes in their behaviour on their overall health. This led them to taking no action at all, thinking that no benefit would come from anything other than a drastic change in lifestyle.

Employees did not think about engaging in healthy habits while in the workplace, as their mental bandwidth was consumed with other issues.

People had a distinct mental model of exercise and healthy eating habits, with many of them conceptualizing healthy behaviours as something one does at home or after work, rather than in the workplace. As you might expect, we also identified instances of the action-intention gap at work, in which some employees intended to engage in healthy behaviours after work, but admitted to not following through on their good intentions.

There were instances of overconfidence, with some employees believing that they were relatively healthy even when their BMI suggested otherwise.

Intervention Design and Testing: WCG employees competing for increased fitness

To address these behavioural issues, we worked with our partners design the 2013 Walk4Health Challenge: A six-week initiative involving all 13 WCG departments, with teams of four employees each, competing to take the highest number of steps per day. Recognizing the power of social norms on small lifestyle choices in a group setting, we incorporated incentives for participation, timely feedback via personal pedometers, and gamification to generate sustained attention within the teams into the challenge pilot.

A public leaderboard was announced and tracked weekly, enabling participants to compare their progress to that of others and motivate them to stay on track and climb higher in the rankings. Each team also had Wellness Ambassadors to their respective government departments that would serve as a model for other employees to take up healthy habits and more active daily routines.

Of the 50 participants who took part in the challenge, 30 participants completed both a pre- and post-assessment. On average, these participants lost weight, saw a decrease in their BMI, reduced their waist, chest, and thigh circumference, and increased their physical fitness capabilities.

To gauge the success of the Walk4Health pilot, the Sports Sciences Institute recorded participants' biometric measurements at the beginning and after the pilot program. Although the sample size was small, the results were statistically significant and suggest that the pilot may have helped participants achieve their goal of engaging in healthier habits with measurable progress.

2013 Walk4Health: Data Analysis Results	
Weight	**70% lost weight;** average weight lost = 2.8kg
BMI	**70% lowered BMI** from >31 (moderate) to <30 (low)
Cholesterol	**60% lowered cholesterol;** range of decrease: 0.21—2.69
Blood Pressure	**50% lowered blood pressure**
Chest Circumference	**90% decreased in chest circumference;** range of decrease: 0.5—8.9cm
Waist Circumference	**80% decreased in waist circumference;** range of decrease: 0.5—8.8cm
Hip Circumference	**80% decreased in hip circumference;** range of decrease 0.5—8.8cm
Waist/Hip Ratio	**76% decreased in waist/hip ratio**
12 min Motion Test	**97% increased the distance covered in 12 min**

Qualitative interviews and feedback after the Walk4Health challenge further supported the positive results among members of the community, leading to the possibility of scaling the challenge approach to other areas of Western Cape Government programs.

However, we should be careful not to over interpret these findings. Ideally, we always aim to implement our designs as a randomized controlled trial (RCT), which allows us to directly measure the causal impact of the interventions. But due to the logistical barriers to implementing a campaign-based RCT at a single site, we were unable to conduct an RCT in this particular case. While we are very happy with the strong results observed from the initial small pilot, the lack of randomization and rigorous testing does necessitate caution when fully interpreting the results' implications.

Lessons for the Future

The initial Walk4Health pilot was a real success. People who actively engaged in the program showed overwhelmingly positive increases in physical endurance, as well as decreases in key bio measurements, suggesting excess fat loss. The pilot demonstrated that a very simple, small behavioural intervention that accounts for human nature—providing a friendly, community-based competitive atmosphere—can provide people with the nudge they need to transform their existing good intentions to make lifestyle changes for the better into action. The findings from this initial small-scale pilot acted as a proof-of-concept that could form the basis of a larger experiment consisting of a full RCT in the future.

An interesting insight gained from the Walk4Health pilot, which has implications applicable to many types of social problems, is that making achieving goals both salient and enjoyable may make people more likely to engage in the behaviours that will make them healthier in the long term, rather than looking for an unsustainable quick fix.

These findings have wide-reaching implications for application and scalability across the global community, but particularly in countries like South Africa where obesity is quickly overtaking malnutrition as one of the most pervasive (and preventable) threats to physical health. As technology and societal norms lead us to adopt a sedentary lifestyle, it becomes increasingly crucial to create a culture of active wellness to combat the rise in obesity and obesity-related disease.