

Workforce Injury Prevention Programme

For employee health and wellbeing



University of Brighton

Sport and Exercise Science
Consultancy Unit

ABOUT US

The Sport and Exercise Science Consultancy Unit is part of the University of Brighton.

We have a history of delivering high quality consultancy work and have formed partnerships with a wide range of organisations, both nationally and internationally. We also work with individual athletes to help improve their performance.

OUR STAFF

The unit has a team of experts in the field of sport and exercise science who provide high quality support and services that are research informed.

We use modern and up-to-date techniques. Our delivery style is professional, but approachable and we provide a cost-effective and efficient service to all our clients.

OUR FACILITIES

Our state-of-the-art laboratories have a wealth of exercise testing equipment to monitor all aspects of human fitness, physiology, nutrition and psychology. This includes: exercise physiology laboratories, environmental chamber, hypoxic chamber, biomechanics laboratories and a biochemistry laboratory.

Our laboratories are accredited by BASES (our national professional body), meaning that all activity undertaken is in accordance with appropriate protocols, recognised as valid and applicable across the country, and safety considerations are adhered to.



OUR CLIENTS

We are proud to have the following companies amongst our many clients:

Balfour Beatty
East Sussex Fire and Rescue
ZT Safety Systems
Sussex Police

OUR SERVICES

We have considerable experience of delivering a wide range of tailored solutions to businesses of all sizes.

It is estimated that sickness absence and work related ill health costs the UK £100bn per year. Our innovative Workforce Injury Prevention Programme was developed to address workplace illness and is designed to benefit both employers and employees. We have developed three distinct packages in our programme:

Package 1 - Educational

This package contains education and monthly guidelines for supervisory level staff on maintaining and improving staff health in the workplace.

Package 2 - Screening

The educational package plus identification of the levels of risk employees are at in developing ill health, or being injured, using a traffic light system.

Package 3 - Intervention

A programme to educate and screen staff, plus introduce intervention exercises and follow up screening to assess improvement and impact.

GET IN TOUCH

For further information on our services please contact Karl Stevenson:
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A WORKING CASE STUDY

The Sport and Exercise Science Consultancy Unit worked in partnership with Balfour Beatty to look at the effects of an exercise based intervention on manual workers.

THE PROBLEM

Balfour Beatty has a team of 150 operatives who manually dig holes for water meters to be installed. The work being carried out by such operatives lends itself to increased risk of injury (e.g. herniated disc in spine, to shoulder rotator cuff, muscle tears).

In the shorter term, productivity is decreased due to health issues limiting working capacity. Longer term, these issues can lead to physical deterioration, serious injury and premature retirement from work.



PRE-SCREENING

The Sport and Exercise Science Consultancy Unit assessed a sample of dig team operatives for their physical movement capabilities to gain an understanding of their limitations, weaknesses, and imbalances that may lead to injury. The same exercises were carried out with a control group of Balfour Beatty workers.

RESULTS

The assessments for back mobility, lower back flexibility and hamstring range were particularly low, whilst lower back strength and stability were above average. Both these assessment scores were linked to large amounts of time spent sitting in a seated position, resulting in tight hamstrings, limited back mobility and reduced ranges of movement; all increasing the risk of subsequent injury. A 'traffic light' system was used to identify high, medium, and low risk operatives.



INTERVENTION PROGRAMME

A six week home based exercise programme was prescribed based on pre-screening results and tailored to reduce injury occurrence. Prescribed sessions were 20 minutes long, three times a week, totalling 18 sessions in all. The exercise programme was not given to the control group so the effects of the programme could be determined at a re-screening stage.

POST INTERVENTION RESULTS

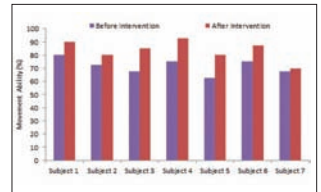
Control Group:
Results indicated no significant

differences between the pre and post screening results.

Intervention Group:

For those on the intervention programme, the post screening results were significantly different.

Scores on their physical movement capabilities had improved by an average of 11% as shown in the graph below.



Furthermore, those that had adhered to the programme fully had a greater improvement than those who had spent less time on the exercises.

FINDINGS

The completed research established that an intervention based programme demonstrated the differences it could make to the health of those involved which in turn should reduce injury and sick leave in a workforce such as Balfour Beatty.

The intervention increased contentment from staff by investing in their wellbeing, and should in turn result in a lower staff turnover.

Please see overleaf for a full range of the Sport and Exercise Science Consultancy Unit services.

SESCU SERVICES

**Marathon Support
Unit**

**Gold Science
Development
Programme**

Product Testing

**School and
College Visits**

**Strength and
Conditioning**

**Support in
Environmental
Extremes**

**Educational
Workshops**

Training Camps

**Individual Athlete
Support**

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