

Health Challenge Wales Seminar 22: Tackling Workplace Sedentary Behaviour

Speakers' biographies and presentation abstracts

Dr Stacy Clemes, Senior Lecturer, Loughborough University



Dr Stacy Clemes is a Senior Lecturer in the School of Sport, Exercise and Health Sciences at Loughborough University. Her research interests focus on the measurement of sedentary behaviour and physical activity in children and adults. She has expertise in intervention research promoting reductions in sedentary behaviour and increases in physical activity in the workplace and school setting, and has conducted a number of profiling studies examining sedentary behaviour and physical activity accumulated during and outside working hours in adults.

Epidemiology of sedentary behavior in office workers

Sedentary behaviour (sitting) is ubiquitous in modern society, with individuals of all ages exposed frequently to environments that require them to spend prolonged periods of time sitting. It is the most prevalent behaviour exhibited by children and adults, accounting for over 65% of waking hours in UK samples. Prolonged sitting adversely affects our health, with evidence suggesting that time spent sedentary is an independent risk factor for obesity, cardiovascular disease, some cancers, diabetes, and all-cause mortality. The modern day workplace encourages high volumes of sedentary behaviour, with most adults employed within sedentary occupations. This talk highlights the evidence linking sedentary behaviour to poor health outcomes and the prevalence of sedentary behaviour during and outside working hours in working-aged adults employed within sedentary occupations.

Sue Wing, Principal Public Health Practitioner, Public Health Wales

Sue Wing is a Principal Public Health Practitioner with Public Health Wales. Sue has worked in Public Health for fourteen years and achieved an MSc in Public Health in 2005. She currently works in the Working Age Adults team for Public Health Wales and manages the national Healthy Working Wales project.

Healthy Working Wales

Healthy Working Wales is a Welsh Government funded project managed by Public Health Wales. It aims to increase the number of people that benefit from the health benefits of work. The project includes workplace health awards, support for businesses to develop the way they manage health safety and wellbeing and work with health professionals to promote the effective use of the fit note.

This presentation outlines the national Healthy Working Wales project and explores the relationship between work and health, why workplace health is important and how the workplace can be used as a setting to promote health and wellbeing.

Emma Adams, Senior Research Associate, Loughborough University



Emma has been undertaking research in the School of Sport, Exercise and Health Sciences at Loughborough University since 2004 and currently leads the research and evaluation work in the BHF National Centre for Physical Activity and Health. She has extensive experience of evaluating national physical activity interventions and her research interests include promoting physical activity in workplaces and communities, with a particular focus on walking and cycling interventions which promote physical activity through active travel and recreation.

Development and evaluation of workplace health promotion programmes

A large proportion of the adult population are in employment and spend over 60% of waking hours at work. Therefore the workplace offers an ideal setting in which to promote physical activity and other healthy lifestyle behaviours. Review level research evidence for the effectiveness of workplace physical activity shows mixed findings and there has been a lack of research in UK organisations. The Well@Work: promoting active and healthy workplaces project aimed to address this gap and was delivered in 32 organisations across 9 regions of England with the potential to reach over 10,000 employees. The evaluation framework and findings from this project will be presented and the lessons learnt for the future development of effective workplace physical activity and health promotion programmes will be outlined.

Dr Gemma Ryde, Postdoctoral Research Fellow, University of Stirling



Dr Gemma Ryde is a researcher in physical activity, sedentary behaviour and public health at the department of Health Sciences, University of Stirling. Her research interests are in workplace physical activity and sitting time, with a specific focus on recruitment and participation, interventions, policy and organisational practice. Her aim is to help people to sit less, move more and exercise.

Conducting physical activity and sedentary behaviour research in the workplace

The workplace has evolved over the past 50 years into a sedentary, desk orientated environment. This has been shown to have detrimental effects on the health and well-being of employees. Workplaces and researchers alike are therefore interested in innovative ways to reduce sedentary behaviour in their employees. The aim of this presentation is to provide a brief overview of the history of workplace sitting and sedentary behaviour interventions with a focus on musculoskeletal health and injuries. Recent movement towards reducing sitting for metabolic health has promoted a growth of intervention studies in this area with the latest review findings into activity permissive work stations discussed. Examples of interventions from the scientific literature will then be described and their findings reviewed covering each stage of the social ecological model. This will be followed by considerations and learning for application of such interventions in the workplace setting.

Dr Lee Smith, Research Associate, University College London



Dr Lee Smith is one of the lead researchers on Active Buildings, a project to model the relationship between workplace layout and physical activity being conducted at University College London. Lee conducted his PhD in Epidemiology at the University of Cambridge, where his research focused on the influences on active travel in children and adolescents. Prior to this, Lee completed a BSc in Applied Sport Science and an MSc in Physical Activity and Health at Loughborough University where his research investigated how micro level features of the physical environment influence physical activity behaviour.

The Active Buildings research project

Health benefits of regular participation in physical activity are well documented but population levels are low. Office layout, and in particular the number and location of office building destinations (e.g. print and meeting rooms), may influence both walking time and characteristics of sitting time. Little research to date has focused on the role that the layout of the indoor office environment plays in facilitating or inhibiting step counts and characteristics of sitting time. The primary aim of this study was to investigate associations between office layout and physical activity, as well as sitting time using objective measures.

'Active buildings' is a unique collaboration between public health, built environment and computer science researchers. The study involves objective monitoring complemented by a larger questionnaire arm. UK office buildings were selected based on a variety of features, including office floor area and number of occupants. Questionnaires included items on standard demographics, well-being, physical activity behaviour and putative socioecological correlates of workplace physical activity. Based on survey responses, approximately 30 participants were recruited from each building into the objective monitoring arm. Participants wore accelerometers (to monitor physical activity and sitting inside and outside the office) and a novel tracking device was placed in the office (to record participant location) for five consecutive days. Data will be analysed using regression analyses, as well as novel agent-based modelling techniques.