ISPAR

Institute for Sport and Physical Activity Research

Conference 2022

CONNECTING THROUGH PHYSICAL ACTIVITY AND SPORT

Performance, health and wellbeing across the lifespan

PROGRAMME AND ABSTRACTS

University of Bedfordshire

CONTENTS

WELCOME

On behalf of the Institute for Sport & Physical Activity Research (ISPAR), we'd like to welcome you to our seventh annual ISPAR Conference with the theme of 'Connecting through physical activity and sport'.

We are delighted to be able to invite people back to our Bedford campus this year, and are excited to hear from our keynote speaker, Professor Robert Copeland, Professor of Physical Activity and Health, Director of the Advanced Wellbeing Research Centre, Sheffield Hallam University who will give our opening address on 'Placing physical activity at the heart of the NHS: A systems approach'.

COVID-19 has seen a great disruption to our lives. Our conference theme aims to highlight the importance of connections in society, and how this can be enhanced through physical activity and sport. Sustainability and health are key priority areas for us in ISPAR, and we look forward to hearing from our guest speakers from the Sustainable Transport Team at Bedford Borough Council. Our conference will go on to showcase the impactful research that our staff, postgraduate students and collaborators are engaged in within each of our three research centres. The day will be brought to a close with a warm welcome back to two of our former ISPAR PhD graduates, Dr Jane Williams and Dr Marsha Brierley, featured as our Alumni keynotes who will showcase their work and careers since graduating.

ISPAR's three research centres will feature throughout the day. Our Centre for Health, Wellbeing and Behaviour Change is led by Professor Angel Chater, our Centre for Physical Education, Sport and Human Movement is led by Dr Joanne Hill and our Centre for Physical Activity and Sports Performance is led by Dr Jeff Aldous. We are passionate about health and wellbeing, with talks including topics on prevention and treatment of non-communicable diseases, including obesity and diabetes; cardiometabolic risk, and glycaemic control. We will share our work in supporting optimal human performance through cooling strategies in team sport and the effects of footwear on postural stability. And we will showcase our value for social justice, with talks on the importance of an LGBTQ + Leadership Programme in Higher Education, girls' academy football coaching and tackling racial exclusion and discrimination in university sport and physical activity.

The impact of our work in ISPAR has been recognised, with 89% of our research classified as internationally excellent/world-leading in the most recent Research Excellence Framework (REF2021) assessment. Our research informs our work with the local community through our UoB Exercise Clinic, where we offer exercise sessions to individuals to help with their long-term health conditions, our Human Performance Centre, where we work with a range of people from elite athletes and sports teams, and individuals to optimise performance and our links with education and schools through the Faculty's training for Physical Education (PE) teachers and higher education.

We are incredibly proud of ISPAR and look forward to sharing our research with you. We hope our research and outreach work will inspire various ways to connect through physical activity and sport and we encourage you to connect with us during and after the conference, with a view to exploring new and continuing research opportunities and collaborations.

PROFESSOR ANGEL CHATER

Director, Institute for Sport
& Physical Activity Research (ISPAR)

MARTYN MORRIS

Head of School of Sport Science
and Physical Activity SSPA

DR JULIA ZAKRZEWSKI-FRUER & DR JOANNE HILL

Co-Deputy Directors of ISPAR

JULIET FERN

Dean of the Faculty of Eduction,
English and Sport

PROFESSOR ANDREW CHURCH

Pro Vice Chancellor for Research & Innovation

With special thanks to the ISPAR 2022 Organising Committee: Julia Fruer, Angel Chater, Joanne Hill, Mike Newell, Martyn Morris, Jeff Aldous, Phoebe Brook-Rowland, Nimra Butt, Dionne Jules, Abigail Saunders, Diana Soares.

PROGRAMME

15th September 2022

9:30-10:00 Registration and refreshments (tea and coffee/fruit/pastries)

10:00 WELCOME
Professor Angel Chater,
Professor in Health Psychology and Behaviour Change, Director of ISPAR

10:10 KEYNOTE : PLACING PHYSICAL ACTIVITY AT THE HEART OF THE NHS: A SYSTEMS APPROACH
Professor Robert Copeland, Director of The Advanced Wellbeing Research Centre, Professor of Physical Activity and Health, Sheffield Hallam University

11.00 EFFECTS OF BREAKING UP SITTING TIME ON CARDIOMETABOLIC RISK MARKERS AND CARDIAC FUNCTION POST MYOCARDIAL INFARCTION
Abbie Bell, PhD student, ISPAR, University of Bedfordshire

Chair: Julia Fruer

11:15-11:30 COMFORT/ 'MOVE MORE' BREAK

11:30 AN ONLINE SURVEY INVESTIGATING OVERWEIGHT, OBESITY AND THE IMPACT OF CHRONONUTRITION AND HEALTH BEHAVIOURS IN UK FIREFIGHTERS
Ashley Beckett, PhD student, ISPAR, University of Bedfordshire

11:45 THE EFFECTS OF SUBSTITUTING SITTING WITH STANDING AND WALKING IN FREE-LIVING CONDITIONS ON GLUCOSE IN OVERWEIGHT AND OBESE SOUTH ASIAN ADULTS
Kamalesh Dey, PhD student, ISPAR, University of Bedfordshire

12:00 GLYCAEMIC CONTROL, BREAKFAST CONSUMPTION AND ACTIVE TRAVEL AMONG ADOLESCENTS: DAILY ASSOCIATIONS AND VALIDATION OF MEASUREMENT TOOLS
Roberto Salvaggio, PhD student, ISPAR, University of Bedfordshire

12:15 APPROACHES TO ENGAGEMENT FOCUSED ON INDIVIDUAL'S AWARENESS AND ATTITUDES, TO AFFECT BEHAVIOUR CHANGE TOWARDS ACTIVE AND SUSTAINABLE MODES OF TRAVEL
Bedford Borough Council Sustainable Transport Team

Chair: Phoebe Brook-Rowland

12:30-13:30 LUNCH BREAK

Poster presentations (taught postgraduate and undergraduate students), activities (e.g. smoothie bike, micro scooter sessions and Nordic Walking tasters), research exhibitions, networking and refreshments.

13:30 THE EFFECT OF COOLING STRATEGIES ON INTERMITTENT AND TEAM-SPORT EXERCISE IN THE HEAT: A SYSTEMATIC REVIEW AND META-ANALYSIS

Jake Scott, PhD student, ISPAR, University of Bedfordshire

13:45 THE EFFECTS OF FOOTWEAR MIDSOLE THICKNESS ON POSTURAL STABILITY OF OLDER ADULTS AGED 65 TO 79 YEARS

Diana Soares, PhD student, ISPAR, University of Bedfordshire

14:00 HOW CAN THE BEHAVIOUR CHANGE WHEEL, AND ITS COMPONENTS, HELP UNDERSTAND AND FACILITATE EXERCISE PROFESSIONALS TO HELP PEOPLE WITH NON-COMMUNICABLE DISEASES BECOMING MORE ACTIVE?

Phoebe Brook-Rowland, PhD student, ISPAR, University of Bedfordshire

14:15 A SYSTEMATIC REVIEW OF LITERATURE ON PARENTAL INVOLVEMENT IN THE DEVELOPMENT OF TALENTED FEMALE SPORTS PERFORMERS

David Pears, Senior Lecturer in Sport Coaching

Chair: Joanne Hill

14:30-15:00 BREAK

Including poster presentations, activities and networking

15:00 QUEERING LEADERSHIP ON A LEADERSHIP DEVELOPMENT PROGRAMME FOR LGBTQ+ UK HE staff

Alex Baird, Lecturer in Sport and Physical Education and EdD student

15:15 THE EFFECTIVENESS OF COMMUNITIES OF PRACTICE: SUPPORTING THE USE OF COOPERATIVE LEARNING AS A PRDAGOGICAL MODEL TO DELIVER RECREATIONAL GYMNASTICS

Dr Michelle Flemons, Senior Lecturer in Sport Coaching and Physical Education and Hayley Flye, Gymnastics Participation Product Officer for British Gymnastics

15:30 THE REPRISE OF THE DJ METAPHOR FOR CURRICULUM INNOVATION: TOWARDS A POLYPHONIC FUTURE

Danny Golding, Senior Lecturer in Psychology Research Methods, and Dr Saul Keyworth, Senior Lecturer in Physical Education

15:45 CELEBRATING RESEARCH AND INNOVATION AT THE UNIVERSITY OF BEDFORDSHIRE: IMPLEMENTING THE RESEARCH AND INNOVATION STRATEGY, DEVELOPMENT OPPORTUNITIES AND THE RESEARCHER CONCORDAT

Professor Andrew Church, Pro-Vice Chancellor (Research and Innovation)

Chair: Diana Soares

16:00-16:05 COMFORT/ 'MOVE MORE' BREAK

16:05 ISPAR ALUMNI TALKS: RESEARCH, ACADEMIA AND PRACTICE-BASED ROLES IN THE AREA OF PHYSICAL ACTIVITY, SEDENTARY BEHAVIOUR, HEALTH AND WELLBEING

Dr Marsha Brierley (Specialist Behavioural Science Practitioner, Buckinghamshire Council) and Dr Jane Williams (Lecturer in Psychology, University of Bedfordshire)

16:30 THANKS, AWARDS AND CLOSE

Chair: Angel Chater

END OF CONFERENCE - NETWORKING AND SOCIAL CONTINUED AT THE WHITE HORSE PUB

INSTITUTE FOR SPORT AND PHYSICAL ACTVITY RESEARCH (ISPAR)

DIRECTOR OF THE INSTITUTE

Professor Angel Chater

CO-DEPUTY DIRECTORS OF INSTITUTE

Dr Joanne Hill & Dr Julia Zakrzewski-Fruer

CENTRE FOR PHYSICAL EDUCATION, SPORT & HUMAN MOVEMENT

Lead: Dr Joanne Hill
Deputy: Dr Michelle Flemons

CENTRE FOR HEALTH, WELLBEING & BEHAVIOUR CHANGE

Lead: Professor Angel Chater
Deputy: Dr Julia Zakrzewski-Fruer

CENTRE FOR PHYSICAL ACTIVITY & SPORTS PERFORMANCE

Lead: Dr Jeffery Aldous
Deputy: Dr Michelle Newell

SPECIAL INTEREST GROUPS

- PEDAGOGY & YOUTH SPORT
- EDUCATION & SPORT POLICY
- SOCIAL JUSTICE FOR PHYSICAL EDUCATION
- SPORT, PHYSICAL ACTIVITY & HEALTH PSYCHOLOGY
- BEHAVIOUR CHANGE INTERVENTION DESIGN & COMM.
- PREVENTION & MANAGEMENT OF LONG-TERM CONDITIONS
- SPORTS PERFORMANCE & BIOMECHANICS
- SEDENTARY BEHAVIOUR AND HEALTH
- PHYSICAL ACTIVITY, NUTRITION & METABOLISM

If you are interested in completing research with us (e.g., a collaborative project or research degree) in any of the areas above, please email ISPAR@beds.ac.uk. You can also access an overview of our research centres on our ISPAR website at unibeds.info/ISPAR and our staff profiles on the University website at unibeds.info/SSPAstaff and enquire with individual members of staff directly.

ISPAR

ISPAR SEMINAR SERIES 2021-2022

ISPAR regularly invites experts in their field to speak as part of our annual ISPAR seminar series. The 2021-2022 series included:

Learning to suffer: The impact of endurance training on pain tolerance, neuromuscular fatigue and aerobic fitness
Dr Martyn Morris, University of Bedfordshire

Network Physiology of Exercise: How organ systems interact. New Horizons in fitness and performance assessment
Dr Sergi Garcia Retortillo, Boston University

Having a research career with Impact
Dr Julie Bayley, University of Lincoln

Thinking shallow and thinking deep about concussion – what can we learn by getting punched in the face?
Dr Christopher Matthews, Nottingham Trent University

New insights and new interventions to limit sedentary behaviour and enhance health
Dr Daniel Bailey, Brunel University

Places, access and the future of informal outdoor sport and leisure
Professor Andrew Church, Dr Paul Gilchrist and Dr Katherine King, University of Bedfordshire

Active Games 4 Change
Jordan Wintle, University of Gloucestershire

Should we scale up? Using mixed methods to understand if, how, and why interventions work
Dr Marsha Brierley, Buckinghamshire County Council

Living with chronic pain: The influence of social support and pain management interventions on the psychosocial wellbeing of people with chronic pain.
Dr Katherine Findlay, Reading University

We are currently in the process of organising next year's series, and welcome your input. To suggest a speaker, get in touch via ispar@beds.ac.uk

KEYNOTE BIOGRAPHIES

PRESENTING AT 10:10 - 10:50

PROFESSOR ROBERT COPELAND CPSYCHOL PHD

PLACING PHYSICAL ACTIVITY AT THE HEART OF THE NHS: A SYSTEMS APPROACH

Abstract: Rob is Professor of Physical Activity and Health at Sheffield Hallam University and a Chartered Sport and Exercise Psychologist with the British Psychological Society. He moved to Sheffield in 1998 to undertake a Masters Degree at Sheffield University and has fallen in love with the city ever since. Rob completed his PhD in psychology at Sheffield Hallam University in 2006 and continues to be fascinated by how to create the conditions to make it easier for people to be physically active and in an equitable way. Rob is currently the Director of the Advanced Wellbeing Research Centre at Sheffield Hallam University and the National Centre for Sport and Exercise Medicine (NCSEM) in Sheffield, a London 2012 Olympic legacy programme, which aims to improve the health and wellbeing of the nation through sport, exercise and physical activity. In this talk, Rob will explore systems approaches to physical activity and share some examples of the work he has been leading in Sheffield to make it easier for physical activity to be a routine part of health and care, including the co-location of NHS clinics with leisure facilities in disadvantaged communities.

DAVID FISHER

APPROACHES TO ENGAGEMENT FOCUSED ON INDIVIDUALS' AWARENESS AND ATTITUDES, TO AFFECT BEHAVIOUR CHANGE TOWARDS ACTIVE AND SUSTAINABLE MODES OF TRAVEL

Abstract: David Fisher is an Active Travel Officer at Bedford Borough Council. David completed a MSc Physical Activity, Nutrition and Health Promotion at the University of Bedfordshire to augment his prior and proceeding work using brief and minimal interventions to produce enduring lifestyle change. His work at Bedford Borough Council engages groups and individuals in schools, workplaces, and the community helping participants identify ways they can make modal shifts in travel to improve their personal health & wellbeing, improve the built environment, their carbon footprint or improve air quality. Key to the team's approach is awareness raising, firstly using extrinsic motivators to produce initial behaviour change and then progressing to developing intrinsic enablers to maintain those modal shifts. A non-confrontational engaging approach helps to open segues to attitudinal shifts using a paradigm, which confronts the barriers of access, ability and ambition (https://doi.org/10.16997/ats.1075). The Sustainable Transport Team will be showcasing 'tools' they use for engagement: Smoothie Bike, Nordic Walking Tasters and Micro Scooter Sessions.

PRESENTING AT 12:15-12:30

ACTIVE TRAVEL OFFICER,

SUSTAINABLE TRANSPORT TEAM BEDFORD BOROUGH COUNCIL

ANDREW CHURCH

PRESENTING AT 15:45 - 16:00

CELEBRATING RESEARCH AND INNOVATION AT THE UNIVERSITY OF BEDFORDSHIRE: IMPLEMENTING THE RESEARCH AND INNOVATION STRATEGY, DEVELOPMENT OPPORTUNITIES AND THE RESEARCHER CONCORDAT.

Abstract: Professor Andrew Church is the Pro-Vice-Chancellor (Research and Innovation) at the University of Bedfordshire. He is also Professor of Human Geography focusing on human-nature relations and especially cultural ecosystem services. Andrew has extensive experience in using a range of quantitative and qualitative research methods to understand how people interact with, experience and affect the natural environment through their cultural, leisure and tourism activities. His contributions to recent projects funded by NERC/GCRF and the Valuing Nature Programme (NERC) have been highly interdisciplinary involving arts based practice and methodologies. Andrew works on international collaborative research projects and was a Coordinating Lead Author on the UN Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Andrew's work related to sport and leisure has focused on public access to water and urban outdoor space and has been funded by Defra, Sport England, the Forestry Commission and the Environment Agency.

You can read more about the University of Bedfordshire's Transformational Research here: https://www.beds.ac.uk/research/

ISPAR ALUMNI TALKS

RESEARCH, ACADEMIA AND PRACTICE-BASED ROLES IN THE AREA OF PHYSICAL ACTIVITY, SEDENTARY BEHAVIOUR, HEALTH AND WELLBEING 16:05-16:30

DR MARSHA BRIERLEY

SPECIALIST BEHAVIOURAL SCIENCE PRACTITIONER,

BUCKINGHAMSHIRE COUNCIL

Dr Marsha Brierley is an ISPAR graduate who was awarded in January 2021. Her PhD focussed on sedentary behaviour and cardiometabolic risk markers. After graduation, she was a post-doctoral Research Fellow for a clinical trial at Brunel University. She now works in public health on a variety of projects ranging from blood pressure checks in the community to GP referring behaviour to suicide risk prevention. She is primarily interested in health behaviour change and community-based interventions. Marsha also holds an MSc in Sports Performance and a BA in Psychology.

DR JANE WILLIAMS

LECTURER IN PSYCHOLOGY,

UNIVERSITY OF BEDFORDSHIRE

Dr Jane Williams is an ISPAR graduate who was awarded in July 2021. Currently she is working for the University ofBedfordshire in the School of Psychology as a Lecturer in Psychology. Jane's main areas of interest are within Health and Sport Psychology. Her research focus is the role that physical activity can play in supporting grief outcomes after individuals experience a bereavement.

SPEAKER ABSTRACTS

ABBIE BELL

EFFECTS OF BREAKING UP SITTING TIME ON CARDIOMETABOLIC RISK MARKERS AND CARDIAC FUNCTION POST MYOCARDIAL INFARCTION

Bell, A.C.,[1] Walker, D.,[1] Bailey, D.P.,[2] Zakrzewski-Fruer, J.K.,[1] Smith, L.[1] & Richards, J.[1]
.
[1]University of Bedfordshire, [2] Brunel University, London

Background: Approximately 7 million people in the UK are living with cardiovascular disease (CVD) (British Heart Foundation, 2021). Following a cardiovascular event, there is an increased risk of secondary CVD. Cardiac Rehabilitation is an exercise-based intervention used to prevent this. However, it focuses on increasing physical activity, as opposed to reducing sedentary behaviour. High amounts of sedentary time are an independent risk factor for CVD (Tremblay, et al., 2017). Breaking up sitting time with light-intensity physical activity improves cardiometabolic risk markers in healthy and diabetic populations over a single day (Peddie et al., 2013; Dempsey et al., 2016) but the effects in cardiac patients are unknown. The aim of this study is to evaluate the effects of breaking up sitting time on cardiometabolic risk markers and cardiac function in cardiac patients.

Methods: A randomised cross over trial design was used. Cardiac patients (n=18) will take part in three experimental conditions: (i) uninterrupted sitting; (ii) sitting with 5 minutes of standing every 30 minutes; (iii) sitting with 5-minute bouts of light stepping to a metronome every 30 minutes. Outcomes were blood pressure, postprandial glucose, insulin, triglycerides, high density lipoprotein cholesterol and total cholesterol, in addition to measures of cardiac function and structure.

Results: Data collection is currently in progress and results will be available by August 2022 for presentation at the ISPAR conference.

Conclusion: The findings will identify if breaking up sitting could be effective for improving cardiometabolic health in cardiac patients and thus will inform future BACPR guidelines.

ASHLEY BECKETT

AN ONLINE SURVERY INVESTIGATING OVERWEIGHT, OBESITY AND THE IMPACT OF CHRONONUTRITION AND HEALTH BEHAVIOURS IN UK FIREFIGHTERS

Beckett, A.,[1] Aldous, J.,[1] Ferrandino, L.[1] & Chater, A.[1,2].

[1]University of Bedfordshire, [2] University College London

Background: Overweight and obesity has risen from 65% to 80% in UK firefighters from 2008 to 2021, despite interventions to prevent/manage such health outcomes. Recent hypotheses suggest the required shift work may negatively impact chrononutrition behaviours and thus, unfavourable health. This study aimed to assess the chrononutrition behaviours of UK firefighters and to identify other health behaviours and occupational characteristics that may predict overweight and obesity.

Methods: An online survey was distributed across UK Fire Services. The survey measured chrononutrition, sleep quality, physical activity, caffeine use, smoking status and diet quality. Self-reported height and weight were also collected to calculate BMI.

Results: Current findings report UK firefighters are on average, overweight (BMI: 27.3 ± 3.6 kg.m2) with a combined prevalence of overweight (47%) and obesity (25%) at 72%. Firefighters living with obesity reported significantly ($p = 0.046$) lower breakfast consumption and significantly later last eating event time ($p < 0.001$), eating window preference ($p < 0.001$) and eating window at work ($p < 0.001$). Firefighters in the health weight category. Chrononutrition misalignment was significantly greater ($p < 0.001$) during working days compared to non-working days. Firefighters that reported poor sleep quality were 6.5 times more likely (odds ratio [OR]: 6.5, $p < 0.001$) to be categorised as obese compared to good sleep quality.

Conclusion: Firefighters are exposed to chrononutrition misalignment during working days and firefighters with obesity demonstrate unfavourable chrononutrition habits compared to healthy weight firefighters. Highlighting the potential importance of novel chrononutrition based interventions to help prevent/manage overweight/obesity in firefighters.

KAMALESH DEY

THE EFFECTS OF SUBSITUTING SITTING WITH STANDING AND WALKING IN FREE-LIVING CONDITIONS ON GLUCOSE IN OVERWEIGHT AND OBESE SOUTH ASIAN ADULTS

Dey, K.C.,[1] Zakrzewski-Fruer, J.K.,[1] Smith L.,[1] Jones, R.L.[1,2] & Bailey, D.P.[1,3]

[1]University of Bedfordshire, [2]University of Lincoln, [3]Brunel University London

Background: South Asians have the highest risk of cardiometabolic disease of any ethnicity in the United Kingdom. Substituting sitting with standing and walking every 30 min can improve some cardiometabolic risk markers (e.g., insulin) in Caucasians in free-living settings, but data in South Asians is lacking.

Methods: Fourteen overweight/obese [Body Mass Index (BMI) > 23 kg·m-2] South Asians [(7 male and 7 female); age: 40.9 ± 3.2 years; BMI: 26.5 ± 0.08 kg.m-2] completed two 4-day regimens in a counterbalanced order: Sit regimen (SIT; restrict walking and standing to ≤1 h/day each) and Sit Less regimen (SIT-LESS; substitute ≥5 h/day of sitting with ≥3 h of standing and ≥2 h of walking for 2-5 min every 30 min). Interstitial glucose, sitting, and physical activity levels (PA) were measured throughout. Statistical analyses were completed using linear mixed models.

Results: Compared with SIT, sitting time was significantly higher by 41% in SIT-LESS (7.02 [5.93, 8.10] h/day) ($P < 0.001$, $d = 1.65$). There were significant differences in all PA related variables (e.g., standing time) between the two regimens ($P \leq 0.008$, $d = 1.08$-2.39). There were no significant differences in glucose and some of the sedentary bout related variables (e.g., number of sedentary bouts) between the two regimens ($P \geq 0.09$; $d = 0.01$-0.55).

Conclusion: Substituting sitting with standing and walking for 2-5 min every 30 min can improve aspects of sitting time and PA patterns, but daily glucose responses are unaffected in overweight/obese South Asians in free-living conditions. Further research is needed to determine whether such interventions should be promoted for long-term cardiometabolic health in this underresearched population.

ROBERTO SALVAGGIO

GLYCAEMIC CONTROL, BREAKFAST CONSUMPTIOON AND ACTIVE TRAVEL AMONG ADOLESCENTS: DAILY ASSOCIATIONS AND VALIDATION OF MEASUREMENT TOOLS

Salvaggio, R.,[1] Zakrzewski-Fruer, J.K.,[1] Newell, M.[1] & Smith, L.[1]

.

[1]University of Bedfordshire

Background: Breakfast consumption and physical activity levels often decline during adolescence, both of which are associated with poor glycaemic control. Active travel is a key opportunity for morning physical activity in close proximity to the breakfast meal. This study aims to examine the daily associations between breakfast consumption, active travel and glycaemia and the validity of relevant assessment tools among adolescents .

Methods: Using a cross-sectional study design, 40-50 boys and girls aged 11-15 years will undergo study habituation, anthropometric measurements and an oral glucose tolerance test. During a subsequent 7-day period, participants will wear a Flash Glucose and ActiGraph GT3X monitor and complete a daily breakfast and active travel log. On day 8, participants will complete a questionnaire on their breakfast and active travel habits. The agreement between the habitual breakfast and active travel questionnaires and daily logs will be determined using weighted kappa. The correlation between oral glucose tolerance test-derived plasma glucose data and the free-living interstitial glucose data will be determined using Pearson product-moment correlation. Linear mixed models will be used to assess the within-participant daily associations between breakfast consumption and active travel with glycaemia and physical activity outcomes.

Current Status of Project: The study has been approved by the ISPAR Research Ethics Committee.

Implications: The findings will: 1) provide recommendations on valid questionnaires to assess habitual breakfast consumption and active travel frequency for future research, and 2) determine whether breakfast consumption and active travel can predict daily glycaemia to inform interventions to enhance glucose control among adolescents.

JAKE SCOTT

THE EFFECT OF COOLING STRATEGIES ON INTERMITTENT AND TEAM-SPORT EXERCISE IN THE HEAT: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Scott, J.R.,[1] Beckett, A.,[1] Gordon, R.J.F.,[1,2] Tyler, C.J.[2] & Aldous, J.W.F.[1]

[1]University of Bedfordshire, [2] University of Roehampton

Background: Climate change and global events in summer periods have increased the frequency of experiencing high thermal demands during intermittent exercise in hot/humid environments (> 26°C/~50%). Therefore, the current study analysed cooling strategies, which are typically the easiest, quickest, and most popular strategy to cope/beat the heat.

Methods: The study search found 27 studies that met the inclusion criteria, within these studies there were 44 different cooling trials which examined cooling either prior (n = 13), during (n = 11), or the combination of both (n = 20) and applied cooling in an external (n = 17), internal (n = 8), or mixed-method strategy (n = 19). Weighted-mean effect sizes (Hedges' g), heterogeneity (I2), and significance were calculated.

Results: Overall cooling significantly improved specific and overall physical performance by small effects (g = 0.22-0.26, P < 0.01). External cooling improved intermittent exercise performance (g = 0.22-0.26, P = 0.02- 0.06), but mixed-method found larger improvements in physical performance (g = 0.31-0.35, P < 0.01), whereas internal cooling had no effect (g = -0.02-0.14, P > 0.05). Pre-cooling (g = 0.02, P = 0.84) and percooling (g = 0.14, P = 0.32) had trivial effects on specific physical performance, but combination cooling found significant small improvements (g = 0.43, P < 0.01).

Conclusion: In summary, utilising multiple small cooling strategies targeting a large surface-area via a combination cooling approach which utilises the 'windows of opportunities' to cool during intermittent exercise, is the most beneficial cooling strategy for practitioners of intermittent/team-sports to prescribe/follow in hot environments.

DIANA SOARES

THE EFFECT OF FOOTWEAR MIDSOLE THICKNESS ON POSTURAL STABILITY OF OLDER ADULTS AGES 65 TO 79 YEARS

Soares, D.,[1] Fletcher, I.,[1] Mitchell, A.[1] & Charalambous L.[1]

[1]University of Bedfordshire

Background: Footwear is a major fall risk factor. Shoe midsole thickness may affect the postural stability of older adults (OA). This study investigated the effects of footwear midsole thickness on OA postural stability.

*Methods:*Twenty-six OA (age 71.0 ± 4.1 years; height 166.6 ± 7.1 cm; mass 69.2 ± 11 kg) completed a bipedal static balance test on a force plate. Three 30 s trials with 1 min seated rest between trials were conducted in four footwear conditions: own, thick, moderate and minimal shoes, differentiated by midsole thickness. One way ANOVA (with Bonferroni post-hoc; p < 0.05) analysed the differences between footwear for centre of pressure (CoP) sway path (mm), mean speed (mm/s), anteroposterior (AP) and mediolateral (ML) mean velocity (mm/s).

Results: Wearing minimal footwear, CoP sway path (P = 0.002, d = 0.64, 328.5 ± 79.4 mm), mean speed (P = 0.002, d = 0.65, 10.9 ± 2.6 mm/s), AP mean velocity (P = 0.007, d = 0.57, 9.1 ± 2.5 mm/s) were significantly better by a medium magnitude, and ML mean velocity by a large magnitude (P < 0.001, d = 0.91, 4.1 ± 1.1 mm/s), when compared with the participant's own shoes (379.3 ± 97.0 mm; 12.6 ± 3.2 mm/s; 10.5 ± 3.1 mm/s; 5.1 ± 1.2 mm/s). There were no significant differences between the other conditions.

Conclusion: The OA in this study exhibited significantly better postural stability when wearing minimal footwear. Therefore, wearing footwear with thin midsole thickness might improve OA' balance and reduce fall risk.

PHOEBE BROOK-ROWLAND

HOW CAN THE BEHAVIOUR CHANGE WHEEL, AND IT'S COMPONENTS, HELP UNDERSTAND AND FACILITATE EXERCISE PROFESSIONALS TO HELP PEOPLE WITH NON-COMMUNICABLE DISEASES BECOMING MORE ACTIVE?

Brook-Rowland, P.[1], Morris, M.[1],Wyld, K.[1] & Chater, A. [1,2].

[1] Institute for Sport and Physical Activity Research, [2] University College London

Background: Physical activity referral schemes are an intervention to increase physical activity in people with or at risk of non-communicable diseases. Currently the utility of the schemes is debated due to inconsistent participant outcomes. It is argued that the inclusion of behavioural change support could improve referral scheme outcomes.

Aim: This programme of research aims to investigate the sport and physical activity practitioners capability, opportunity and motivation to effectively implement behaviour change support.

Methods: The research will include a systematic review, in-depth interviews and observational data, to design, deliver and evaluate training, drawing from the Behaviour Change Wheel approach. The Behaviour Change Wheel is intended to be a systematic and rigorous approach, synthesising 19 intervention frameworks and 33 theories, to enable intervention developers to identify the appropriate intervention content, mode of delivery and evaluation.

Desired outcomes: This work-in progress will provide sport and physical activity practitioners with the 'what' and the 'how' of behaviour change support so they are better able to provide tailored sport within physical activity referral consultations.

DAVID PEARS

A SYSTEMATIC REVIEW OF LITERATURE ON PARENTAL INVOLVEMENT IN THE DEVELOPMENT OF TALENTED FEMALE SPORTS PERFORMERS.

Abstract: The role of parents in the development of talented sports performers is important and a growing area of research across a range of sports. However, there seems to be a dearth of this type of research in relation to parental involvement in the development of talented female football players and this provides a challenge when attempting to develop research informed practice. This systematic review aims to synthesise current research in order to provide a starting point for future research with a view to informing practice relating to parental involvement in the development of talented female football players. The review will be conducted in accordance with the 2020 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. PRISMA is an evidence-based minimum set of items or reporting in systematic reviews and meta-analyses. An initial pilot search using EBSCO Host to search Sports Discus conducted on parental involvement in the development of talented female football players elicited 221 records, but led to no papers that fully met the criteria for inclusion. Therefore, the search was widened to all sports. A further pilot search across all sports led to 430 records being identified. Initial findings would suggest that research on parental involvement covers topics such as the effect of parental values on motivational climate, the parent-child relationship, parental feedback, player involvement levels, player identity, parentalsupport, parental behaviour, gendered parental roles, player coping and sport socialisation.

ALEXANDRA BAIRD

QUEERING LEADERSHIP ON A LEADERSHIP DEVELOPMENT PROGRAMME FOR LGBTQ+ UK HE staff

Baird, A. J.[1],[2].

[1]University of Bedfordshire, [2]University College London

Background: Marginalisation and stigma affect all stages of leadership development for LGBTQ+ people including a reluctance to assume certain leadership roles, obstacles that may hinder LGBTQ+ individuals from emerging as leaders and challenges once they become a leader (Fassinger et al., 2010). To respond affirmatively to LGBTQ+ leadership and rectify a distinct need for LGBTQ+ leadership development, given the current gap within Advance HE leadership programmes, the first LGBTQ+ Leadership programme for HE is set to launch in one post-1992 English university during 2022/23. Seminar themes include routes into leadership and inspirational leaders, communication and presentation skills, leadership identity and practice, breaking down barriers and influencing cultural change, and building leadership networks. These seminars will take place over three face-to-face days alongside individual mentorship offered. This research aims to establish how LGBT+ leadership is understood and constructed in the context of a scheme that promotes LGBT+ leadership in HE. It will also identify the hidden assumptions that constructions of LGBTQ+ leadership rely upon and the implications of this.

Methods: I will invite attendees, mentors, workshop leaders and the programme leader to participate in one-to-one semi-structured interviews and will analyse transcripts using reflexive thematic analysis (Braun & Clarke, 2013). I have permission to access seminars as a researcher and will keep field notes of content, how sessions are delivered, how sessions are received, and the written and verbal contributions (from those who provide consent). Field notes and publicly available university documents (EDI Statements, Objectives and Reports) will be analysed using discourse analysis (Willig, 2014).

MICHELLE FLEMONS

THE EFFECTIVENESS OF COMMUNITIES OF PRACTICE: SUPPORTING THE USE OF CO-OPERATIVE LEARNING AS A PEDAGOGICAL MODEL TO DELVIER RECREATIONAL GYMNASTICS

Flemons, M.[1]. Flye, H,[2].

[1]University of Bedfordshire, [2]British Gymnastics

Abstract: The accepted, socialised and recycled coach practices inherent within gymnastics focuses on physical competence, using sport as technique, didactic approaches to delivery. British Gymnastics have created Rise Gymnastics, a modern recreational programme fostering social, affective, cognitive and physical development for gymnasts, whereby movement patterns are developed organically. However, despite using the UKCC framework in coach education to develop child centred pedagogies, traditional cultures and traditions are resistant to change. Coach pedagogies are best learned experientially within the context of the club, therefore to support a cultural shift in recreational coach practice, the study will adopt Communities of Practice to complement the current coach education provision. Co – operative Learning (CL) will be piloted in one recreational gymnastics setting following its inclusion in a BG Helpers course with 12 beginning coaches to support its implementation, ensuring that the social and affective domains have equal emphasis to physical competence and cognitive development in the planning and delivery of sessions. Using a mixed methods approach, the aims of the project are to a) explore the use of CL to support the holistic delivery of recreational gymnastics, and b) explore the effectiveness of using Communities of Practice to support coaches' situated learning post course to encourage sustainable change to coaching practice. The study will help to guide future coach education and coaching practice by facilitating a sustainable move towards a more holistic approach to coaching gymnastics; highlighting the importance of sport pedagogy and supported experiential learning as an integral part of coach education.

DANNY GOLDING AND DR SAUL KEYWORTH

THE REPRISE OF THE DJ METAPHOR FOR CURRICULUM INNOVATION: TOWARDS A POLYPHONIC FUTURE

Golding, D.[1] & Keyworth, S.[1].

[1] University of Bedfordshire

Abstract: Our desire in this paper is to explore the potentialities of a diffractive reading of Cano Abadia's (2021) 'Towards a Feminist and Affective Pedagogy of Vulnerability' for physical education/teacher education. A key tenet of her paper is to be open to otherness through exploring hopeful lines of flight from constraining educational dogma and normative ways of thinking-moving-feeling. Throughout she builds on Deleuze's (1994: 23) insight that 'there is something amorous yet fatal about all education'. This has direct relevance to PE as its overwhelmingly sport-centric nature has inspired and alienated in equal measure. Embracing diffraction, vulnerability and rhizomatic thinking-moving, we will explore the 'generative and creative possibilities' for being other-wisely and engaged through Dance and OAA. Throughout we seek to reprise our previous work on the DJ metaphor for curriculum innovation that highlights the desirability of being 'wide-awake' to the complexities and craft of harmoniously re-mixing the teaching-learning assemblage/s.

EXHIBITION

DR JOANNE HILL AND DR AMANDA JONES

STUDENT NARRATIVES OF FACE EQUALITY IN UNIVERSITY SPORT: DEVELOPING INCLUSIVE PRACTICE

Hill, J.,[1] & Jones, A.,[1]

.

[1] University of Bedfordshire

Current initiatives in UK higher education to improve equality and inclusion or address racism need to begin from the point of listening and responding to students. Funded by British Universities and Colleges Sport (BUCS), this exhibition forms part of a multi-case study project to listen to student voice, understand current policy and practice, and provide a toolkit for BUCS and universities in supporting the positive engagement of non-white students in sport and physical activity. The exhibition will present narrative vignettes of race (in)equality and inclusion in sport and physical activity at six case study universities in the UK. Sticky notes will be provided to prompt written responses to the narratives. We seek to offer further evidence of the value of student voice in anti-racist and diversity, equity and inclusion work across curricular and extra-curricular activities.

CELEBRATING ISPAR IN 2021-22
INVITED TALKS AND KEYNOTES

Baird, A. Engaging with teachers' reflections of Relationships, Sex and Health Education (RSE) in an English Primary School. Presented at BERA, ISPAR and UCL. (2021).

Chater, A. & Sniehotta. Real world behavioural science podcast #24 with Angel Chater, Professor of Health Psychology & Behaviour Change & Falko Sniehotta, Professor of Behavioural Medicine & Health Psychology (Online, November, 2021). https://podcasts.apple.com/us/podcast/24-angel-chater-professor-of-healthpsychologyid1473087056?i=1000541511685

Chater, A. The psychology of behaviour change and its role in dentistry. BeCinD (Behaviour Change in Dentistry) Launch event. (Online, November, 2021).

Chater, A. The role of health psychology and health psychologists in the COVID-19 response. Australian Psychological Society Division of Health Psychology Annual Conference: Keynote. (Online, November, 2021).

Chater, A. Connecting disciplines through translational systems and networks: Behavioural science, health psychology and public health. Northern Ireland Public Health Research Network. (Online, December 2021).

Chater, A. The British Psychological Society COVID-19 Behavioural Science and Disease Prevention TaskForce: What have we done? Where are the gaps?. Association for the Directors of Public Health and BSPHN joint event. (Online, March, 2022).

Chater, A. The role of health psychology in the COVID-19 response: A teachable moment for the value of the discipline. British Psychological Society Division of Health Psychology Scotland Annual Meeting. (Online, February, 2022).

Chater, A. Supporting careers of qualitative and mixed-methods researchers. NIHR Methodology Incubator. Launch Event (Online, February, 2022).

Zakrzewski-Fruer, J.K. The Climate Emergency: Funding, Research Gaps and Policy Priorities. Physiological Society webinar, (Online, June 2022).

Zakrzewski-Fruer, J.K. Paediatric cardiometabolic risk reduction through breakfast-physical activity manipulations and considerations for environmental sustainability. Nutrition Society Summer Conference, Food and Nutrition: Pathways to a Sustainable Future, Sheffield Hallam University. (Sheffield, July, 2022).

Zakrzewski-Fruer, J.K. Understanding metabolic responses of children and adolescents to inform cardiometabolic health-focused obesity interventions. Food Matters Live. (Online, November 2021).

SELECTED PUBLICATIONS AND REPORTS 2021-2022

2021

Alhusein, N., Scott, J., Neale, J., Chater, A. & Family, H. (2021). Engaging community pharmacists' views on providing a reproductive health service to women receiving opioid substitution treatment: A qualitative study using the TDF and COM-B. *Exploratory Research in Clinical and Social Pharmacy, 100071. https://doi.org/10.1016/j.rcsop.2021.100071*

Archer, E., Brannigan, J., Fletcher, I. & Sargent, D. (2021) Foundations of Strength & Conditioning. UK Strength and Conditioning Association. ISBN 978-1-8383103-0-1.

Bailey, D. P., Edwardson, C. L., Pappas, Y., Dong, F., Hewson, D. J., Biddle, S. J., Brierley, M. L. & Chater, A. M. (2021). A Randomised-Controlled Feasibility Study of the Regulate your Sitting Time (RESIT) Intervention for Reducing Sitting Time in Individuals with Type 2 Diabetes: Study Protocol *Pilot and Feasibility Studies, 7(1), 1-11.*

Baird, A. (2022). 'LGBTQ Voices in Education'. In Diverse Voices in Educational Practice: *A Workbook for Promoting Pupil, Parent and Professional Voice.*

Bottoms, L., Howlett, N., Chater, A., Jones, A., Jones, J., Wyatt, S., Mengoni, S. E., Sharma, S., Irvine, K., Trivedi, D. & Wellsted, D. (2021). Energy Matching of a High Intensity Exercise Protocol with a Low Intensity Exercise Protocol in Young People. *Sport Sciences for Health 17, 1035–1038 https://doi.org/10.1007/s11332-021-00774-3*

Brierley, M.L., Smith, L.R., Bailey, D.P., Every, S.A., Staines, T.A. & Chater, A.M. (2021). Perceived influences on reducing prolonged sitting in police staff: a qualitative investigation using the Theoretical Domains Framework and COM-B model. *BMC Public Health, 21(1):2126. doi: 10.1186/s12889-021-12019-6. PMID: 34798842.*

Carr, S., Burke, A., Chater, A., Howlett, N. & Jones, A. (2021). An evolving model of best practice in a community physical activity programme: A case study of 'Active Herts'. *Journal of Physical Activity and Health. 18(12), 1555-1562.*

Chater, A., Milton, S., Green, J., Gilworth, G. & Roposch, A. (2021). Understanding physician behaviour in the 6–8 weeks hip check in primary care: a qualitative study using the COM-B. BMJ Open, 11(3), e044114.

Chater, A. M., Shorter, G. W., Swanson, V., Kamal, A., Epton, T., Arden, M .A., Hart, J., Byrne-Davis, L., Drury, J., Whittaker, E., Lewis, L., McBride, E., Chadwick, P., O'Connor, D. B. & Armitage, C. J. (2021). Template for Rapid Iterative Consensus of Experts (TRICE). *International Journal of Environmental Research and Public Health, 18(19), 10255; https://doi.org/10.3390/ijerph181910255*

Courtenay, M. & Chater, A. (2021). Antimicrobial stewardship: a competency framework to support the role of nurses. *Primary Health Care, 31(2). doi: 10.7748/phc.2021.e1709*

Dey, K.C., Zakrzewski-Fruer, J.K., Smith, L.R., Jones R.L., Bailey., D.P. (2021) The Prevalence of Daily Sedentary Time in South Asian Adults: A Systematic Review. *International Journal of Environmental Research and Public Health, 18 (17) 9275.*

Finlay, K. A., Hearn, J. H.,& Chater, A. (2021). Grieving a disrupted biography: an interpretative phenomenological analysis exploring barriers to the use of mindfulness after neurological injury or *impairment. BMC Psychology,* 9(1), 1-12.

Finlay, K. A., Hearn, J. H. & Chater, A. (2021). The impact of neurological disability and sensory loss on mindfulness practice. *Disability and Rehabilitation,* 1-9. Doi.10.1080/09638288.2021.1887946

Ghio, D., Lawes-Wickwar, S., Tang, M. Y., Epton, T., Howlett, N., Jenkinson, E., Stanescu, S., Westbrook, J., Kassianos, A. P., Watson, D., Sutherland, L., Stanulewicz, N., Guest, E., Scanlan, D., Carr, N., Chater, A., Hotham, S., Thorneloe, R., Armitage, C. J., Arden, M. A., Hart, J., Byrne-Davis, L. & Keyworth, C. (2021). What influences people's responses to public health messages for managing risks and preventing infectious diseases? A rapid systematic review of the evidence and recommendations. *BMJ Open.* 11:e048750. doi: 10.1136/bmjopen-2021-048750

Howlett, N., Bottoms, L., Chater, A., Clark, A.B., Clarke, T., David, L., Irvine, K., Jones, A., Jones, J., Mengoni, S.E., Murdoch, J. Pond, M., Sharma, S., Sims, E. J., Turner, D. A., Wellsted, D. Wilson, J., Wyatt, S. & Trivedi, D. (2021). A randomised controlled trial of energetic activity for depression in young people (READY): a multi-site feasibility trial protocol. *Pilot and Feasibility Studies,* 7(1), 1-19.

Lawes-Wickwar, S., Ghio, D., Tang, M.Y., Keyworth, C., Stanescu, S., Westbrook, J., Jenkinson, E., A.P., Kassianos, Scanlan, D., Garnett, N., Laidlaw, L., Howlett, N., Carr, N., Stanulewicz, N., Guest, E., Watson, D., Sutherland, L., Byrne-Davis, L., Chater, A., Hart, J., Armitage, C., Shorter, G., Swanson, V. & Epton, T. (2021). A rapid systematic review of public responses to health messages encouraging vaccination against infectious diseases in a pandemic or epidemic. *Vaccines,* 9(2), 72.

Liapi, F., Chater, A.M., Randhawa, G. & Pappas, Y. (2021). Factors that facilitate or hinder whole system integrated care for obesity and mental health: a scoping review protocol. *BMJ* Open, *11*(8), e050527

McBride, E., Arden, M., Chater, A. & Chilcot, J. (2021). The impact of COVID-19 on health behaviour, wellbeing, and long-term physical health. *British Journal of Health Psychology, 26*(2), 259-270. https://doi.org/10.1111/bjhp.12520

Neale, J., Werthern, H., Alhusein, N., Chater, A., Scott, J. & Family, H. (2021). Contraceptive choice and power amongst women receiving opioid replacement therapy: qualitative study. *Drugs: Education, Prevention & Policy.* 1-12. https://doi.org/10.1080/09687637.2021.1954599

Spillane, D., Courtenay, M., Chater, A., Family, H., Whitaker, A. & Acton, J. H. (2021). Factors influencing the prescribing behaviour of independent prescriber optometrists: a qualitative study using the Theoretical Domains Framework. *Ophthalmic and Physiological Optics, 41*(2), 301-315. https://doi.org/10.1111/opo.12782

Thomas, R., Aldous, J., Forsyth, R., Chater, A. & Williams, M. (2021). The Influence of a blend of Probiotic Lactobacillus and Prebiotic Inulin on the Duration and Severity of Symptoms among Individuals with Covid-19. *Infectious Diseases Diagnosis and Treatment, 5*(182), 2577-1515.

Williams, J., Shorter, G. W., Howlett, N., Zakrzewski-Fruer, J. & Chater, A. M. (2021). Can physical activity support grief outcomes in individuals who have been bereaved? A systematic review. *Sports Medicine Open,* 7(1), 1-17. https://doi.org/10.1186/s40798-021-00311-z

Yates, J. D., Aldous, J. W., Bailey, D. P., Chater, A. M., Mitchell, A. & Richards, J. C. (2021). The Prevalence and Predictors of Hypertension and the Metabolic Syndrome in Police Personnel. *International Journal of Environmental Research and Public Health*, *18*(13), 6728.

Zakrzewski-Fruer, J. K., Seall, C. & Tolfrey, K. (2021). Breakfast Consumption Suppresses Appetite but Does Not Increase Daily Energy Intake or Physical Activity Energy Expenditure When Compared with Breakfast Omission in Adolescent Girls Who Habitually Skip Breakfast: A 7-Day Randomised Crossover Trial. Nutrients, *13*(12), 4261.

2022

Amirova, A., Taylor, L., Volkmer, B., Ahmed, N., Chater, A. M. & Fteropoulli, T. (2022). Informing behaviour change intervention design using systematic review with Bayesian meta-analysis: physical activity in heart failure. *Health Psychology Review,* 1-50.

Bailey, D.P., Stringer, C.A., Maylor, B.D. & Zakrzewski-Fruer, J.K. Lower Amounts of Daily and Prolonged Sitting Do Not Lower Free-Living Continuously Monitored Glucose Concentrations in Overweight and Obese Adults: A Randomised Crossover Study. *Nutrients,* 2022;14(3):605.

Brierley, M.L., Smith, L.R., Bailey, D.P., Ojo, S., Hewson, D., Every, S.A., Staines, T.A. & Chater, A.M. (2022: accepted 24-01-2022). Evaluating a multi-component intervention to reduce and break up office workers' sitting with sit-stand desks using the APEASE criteria. *BMC Public Health, 22*(458), 1-15.

Burcal, C. J., Rosen, A. B., Jaffri, A., Mitchell, A., Koldenhoven, R. M., Powden, C. J., Fraser, J. J., Simon, J. E., & Hoch, M. (2022). Participant-Level Analysis of the Effects of Interventions on Patient-Reported Outcomes in Patients with Chronic Ankle Instability. *Journal of Sport Rehabilitation*, Epub ahead of print.

Byrne-Davis, L.M.T., Turner, R.R., Amatya, S., Ashton, C., Bull, E.R., Chater, A.M., Lewis, L.J.M., Shorter, G.W.,Whittaker, E. & Hart, J.K. (2022). Using behavioural science in public health settings during the COVID-19 pandemic: The experience of public health practitioners and behavioural scientists. *Acta Psychologica, 224,* 103527, ISSN 0001-6918, https://doi.org/10.1016/j.actpsy.2022.103527

Chater, A. M., Howlett, N., Shorter, G. W., Zakrzewski-Fruer, J. & Williams, J. (2022: submitted 04-12-21; accepted 11-02-2022). What is it like to experience the death of a parent as a young person: A qualitative investigation. *International Journal of Environmental Research and Public Health*, *19*(4), 2083.

Finlay, K. A., Hearn, J. H., Gillett, J. L., Ratwatte, P., Morton-Bye, J. & Chater, A. M. (2022). Adaptations to mindfulness-based interventions for neurological impairment: The SMALL PROMPTS approach. Rehabilitation Psychology. https://doi.org/10.1037/rep0000455

Grey, E. B., Atkinson, L., Chater, A., Gahagan, A., Tran, A. & Gillison, F. B. (2022: accepted 03-04-2022). A systematic review of the evidence on the effect of parental communication about health and health behaviours on children's health and wellbeing. *Preventive Medicine,* 159, 107043.

Hill, J., Walton-Fisette, J.L., Flemons, M., Philpot, R., Sutherland, S., Phillips, S., Flory S.B., & Ovens. A. (2022 in press) Social justice knowledge construction among physical education teacher educators: The value of personal, professional, and educational experiences. *Physical Education and Sport Pedagogy.*

Liapi, F., Chater, A. M., Pescheny, J. V., Randhawa, G. & Pappas, Y. (2022). Understanding the Experience of Service Users in an Integrated Care Programme for Obesity and Mental Health: A qualitative investigation of Total Wellbeing Luton. *International Journal of Environmental Research and Public Health, 19*(2), 817. https://doi.org/10.3390/ijerph19020817

Newman, K. L., Chater, A., & Knibb, R. C. (2022). Beliefs about food allergies in adolescents aged 11–19 years:*A systematic review. Clinical and Translational Allergy, 12*(4), e12142.

Ojo, S. O., Bailey, D. P., Chater, A. M. & Hewson, D. J. (2022). Workplace Intervention for Reducing Sitting Time in Sedentary Workers: Protocol for a Pilot Study Using the Behaviour Change Wheel. *Frontiers in Public Health,* 10. https://doi.org/10.3389/fpubh.2022.832374

Rosen, A. B., Jaffri, A., Mitchell, A., Koldenhoven, R. M., Powden, C. J., Fraser, J. J., Simon, J. E., Hoch, M. & Burcal, C. J. (2022). Association of Ankle Sprain Frequency With Body Mass and Self-Reported Function: A Pooled Multisite Analysis. *Journal of Sport Rehabilitation,* 1–6. https://doi.org/10.1123/jsr.2021-0453

Thomas, R., Williams, M., Aldous, J., Yanagisawa, Y., Kumar, R., Forsyth, R. & Chater, A. (2022). A Randomised, Double-Blind, Placebo-Controlled Trial Evaluating Concentrated Phytochemical-Rich Nutritional Capsule in Addition to a Probiotic Capsule on Clinical Outcomes among Individuals with COVID-19—The UK Phyto-V Study. *COVID, 2*(4), 433-449.

Wells, J. E., Mitchell, A. C., Charalambous, L. H., & Fletcher, I. M. (2022). Relationships between highly skilled golfers' clubhead velocity and kinetic variables during a countermovement jump. *Sports Biomechanics,* 1-13. https:// doi.org/10.1080/14763141.2022.2041709

CONFERENCE PRESENTATIONS

Allcott-Watson, H., Chater, A., Troop, N. & Howlett, N. A systematic review of interventions targeting physical activity and/or healthy eating behaviours in adolescents: *practice and training.* BPS Division of Health Psychology Annual Conference 2022 (Bristol, June, 2022).

Beckett, A., Chater, A.M. & Aldous., J. *The prevalence of metabolic syndrome in firefighters:* A systematic review and meta-analysis. Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Brook-Rowland, P., Tolani, F., Christopher, E., Moffat, A. & Chater., A. M. A qualitative evaluation of a constellation of *COVID-19 disease prevention behaviours using the COM-B model and the Theoretical Domains Framework.* BPS Division of Health Psychology Annual Conference (Bristol, June, 2022).

Chater, A., Bailey, D. & Smith, L. Changing sedentary behaviour, inactivity, health and well-being through influencing policy, training and practice. *REF2021 Impact Case Study.* Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Finlay, K., Hearn, J., Tidmarsh, L., Barnes., A. & Chater, A. *Trialling Adapted Mindfulness Practices Tailored for People with Spinal Cord Injury: A Feasibility Study*. BPS Division of Health Psychology Annual Conference (Bristol, June, 2022).

Hill, J. (2021). Student journeys: *Academic identity among commuting students before and during the COVID19 pandemic.* Society for Research in Higher Education Conference (Online, December, 2021).

Hill, J. (2022). *Meaningful physical activity at home after lockdown: reflecting on space, interaction and adventure.* Qualitive Research in Sport and Exercise (QRSE) Conference (Durham, July, 2022).

Hill, J., & Baird., A. (2022). *Commuting students' geographical, emotional, and cultural dimensions of learning before and during COVID-19.* University of Bedfordshire Research and Innovation Annual Research Conference (Luton, June, 2022).

Jenkinson, E., Byrne-Davis, L.M.T., Chater, A. M., Hart, J., Renwick, L. & Whittington, *A. Working with Health Education England to develop funded Health Psychology training posts in NHS workforce redesign.* BPS Division of Health Psychology Annual Conference (Bristol, June, 2022).

Kukuscuka, D., Wyld, K., Whitehall, J., Shorter, G., Howlett, N. & Chater, A. M. *Positive Psychology Interventions (PPIs) to improve the health and wellbeing of Police staff.* Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Liapi, F., Chater, A.M., Randhawa, G. & Pappas, Y. *Factors that facilitate or hinder whole system integrated care for obesity and mental health.* Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Moffat, A., Cook, E. & Chater, A.M. *Using behavioural science within local authority Public Health.* Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Moffat, A., Cook, E., Smith, L. & Chater, A. M. *Exploring the influences on the use of behavioural science in public health practice:* A qualitative investigation. BPS Division of Health Psychology Annual Conference (Bristol, June, 2022)

Saunders, A. The impact of resistance training on cardiac structure and function: *A systematic review and meta-analysis*. British Association of Sport and Exercise Sciences Conference (November 2021)

Soares, D., Fletcher, I., Mitchell, A. & Charalambous, L. (2021). *Intra and Intersession Reliability of Centre of Pressure Measures in Older Adults during Bipedal Static Postural Tests.* XXVIII Congress of the International Society of Biomechanics (ISB) (Online, July 2021).

Whitehall, J., Fruer, J. & Chater, A.M. *Obesity-Related Behaviour change Training (ORBIT) for health care professionals*. Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Williams, J., Shorter, G.W., Howlett, N., Zakrzewski-Fruer J. & Chater A.M. *Can physical activity support grief outcomes in individuals who have been bereaved? A systematic review.* Institute for Sport and Physical Activity Research (ISPAR) Annual Conference (Online, September, 2021).

Williams, J., Howlett, N., Shorter, G. W., Zakrzewski-Fruer, J. & Chater, A. M. *What roles does physical activityplay following the death of a parent as a young person? A retrospective qualitative investigation*. BPS Division of Health Psychology Annual Conference (Bristol, June, 2022).

Zakrzewski-Fruer, J.K., Morari, V., Champion R.B., & Jones, R.L. Paediatric Workshop Physiology 2021. *Acute cardiometabolic and exercise responses to breakfast consumption versus breakfast omission in adolescent girls: A crossover trial.* (Online, 14th to 17th September 2021).

CONGRATULATIONS

Congratulations to Emily Bousfield awarded her MSc by Research PhD investigating perceptions and use of cooling modalities by athletes, coaches, and support staff in endurance-based sports. Supervisors: Dr Jeffrey Aldous and Dr Louise Ferrandino.

Congratulations to James Hall awarded his MSc by Research investigating 'game sense', a theoretical model for a practical reality, a discussion with performance and community rugby union coaches. Supervisors: David Pears and Dr Helen Ives.

Congratulations to Oliver Lily awarded his MSc by Research PhD investigating effects of bracing and a futsalspecific fatiguing protocol on muscle reaction time and ground reaction forces. Supervisors: Dr Andrew Mitchell and Dr Laura Charalambous.

Congratulations to George Maddams awarded his MSc by Research PhD investigating muscle activity and kinematic differences between a range of hip dominant resistance exercises. Supervisors: Dr Iain Fletcher and Dr Laura Charalambous.

Congratulations to Charlotte Murphy awarded her MSc by Research PhD investigating the effect of singular and combined ice vest and neck collar cooling used pre-match and at half-time, during a soccer specific simulation in the heat. Supervisors: Dr Jeffrey Aldous and Dr Rebecca Jones.

Congratulations to Dr Cheryl Barford awarded her PhD investigating torso muscle onset in response to an unexpected lower body perturbation in young adults, older adults and trained participants. Supervisors: Dr Iain Fletcher and Dr Jo Richards.

Congratulations to Dr Kamalesh Dey awarded his PhD investigating the effect of breaking up sedentary time on cardiometabolic disease risk markers in South Asian adults. Supervisors: Dr Julia Zakrzewski-Fruer, Dr Lindsey Smith, Dr Rebecca Jones and Dr Daniel Bailey.

Congratulations to Dr Chris Long awarded his PhD assessing stability and post-collision stabilisation in elite level rugby union athletes. Supervisors: Dr Iain Fletcher, Dr Laura Charalambous and Dr Andrew Mitchell.

Congratulations to Professor Angel Chater, our ISPAR Director, who has been appointed as the Co-Director of the Centre for Behaviour Change at University College London. Angel will stay with us for a day a week to continue supporting the leadership of ISPAR.

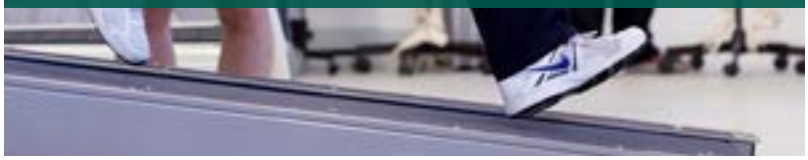
COMMUNITY EXERCISE CLINIC

The University of Bedfordshire's Community Exercise Clinic was set up in April 2017 in conjunction with the local Diabetes UK support group. Its aim is to support those in the local community diagnosed with Type 2 Diabetes in managing their condition through exercise and encourages behaviour change through education, motivation and providing and supportive environment. Since then, the Community Exercise Clinic has expanded to support those in the local community who have been diagnosed with any disease or condition that their GP or hospital consultant believes exercise will help. The clinic is currently working with clients with cancer, weight management issues, cardiac rehabilitation, mental health, lower back problems, and early onset dementia helping improve their quality of life and improve their health.

Sessions are completed as an exercise circuit, but this can be adapted if individuals want one-to-one sessions. The circuit comprises of 8-10 exercise stations, each having a choice of exercises with differing levels of difficulty. Trained University of Bedfordshire students support the sessions to gain practical experience whilst being guided by a qualified staff member and Exercise Referral Specialists.

To enter onto the Community Exercise Clinic programme clients need to approach their GP consultant or health professional and ask to be referred through the Lifestyle Hub. Once referred, clients will be contacted by the Community Exercise Clinic and invited to join one of our sessions. Please contact Kevin Wyld (Kevin.Wyld@beds.ac.uk) if you have any questions.

HUMAN PERFORMANCE CENTRE



WHO WE ARE

We offer a range of health, fitness and wellness services aimed at optimising your overall wellbeing. Whether your goal is to lose weight or improve your athletic performance, our state of the art facilities and highly trained sport and exercise scientists can assist to achieve your fitness goals.

- Environmental training
- Health, Wellness, & Metabolic Asessment
- Strength and Conditioning
- Team Sport Assessment
- Fitness Assessment
- VO_2 Max testing
- Lactate Threshold Profiling
- Anthropometry Testing
- Biomechanical Testing
- Nutrition Assessment and support
- Behaviour change support and Training

Kayamba Prospere, Boxer

"The service provided by the human performance centre has been exceptional. I was able to have the fitness testing tailored to meet my needs and the results were relayed back to me in a clear and understandable format. The staff at the Human Performance Centre are very friendly, knowledgeable and professional, making the experience very worthwhile."

Ian Hammett, Team GB Spartathlon runner

"It's been amazing - the guys have been fantastic in looking after me. It's not just been physical, they've given me plenty of advice on coping mentally and assuring me that my preparation is going the right way when I haven't perhaps felt at my best. Their time has been very much appreciated, and the facilities have been amazing, and my time here will stand me in good stead for achieving my goal."

For more information on other testing we provide, visit
www.beds.ac.uk/humanperformance

01234 400400 | humanperformanceinfo@beds.ac.uk | @UoB_HPC

SPORT SCIENCE AND PHYSICAL ACTIVITY

POSTGRADUATE RESEARCH AND TAUGHT MASTERS DEGREES

PhD and MA/MSc BY RESEARCH

Students benefit from an opportunity to be supervised by eminent researchers in the field and to contribute to policy and practice.

All postgraduate research students will complete an independent piece of novel research under the supervision of a team of experts from ISPAR, which will be externally examined through a written thesis and an oral viva.

For more information on our research degrees and how to apply, please visit:
www.beds.ac.uk/rgs/apply/

For information on specific projects within ISPAR, please visit:
www.beds.ac.uk/ispar/research-degrees/

RESEARCH AREAS

ISPAR welcomes applications from PhD and MA/MSc by Research candidates in the following areas:

- Sport, Physical Activity and Health Psychology
- Behaviour Change
- Intervention Design and Communication
- Prevention and Management of long-term conditions
- Physiology of Sedentary Behaviour
- Physical Activity, Nutrition and Metabolism
- Sports Performance and Biomechanics
- Pedagogy and Youth Sport
- Education and Sport Policy
- Socio-cultural Studies
- Environmental Physiology
- Children and Young People

GET IN TOUCH

If you would like more information on our courses, or are interested in studying with us, you can get in a number of ways:

Web: unibeds.info/SSPAPG
Email: ispar@beds.ac.uk
Twitter: @UoB_SSPA @ISPAR_UoB
Instagram: @uniofbeds_sspa

University of Bedfordshire

TAUGHT MASTERS DEGREES

PHYSICAL EDUCATION AND SPORT MA

This intellectually demanding programme is designed to support you in becoming a more critical and reflective teacher or youth/community sports coach, using intensive, compressed teaching time combined with flexible asynchronous guided learning to fit around your work in a school or youth sport setting. It is research-led and research-informed, grounding the theoretical study of physical education, sport pedagogy, and leadership in your practical work place experience. There are two routes: one for recent graduates (Pedagogy), and one for experienced teachers/coaches (Leadership).

CLINICAL EXERCISE PHYSIOLOGY PgCert/PgDip/MSc

The course involves the detailed study of the physiological consequences of chronic debilitating diseases and highlights the changes that these different diseases cause during exercise testing. This unique course gives you a solid grounding in theory and application of physiological tests in clinical populations including: graded cardiopulmonary exercise testing; cardiac ultrasound; vascular ultrasound; and muscle function analyses. Throughout the course you will actively participate in practical sessions designed to increase your skills, with supervised practice sessions working alongside University sports teams and the Community Exercise Clinic.

SPORT AND PHYSICAL ACTIVITY (LEADERSHIP AND MANAGEMENT) MA

The sport and physical activity industry has an innovative and dynamic workforce and this course will support you in developing the knowledge and skills required to gain entry to the sector. Taking a practical, research based approach, this course will give you the opportunity to review and analyse examples of best practice, develop sustainable sport participation programmes and undertake research into a sport and physical activity topic area of your choice.

SPORT AND PHYSICAL ACTIVITY (EXECUTIVE LEADERSHIP) MA

Taking a reflective, analytical and research based approach, this course will inspire you to think differently about how organisations in sport and physical activity respond to the challenges set and how they can best deliver pioneering solutions. In doing so, the course support you in developing your executive leadership skills and will offer the professional and personal development required in order for you to take the next step and become an industry leader.

PHYSICAL ACTIVITY, NUTRITION & BEHAVIOUR CHANGE MSc

In addition to developing a firm understanding of the links between physical activity, nutrition, health and behaviour change, this course offers invaluable opportunities to further career prospects during placement and research project units. With relevant experience, we will also support you in registering as an Associate Nutritionist or converting to full registration as a Nutritionist/ Public Health Nutritionist.

STENGTH & CONDITIONING MSc

If you wish to work with sports performers as a strength and conditioner, or applied sports wscientist, this innovative course is for you. Designed to meet the needs of students interested in the optimisation of fitness capacities required for high level performance in sport, it will provide the theory and foundation knowledge and skills you need to pursue professional accreditation with a number of bodies including the British Association of Sport and Exercise Sciences (BASES); the United Kingdom Strength and Conditioning Association (UKSCA).

INSTITUTE FOR SPORT & PHYSICAL ACTIVITY RESEARCH

PhD, MSc BY RESEARCH & STAGE 2 HEALTH PSYCHOLOGY OPPORTUNITIES IN THE AREA OF BEHAVIOUR CHANGE

1) EVALUATION OF COMMUNITY PHYSICAL ACTIVITY PROGRAMMES FOR THE BENEFIT OF LONG-TERM CONDITIONS

The University of Bedfordshire hosts an exercise clinic for the local community to support health and wellbeing through the engagement of physical activity. With excellent links to the health and wellbeing services and hospitals across three local authorities, there is an opportunity to evaluate and further develop physical activity programmes, both within the university and regionally, to understand the benefit to long-term conditions (e.g. diabetes, cancer, cardiovascular disease, mental health). Using behaviour change methodologies, this research will further develop support services in this area and aim to optimise their performance to benefit physical and psychological health.

2) HEALTH PROFESSIONAL BEHAVIOUR FOR EXERCISE REFERRALS

Physical activity can significantly enhance health and wellbeing, optimising health status. Yet there are a large number of people not currently meeting government recommendations. With the promotion of physical activity being given more importance in the new government obesity initiative and 'Better Health' app, there is a need to ensure that those who are working with individuals to promote physical activity are equipped with the skills in behaviour change. This includes those who may refer on to an exercise on referral programme such as general practitioners, and those who deliver the service, such as registered exercise professionals. This research will assess the current need for training and develop a programme of training and evaluation that can be replicated and rolled out nationally/ internationally.

The specific nature of the project is open for discussion and development with the research student. Please contact Prof Chater, Angel.Chater@beds.ac.uk if you have any questions.

INSTITUTE FOR SPORT & PHYSICAL ACTIVITY RESEARCH

PhD & MSc BY RESEARCH OPPORTUNITIES IN PHYSICAL ACTIVITY, NUTRITION & METABOLIC HEALTH IN CHILDREN & ADOLESCENTS

1) DOES BREAKFAST CONSUMPTION VERSUS BREAKFAST OMISSION AFFECT PHYSICAL ACTIVITY, DIETARY INTAKES AND CARDIOMETABOLIC HEALTH OUTCOMES IN CHILDREN AND ADOLESCENTS?

Breakfast is believed to be the 'most important meal of the day' and is associated with favourable health outcomes in children and adolescents. Yet, the available evidence on breakfast and health does not allow us to establish cause-and-effect. This project will focus on conducting experimental research to identify whether breakfast consumption can help to improve physical activity levels, dietary intakes and cardiometabolic health (e.g., glycaemic control) in children and adolescents when compared with breakfast omission.

The specific nature of the project is open for discussion and development with the research student. Please contact Dr Fruer, Julia.Fruer@beds.ac.uk if you have any questions.

2) BREAKFAST COMPOSITION AND TIMING IN CHILDREN AND ADOLESCENTS: IMPACT ON ENERGY BALANCE AND CARDIOMETABOLIC HEALTH OUTCOMES

This project will focus on conducting experimental research to identify whether there is a specific type of breakfast (e.g., macronutrient composition) and time of day that breakfast should be consumed to improve physical activity levels, dietary intakes and cardiometabolic health (e.g., glycaemic control) in children and adolescents.

3) IMPROVING GLYCAEMIC CONTROL AND INSULIN SENSITIVITY THROUGH PHYSICAL ACTIVITY AND NUTRITION IN NON-OVERWEIGHT, OVERWEIGHT, AND OBESE CHILDREN AND ADOLESCENTS

With childhood and adolescence being an important time of life to target for the prevention of type 2 diabetes, this project aims to identify how manipulations in exercise and nutrition can improve glycaemic control and insulin sensitivity in this under-researched population. The impact of overweight and obesity on the research outcomes will also be investigated.


ANGEL CHATER


MARTYN MORRIS


ANDREW MITCHELL


ALEX STEWART


ALEXANDRA BAIRD


AMANDA JONES


CHERYL BARFORD


DANNY GOLDING


DAVID PEARS


GERALD REMY


HELEN IVES


DR IAIN FLETCHER


DR JEFFREY ALDOUS


DR JOANNE HILL


DR JOANNE RICHARDS


DR JOHN MCCARTHY


DR JULIA ZAKRZEWSKI-FRUER


DR KEVIN WYLD


DR LAURA CHARALAMBOUS


DR LINDSEY SMITH


DR LOUISE FERRANDINO


MARK BOWLER


MICHAEL DWYER


MICHAEL NEWELL


PAUL SAMMON


STUART WILSON


TARRYN MUTCH


DR MICHELLE FLEMONS


DR SAUL KEYWORTH


SIMON ROBINSON

ISPAR STAFF


DR PING WU


DR STEPHEN KOZUB


ABBIE BELL


ABIGAIL MOFFAT


ASHLEY BECKETT


DIANA SOARES


FANI LAPI


JACK GRIFFITHS


JACOB MURPHY


JAKE SCOTT


JACOB WYMER


JAMIE WHITEHALL


JORDANNE HINE


LAUREN HOWARD


LAUREN WORMACK


NATHAN ALLWORK


PHOEBE BROOK-ROWLAND

ISPAR POSTGRADUATE RESEARCH STUDENTS


ROSS ENDERSBY


ROBERTO SALVAGGIO

ISPAR