ePosters

Theme: Behaviour Change

A new intervention model for increasing physical activity levels in fitness centres based on the Behaviour Change Wheel

Jorge López-Fernández[1], Lou Atkinson[2], Elizabeth Horton[3], Alfonso Jimenez[4]

[1]Coventry University, UK; GO Fit LAB, Ingesport, Spain, [2]Aston University, School of Life and Health Sciences, [3]Coventry University, Centre for Innovative Research Across the Life Course (CIRAL), [4]Coventry University, Centre for Innovative Research Across the Life Course (CIRAL), UK; GO Fit LAB, Ingesport, Spain

Introduction: As a health promotion environment, fitness centres could probably play a proactive role to address the high physical inactivity levels of modern societies. We used the Behaviour Change Wheel (BCW) to design an intervention model to increase physical activity levels in fitness centres.

Methods: This intervention was designed following the three stages defined in the BCW. In Stage 1, the target behaviour and COM-B Model were defined using a pragmatic review until saturation. In Stage 2, the intervention functions were selected using the APEASE criteria. In Stage 3, a pragmatic review was performed to identify the most efficient Behavioural Change Techniques (BCTs; taxonomy version 1) to deliver the intervention model. Finally, only those BCTs that met the APEASE criteria were selected.

Results: The intervention model addressed the six components of the COM-B model:

- Physical capability: designing an individualised exercise programme.
- Physiological capability: training users to do the proposed exercises.
- Physical Opportunity: providing users with an instrument to get feedback in real time.
- Social Opportunity: Connecting users with others with same values.
- Reflective motivation: making users to take part in objective selection (outcomes and behaviour), training design, and evaluation process.
- Automatic Motivation: asking for commitment.

Moreover, eighteen BCTs were identified to deliver the intervention model defined in this research.

Conclusion: The BCW is a useful framework for designing physical activity behaviour change interventions to be delivered in fitness centres.

External funding details: This research has been funded by GO fitfi and Coventry University.

Active commuting to school patterns and associations with socio-economic level in Spanish pre-schoolers

Manuel Herrador Colmenero[1], Cristina Cadenas-Sanchez[2], Idoia Labayen[3], Adrià Muntaner-Mas[4], Diego Moliner-Urdiales[5], Gabriel Lozano-Berges[6], Pedro J Benito[7], Manuel A Rodríguez-Pérez[8], Alvaro Delgado-Alfonso[9], Joaquín Sanchis-Moysi[10], Vicente Martinez-Vizcaino[11], Francisco B. Ortega[2], Palma Chillón[2]

[1]University of Granada, [2]PROFITH "Promoting FITness and Health through physical activity" research group, Department of Physical Education and Sport, Faculty of Sport Sciences, University of Granada, Granada., [3]Department of Health Sciences, Faculty of Health sciences, Public University of Navarra, Pamplona, [4]GICAFE "Physical Activity and Exercise Sciences Research Group" Research Group, University of Balearic Islands. Balearic Islands. PROFITH "PROmoting FITness and Health through physical activity" Research Group, Department of Physical Education and Sports, Faculty of Sport Sciences, University of Granada. Granada., [5]LIFE research group, Faculty of Humanities and Social Sciences, University Jaume I, Castellon., [6]GENUD "Growth, Exercise, NUtrition and Development" research group, Department of Physiatry and Nursing, Faculty of Health and Sport Sciences, University of Zaragoza, Zaragoza., [7]Laboratory of Exercise Physiology Research Group, Department of Health and Human Performance, Faculty of Physical Activity and Sport Sciences, Universidad Politécnica de Madrid, Madrid., [8]SPORT Research Group (CTS-1024), CERNEP Research Center. Department of Education, Faculty of Education Sciences, University of Almería, Almería., [9]Department of Physical Education, Faculty of Education Sciences, University of Cádiz, Puerto Real., [10]Research Institute of Biomedical and Health Sciences (IUIBS), Las Palmas de Gran Canaria, Canary Islands., [11]Health and Social Research Center. Universidad de Castilla-La Mancha, Cuenca.

Introduction: Active commuting to school has previously been associated with socio-economic level in children and adolescent. However, this association is unknown in preschoolers. Therefore, the aims were to describe the patterns of active commuting to school (ACS) in Spanish children aged 3-5 years old and to analyse the association between active commuting to school and socio-economic factors.

Method: A total of 2,639 parents of preschoolers aged between 3 and 5 years old participating in the PREFIT project self-reported information about the mode of commuting to school of their children. Additionally, mothers and fathers reported their socioeconomic level (i.e. marital status, educational level, and occupation). Binary logistic regression was used to analyse the relationship between ACS and socio-economic factors.

Results: Nearly a 50% of pre-schoolers commuted actively to the school. Their parents were mostly married (80%); 72% mothers and 62% fathers had university studies, 60% mothers and 69% fathers were skilled workers. Preschoolers with non-university degree·s parents were more likely to ACS than those preschoolers with university degree·s parents (all $P < 0.001$). Additionally, preschoolers with low professional level·s fathers were more likely to ACS than those preschoolers with high professional level·s fathers ($P < 0.01$). Preschoolers with unskilled worker or unemployed mothers were twice more likely to ACS ($P < 0.001$) than those preschoolers with high professional level's mothers.

Conclusion: Almost half of preschoolers commuted actively to school. Markers of socioeconomic level were inversely associated with ACS, being the characteristics of the mother greater predictors than the parent·s ones, to active commuting.

External funding details: This study was supported by the Spanish Ministry of Economy, Industry and Competitiveness [DEP2016-75598-R (MINECO/FEDER, UE) and BES-2014-068829] and the Spanish Ministry of Education, Culture and Sport (FPU13/02111). The PREFIT project takes place thanks to the funding linked to the Ramón y Cajal grant (RYC-2011-09011).

Beliefs, motives and gains associated with physical activity in people with osteoarthritis

Alice Berry[1], Candy S McCabe[2], Sarah Muir[3], Nicki Walsh[1]