## BARRIERS AND DETERMINANTS OF PHYSICAL ACTIVITY AMONG UK UNIVERSITY STUDENTS

Aceijas C<sup>a</sup>, Bello-Corassa R<sup>b</sup>, Waldhäusl S<sup>c</sup>, Lambert N<sup>d</sup>, Cassar S<sup>e</sup>

<sup>a</sup> Corresponding author. Natural Sciences. School of Science and Technology. Middlesex University. London. UK. Email address: <u>c.aceijas@mdx.ac.uk</u>

<sup>b</sup> Universidade Federal dos Vales do Jequitinhonha e Mucuri. Alto da Jacuba. Brazil. Email address: <u>rafael.bellocorassa@gmail.com</u>

<sup>c</sup> Natural Sciences.School of Science and Technology. Middlesex University. London. UK. Email address: SW1123@live.mdx.ac.uk

<sup>d</sup> Mental Health and Social Work. School of Health and Education. Middlesex University. London. UK. Email address: <u>s.cassar@mdx.ac.uk</u>

<sup>e</sup> Wellbeing Services. Middlesex University London. UK <u>n.lambert@mdx.ac.uk</u>

**Background**: Association between high physical activity (PA) levels and lower health risks and between sedentary behaviours and higher health risks have been consistently identified in scientific literature. This study investigated determinants of physical activity among UK university students.

**Methods**: Online Survey among Middlesex University London UG students with stratified random sampling strategy (n=468) to assess students' PA levels. Stratified by gender bivariate analysis and multivariate logistic regression were used identify risk factors of suboptimal PA. Additionally, two students' focus groups and three university stakeholders in-depth interviews, were conducted.

**Results**: 60% of respondents were insufficiently active. 89% do not use the university gym due to lack of time (40%), price (30%), and embarrassment (11%). PA was significantly associated with Gender – woman had lower PA levels (OR=2.8; 95%CI =1.2–6.2); Ethnicity – black and mixed ethnicity students had lower and higher PA levels, respectively; not using the university gym (OR=2.8; 95%CI=1.2–6.3). Stratified bivariate analysis showed that underweight and obese women had lower PA levels; disabled men had a fivefold risk for insufficient PA (OR=5.1; 95%CI=1.03–24.92); males living with their parents during term were more active. Multivariate model withheld three variables, gender, gym use and smoking – smokers were less active (OR=2.1; 95%CI=1.0–4.3). Qualitative results showed finances, academic pressure and university systems as barriers for PA.

**Conclusions**: PA is associated with various factors, gender being the most important. Regular moderate/vigorous PA appears as protective factor against smoking. Lack of time and cost were institutional barriers for PA. Universities must implement strategies to reduce cost, increase accessibility and improve students' time management capacity to include PA in their routines. Furthermore, tailor made and outside gym sessions may help in achieving optimal PA.

## Main message:

Students' PA levels are low and likely to compromise their health. Universities are in a strategic position to influence their choices and should incorporate strategies to increase their PA levels.