

4H-1

Digital mirrors: Body image and problematic internet use across and related comorbidities in ten countries

*ARTEMISA ROCHA DORES^{1,2}, JULIUS BURKAUKAS³, IRENE P. CARVALHO^{4,5},
KEEP FIT 3 TASK FORCE^{6,7}, ORNELLA CORAZZA^{6,7}*

¹LabRP-CIR, Escola Superior de Saúde, Universidade Politécnica do Porto, Portugal

²Laboratory of Neuropsychophysiology, Faculty of Psychology and Education Sciences, University of Porto

³Laboratory of Behavioral Medicine, Neuroscience Institute, Lithuanian University of Health Sciences

⁴Clinical Neurosciences and Mental Health Department, Faculty of Medicine, University of Porto

⁵CINTESIS@RISE, Faculty of Medicine, University of Porto

⁶Department of Psychology and Cognitive Science, University of Trento

⁷Department of Clinical, Pharmaceutical and Biological Sciences, School of Life and Medical Sciences, University of Hertfordshire

E-mail: artemisa@ess.ipp.pt

Body image is increasingly shaped by social media, which promotes unattainable and unrealistic beauty standards, potentially impacting individuals' mental health and encouraging harmful appearance-related behaviours. This study aimed to explore the association between problematic internet use (PIU) and body image disorders, focusing on related comorbidities such as exercise addiction and the use of image and performance-enhancing drugs (IPEDs) to boost appearance, across ten countries. It also examined how appearance anxiety is predicted by PIU, excessive physical exercise, and IPEDs use. Participants completed a web-based survey assessing sociodemographic data, appearance anxiety (AAI), problematic internet use (PIUQ-9), excessive exercise (EAI), and intake of IPEDs. A total of 3,532 participants from ten countries (Gibraltar, Hungary, Italy, Japan, Lithuania, Mexico, Portugal, Singapore, Spain, and the United Kingdom) were included in the study. Appearance-related anxiety was observed in 12.4% of participants, with the highest prevalence in Mexico, Japan, and Italy. Problematic internet use (PIU) had the highest median scores among participants from Mexico and Singapore, whereas excessive exercise was reported by 3.6%, with no significant differences between countries. IPEDs use was reported by 28.4% of participants, with the highest rates in Gibraltar (61.1%) and Japan (60.6%). Logistic regression revealed that PIU, excessive exercise, and IPEDs use were significant predictors of appearance-related anxiety. The findings demonstrate cross-cultural variability, indicating that sociocultural dynamics play a critical role in shaping body image concerns and related behaviours. The significant associations between PUI, excessive exercise, and IPEDs intake with heightened appearance-related anxiety underscore the multifactorial nature of these issues and their potential implications for mental health. The high prevalence of IPEDs use, particularly in Gibraltar and Japan, raises important public health concerns and calls for targeted interventions addressing the normalization of appearance-enhancing substances. These results highlight the urgent need for culturally sensitive prevention strategies and health education programs aimed at reducing digital exposure to unrealistic body ideals and mitigating the psychological and behavioural consequences linked to body dissatisfaction.

Keywords: social media, appearance anxiety, problematic internet use, image and performance-enhancing drugs, excessive exercise