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Comparing body image and exercise dependence between different fitness groups during COVID-19

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Background: The practice of physical exercise (PE) has several mental and physical benefits, however, due to COVID-19 gyms were closed. Therefore, it is relevant to analyse psychosocial variables in different fitness groups, especially body image (BI) and exercise dependence (ED), an addictive behaviour and a public health problem (Marques et al., 2019). BI is analyzed considering that it could be a risk factor for ED (Cunningham et al., 2016). **Objectives:** To characterize BI and the levels of PE dependence in practitioners of bodybuilding, crosstraining, and cardio and strength training/group classes during the second confinement imposed by COVID-19. **Methods:** An online questionnaire was applied including the Exercise Dependence Scale (Hausenblas et al., 2002) and the Figure Rating Scale (Stunkard et al., 1983). The sample consisted of 84 crosstraining practitioners (34.23±7.56 years), 101 cardio and strength training/group classes practitioners (34.66±13.42 years) and 49 bodybuilding practitioners (25.02±8.40 years). **Results:** All groups showed symptoms of ED. Differences between groups were found ($p<0.05$). Averages were 58.98±17.66 on the crosstraining group, 52.63±18.18 on the cardio and strength training/group and 57.20±18.03 on the bodybuilding group. Prevalence of ED was 5% in the cardio and strength training/group, 9.50% in the crosstraining group, and 18.40% in the bodybuilding group. Regarding (dis)satisfaction of BI, the crosstraining group had an average of 0.86±1.08, the cardio and strength training/group classes an average of 0.68±0.94, and the bodybuilding group an average of 0.34±1.10. Differences were found between crosstraining and bodybuilding groups ($p<0.05$). The cardio and strength training/group group had the highest percentage of participants wanting to lose weight, and in the bodybuilding group participants reported the highest percentage of wanting to gain weight. **Conclusions:** Since ED may be associated with a disruptive practice of PE, it should deserve the attention of researchers and fitness professionals. This study has several practical implications: it implies the importance of controlling the total time and frequency spent on exercise considering the international and health recommendations; and the importance of creating multidisciplinary work in the evaluation and monitoring of practitioners. Moreover, it is important to use images that value a healthy weight instead of a low weight. Future studies should explore the relationship between these variables.

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Keywords: exercise dependence, body image, fitness, physical exercise, COVID19.

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Orofacial and temporomandibular region symptomatology in musicians

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Background: Temporomandibular disorders consist of a group of pathologies that affect the temporomandibular joint, masticatory muscles and other components of the stomatognathic system (Clemente et al., 2015; Santos & Fragelli, 2017). Temporomandibular disorders can be associated with lifestyle and occupation and they are notably becoming more frequent in instrumentalists musicians (Glória et al., 2018). **Objectives:** To determine the frequency of orofacial and temporomandibular region symptomatology in musicians, as well as to determine the existence of differences between instrumentalists groups (wind, stringed and percussion). The secondary objective is to analyse the relation between potential risk factors, such as the number of years of instrumental practice experience, the average number of practice hours per week and the type of instrumental practice as a profession or a hobby in the different domains evaluated. **Methods:** A cross-sectional study was conducted with 102 instrumentalists musicians who participated voluntarily. A link with two questionnaires was published on social media to characterize the sample concerning their instrumental practice and about orofacial symptomatology, temporomandibular region and psychosocial aspects. **Results:** The frequency of orofacial pain was 17.6%, 29.5% reported headaches, 28.5% presented articular sounds and the limitation when opening and closing the mouth was 4.9%. The most common signs and symptoms were back pain (56.8%), tiredness and lack of energy (37.3%) and difficulty sleeping (35.3%). Percussion instrumentalists were most likely to grind their teeth, when compared to wind instrumentalists, and stringed instrumentalists were more depressed, feeling down or hopeless, when compared to percussion instrumentalists ($p<0.05$). **Conclusions:** Low frequencies of orofacial and temporomandibular region symptomatology were observed. An evident existence of significative differences between instrumentalists groups was not observed, as well as the existence of relation between the potential risk factors.

Keywords: temporomandibular joint; temporomandibular disorder; instrumentalists musicians; frequency; risk factors

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Is there any health problem among elderly from a community-based exercise programme?

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Background: Senior population is increasing all around the World with individuals over 60 years depicting low levels of physical activity. Physical exercise practice has positive effects (cognitive, social, affective and physiological) evidencing that sportier people are healthier, happier, more integrated and generally active (Kumar et al., 2016). **Objectives:** to characterize physical capacity level, physical activity level, life satisfaction, fear and risk of falling in older adults. **Methods:** 200 individuals, mostly female (88,5%), (mean (SD) age 65 (8.0) years) were recruited from participants integrated in “Mais Vida Ativa”, promoted by Cmara Municipal de Paredes. The programme included multimodal physical exercise classes (Lacroix, Hortobgyi, Beurskens & Granacher, 2017), twice a week, 45 min each. Participants’ assessment was performed six months after the beginning of the programme, through a battery of physical tests (Tem Meter Walk Test, Sit and Reach, One Leg Stand, Back scratch test, Five Time Sit to Stand) (Naushin, Shweta & Annamma, 2017), International Physical Activity Questionnaire-Short Form, Satisfaction with Life Scale and Fall Efficacy Scale. **Results:** Most of the participants (60%) have a good lower limb flexibility and dynamic balance, moderate/vigorous physical activity and were satisfied with their life. Regarding static balance more than half of the male and approximately one third female participants showed values above the reference values (60.9% vs. 37.3% respectively). However, according to the reference and normative values, these individuals showed reduced static balance and upper limb flexibility. Despite the majority (80%) was not afraid of falling, they present a high risk of falling (more than 50%). **Conclusions:** Compared to reference values’ scales and tests’ data older adults involved in regular exercise classes still present decrease upper limb flexibility, risk of falls and low static balance. Complementary strategies to exercise are still needed.

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Keywords: Older adults, Physical exercise, Functional levels, Falls, Life satisfaction

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Intensity of children's soccer training and its relationship with daily physical activity recommendations

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Background: The Covid-19 pandemic carried several consequences such as the absence of regular physical activity, promoting an increase of weight in children (Pietrobelli et al., 2020). Regular exercise practice promotes well known benefits for children (Krustrup et al., 2010). So, it is necessary to evaluate whether children who practice soccer reach the minimum intensities as a way to combat child sedentary lifestyle. **Objectives:** To compare the intensity of different types of training, as well as to evaluate if football training allows to achieve the values of daily physical activity recommendations (RAF) for children. **Methods:** 21 athletes born in the 2010 year (10.4 ± 0.1 years; IMC (A) – 18.7 ± 0.5 , (B) $42.6 (4.1)$) belonging to two different teams (main and secondary) wore the Actigraph w GT3X+ BT accelerometer during four training sessions (tactical (TT) and simulated game (SG)). The data were analyzed in epoch of 5s and the cut off values were applied according to Crouter (2015). **Results:** Comparing the two teams, in TT there were differences for all intensities ($p < 0.05$), where the main team achieve higher intensities. In SG, the intensities were more similar. Between training types, the secondary team applies more intensity in SG, spending more time in vigorous intensity ($p=0.002$). On average, the main team reached about 80% of the RAF, while the secondary team about 60%. Principal Component Analysis showed that the individual intensity applied in one type of training is consistent among trainings, and that children with higher IMC tend to spend more time in light intensity. **Conclusions:** Football stimulates mostly moderate intensities in the training context and allows athletes to reach about 70% of the RAF. These results show that soccer seems to be a good option as a promotion of physical activity and healthy lifestyles for children.

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Keywords: accelerometer, sedentarism, athletes, technical tactical, roleplay game

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