Then, the EMG signal of these muscles of the non-preferential limb will be collected, during 4 PNF irradiation techniques in a randomized order for each participant. Each irradiation will be applied 3 times, maintaining the contraction for 5s, with a 10s interval between them. After each irradiation will be checked the perceived exertion.
Results: The study is in the data collection phase.
Conclusion: It is expected through this study to verify if the applied irradiation techniques activate the musculatures described anecdotally in the clinical literature.
Implications: The study can generate an understanding of motor irradiation and the use of the technique to improve the strength of a body segment.
Keywords: Irradiation, Proprioceptive neuromuscular facilitation, Electromyography

Conflict of interest: The authors declare no conflict of interest.
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ASSOCIATION BETWEEN ENVIRONMENTAL FACTORS AND AFFORDANCES FOR THE NEUROPSYCHOMOTOR DEVELOPMENT: A CROSS-SECTIONAL STUDY

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Background: In the world, 1 billion children live in poverty. Regarding developing countries, Brazil has the highest rate of social inequality. Environmental factors may impact child development and, consequently, functionality.
Objectives: to analyze the association between environmental factors and affordances in the home environment of healthy infants exposed to low socioeconomic status (SES).
Methods: At 3 months old, 128 full-term healthy infants were divided into two groups: the exposed group (EG), infants classified as low SES, and the comparison group (CG), infants without low SES exposition; both according to the income-to-poverty ratio (PIR). The affordances in the home environment were measured by The Home Environment for Motor Development – Infant Scale (AHEMD-IS); physical space, variety of stimulation, gross-motor toys, fine-motor toys, and total score. It classified the affordances: as less than adequate (LTA), moderately adequate (MA), adequate (A), and excellent (E). In the SPSS 2.0, comparison tests and stepwise multiple linear regression were performed ($p < 0.05$).
Results: Infants of the EG had significantly the lowest mean in length at birth (p=0.03; Cohen's r= 0.157); PIR ($p<0.01$; Cohen's r= 0.351); maternal age ($p<0.01$; Cohen's r= 0.50); marital status of guardians ($p<0.01$; Cohen's r= 0.31); the number of children living in the household ($p<0.0001$; Cohen's r= 0.29); and maternal education ($p<0.01$; Cohen's r= 0.73). The home environment of the EG presented less affordances for child development in the dimensions of gross motor toys ($p<0.0001$; Cohen's r= 0.353; EG, md= 2.00 [1.00 – 3.00] vs GC, md 3.00 [2.00 – 4.50]); fine motor skills (p=0.0001 Cohen's r= 0.327; EG, md= 1.00 [0.00 – 2.00] vs GC, md 2.00 [1.00 – 4.00]); and the total score ($p<0.0001$; Cohen's r= 0.377; EG, md=15.00 [13.00 – 18.00] vs GC, md = 19.00 [16.00 – 22.00]). Maternal age was a protective factor for obtaining the LTA score (p = 0.043, OR: 0.829 [0.692 - 0.994]). Therefore, each additional year in maternal age decreases 17.01-fold the chance the affordances in the home environment score LTA.
Conclusion: The home environment of infants exposed to poverty presented less adequate affordances for neuropsychomotor development, mainly in the dimensions of gross motor toys, fine motor toys, and, consequently, total score. In contrast, the higher the maternal age, the better the results regarding the quantity and quality of affordances present in the home environment.
Implications: Knowledge about offering adequate affordances for neuropsychomotor development is essential for providing healthy child development. Basic kits of age-appropriate toys offered during the follow-up may be useful as palliative and low-cost tools.
Keywords: Low Socioeconomic Status, Maternal Age, Child Poverty

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NORMATIVE VALUES FOR ISOMETRIC MUSCLE STRENGTH OF HIP FLEXORS WITH HAND-HELD DYNAMOMETER IN UNIVERSITY ATHLETES

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Background: Establishing normative strength data can assist professionals in guiding post-injury rehabilitation and be a criterion for deciding discharge for sports return.
Objectives: To establish reference values for isometric hip flexor muscle strength in college athletes.
Methods: This was a cross-sectional observational study. The athletes were submitted to an isometric muscle strength evaluation of the hip flexors through a hand-held dynamometer (Medeor Medtech Tecnologia em Saúde Industria e Comercio Ltda). The athletes remained in dorsal decubitus position on a stretcher, with the tested leg flexed 10 cm above the surface to start the test. The dynamometer was positioned on the anterior part of the leg, above the talotibial joint line. The lever arm was defined as the distance, in meters (m), between the anterior superior iliac spine and the dynamometer application point. The athletes performed three isometric contractions of 5 seconds, with a rest interval of 30 seconds between repetitions. If there was a discrepancy greater than 10% in the first three

repetitions, a fourth repetition was performed. The isometric force data were expressed in kilogram-force (Kg/f) and converted to newton (N) for the calculation of torque (N.m). The normality of the data was verified using the Shapiro-Wilk test. The mean and standard deviation were calculated, followed by and by independent samples t-test. A significance level of ($p > 0.05$) was adopted.
Results: Thirteen female athletes (22 $\pm$ 2.19 years; 1.63 $\pm$ 0.06 m and 63.5 $\pm$ 16.9 kg) and 14 male athletes (23.85 $\pm$ 6.97 years; 1.75 $\pm$ 0.06 m and 72.8 $\pm$ 8.6 kg) participated in the study, totaling 27 college athletes. The athletes were classified according to the International Physical Activity Questionnaire (IPAQ) as Very Active (29.62%), Active (55.55%) and Irregularly Active (14.81%). Male athletes produced significantly more torque (109.36 $\pm$ 43.70 N.m; CI 84.12 - 134.59 N.m) when compared to female athletes (73.05 $\pm$ 14.26 N.m; CI 64.43 - 81.67 N.m).
Conclusion: This study provides a normative database on isometric hip flexor strength measured with a hand-held dynamometer. In general, differences in strength were present between the sexes, with men showing higher torque values compared to women.
Implications: The isokinetic dynamometer is the gold standard instrument for quantifying muscle strength. However, it is not accessible to all athletes. Therefore, we sought an alternative for the quantification of muscle strength in an affordable way. These data provide a description of hip flexor muscle strength in college athletes in order to assist professionals in post-injury rehabilitation, and to be a discharge criterion for sports return.
Keywords: Muscle Contraction, Rehabilitation, Lower Extremity

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BARRIERS AND FACILITATORS TO ACCESS TO REHABILITATION SERVICES IN BRAZIL FOR POST-STROKE INDIVIDUALS IN THE FIRST SIX MONTHS OF RECOVERY

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Background: Post-stroke individuals should have immediate and full access to rehabilitation services after hospital discharge. This access must be obtained in the first six months of the event, a period where the chances of recovery are greater. Thus, it becomes relevant to know the barriers and facilitators of this access. However, studies on this topic were not found in developing countries such as Brazil.
Objectives: To identify barriers and facilitators to access to rehabilitation services for post-stroke individuals discharged from a stroke unit of a public hospital in Brazil in the first six months of recovery.
Methods: A cross-sectional and descriptive study was developed. Sociodemographic and clinical-functional data were collected in the hospital during the acute phase. Six months after discharge, data on barriers and facilitators to access to rehabilitation services were collected, considering 20 aspects related to the economic conditions and displacement to rehabilitation services, quality, and organization of rehabilitation services, as well as individual's personal conditions.
Results: 174 individuals (62$\pm$21 years old) were included. Among the 20 aspects analyzed, 17 (85%) were most frequently pointed out as facilitators. The main facilitators pointed out was the patient's expectation of the treatment and the quality of care offered, identified by the vast majority (>79%) of the individuals. In addition, all aspects related to the quality of rehabilitation services were pointed out as facilitators by the majority of the subjects. Three (15%) aspects were most frequently pointed out as barriers: income available for health care (49.4%), waiting time to make an appointment and be attended (47.2%), and scheduling process (45.4%).
Conclusion: More facilitators than barriers were pointed out. That is, in the first six months of recovery, aspects related to economic conditions and displacement to rehabilitation services, organization of rehabilitation services, quality of rehabilitation services and personal conditions of the individual, have, for the most part, positively influenced the access to rehabilitation services for post-stroke individuals.
Implications: Considering the identified barriers, public policies to subsidize health costs and optimize the waiting time and scheduling process in rehabilitation services should be considered relevant tools to facilitate access to rehabilitation services for post-stroke individuals. Likewise, human, and financial resources must be directed towards promoting the enabling factors.
Keywords: Stroke, Access to rehabilitation services, Barriers and facilitators

Conflict of interest: The authors declare no conflict of interest.
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SHORT PHYSICAL PERFORMANCE BATTERY AS A PREDICTOR OF MORTALITY AMONG OLDER ADULTS: SYSTEMATIC REVIEW WITH META-ANALYSIS

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Background: Physical performance is an essential component in the clinical assessment among older adults, and its decline as assessed by the Short Physical Performance Battery (SPPB) is associated with increased risk for hospitalization, institutionalization, falls, and disability. Although a SPPB score <10 seems to be predictive of mortality, according to previous studies, the cutoff values are heterogeneous, which makes it difficult to really know the predictive