

PARÁMETROS DE NORMALIDAD EN FUERZA DE PRENSIÓN DE MANO EN SUJETOS DE AMBOS SEXOS DE 7 A 17 AÑOS DE EDAD.

P. Escalona D'Angelo, J. Naranjo Olguín, M^a. Lagos Salamó
Sociedad Pro-ayuda del Niño Lisiado, Santiago, Chile

Introduction: Determine parameters of normal grasping strength, will allow obtain objective conditions and results of clinical treatments of patients with alterations in the manual function.

Objective: Establish the normal ranges of strength in three types of grasps, in subjects of both sexes between 7 and 17 years old. **Materials and Methods:** 753 participants randomly selected from schools of the metropolitan region, in two steps sampling with an error of 2.12%. The evaluation consisted in palmar cylindrical grasp (dynamometer), spherical palmar grasp (bulb dynamometer) and sub-terminal lateral pinch (pinch meter); Normal statistic tried to establish confidence intervals of 95% for the average. **Results:** 3.9% of females and 4.4% of men stated that their dominant hand was left; the right hand was 6% more tuff as left in the fist strength in men, and in clip strength in women. For cylindrical grip, the force grew steadily from 10.3 to 25 kg on average till the age of 17 in women and in men, this force grew slowly until age 12, increasing its speed till reaching 39 kg on average at the age of 17. Spherical grip, growth slow and gradual with a peak at 0.45 bar in women and 0.65 bar in men at the age of 17. In lateral pinch the maximum values at limit age reach 6.9 for women and 9.5 kg for men. **Conclusion:**

The confidence intervals obtained for these grips will be use as parameters to establish a guide that will help evaluate such as applying some intervention; further knowing force behavior related to sex and age, deliver's us information that will permit us regulate the levels of exigency raised like goals in therapeutic planning after some medical procedures.

Finally, we reiterate that it is necessary consider the evolutionary development and the occupational of the individual, relating these areas with muscular grip force wich is applied to intentional activities that give meaning to their roles giving an integral boarding centred on the individuals for an efficient performance in the environment in which he develops.

KEY WORDS:

Force, Grasping, Manual Function, Dynamometer, Bulb Dynamometer, Pinch Meter