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## The effect of exercise involvement of elastic bands on nerve conduction, functional fitness and life quality in seniors using wheelchairs

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Nowadays the number of adult persons using wheelchair such as limb palsy affected by war or congenital have more gone under attention. For these people the existence of social problems and decreased communications which leads to no participation in outdoor activities and lack of ease to use weight or other resistance trainings, challenging effectiveness of elastic bands with high access and conforms to need of these special people seems to be essential affair. Accordingly, 22 subjects with wheelchair, age range of 55-70 were intentioned selected and divided into two groups of experimental groups consisted of elastic band training involvement for eight weeks, three sessions per week, 50 min per session and control group without stated involvement with simple supervision activities. Pre- and post- test included neural parameters measurement by electroneurography system, functional activities by joint motion range and flexibility tests and life quality using by Barthel ADL test were conducted. Then, data were analyzed using by dependent and independent T test with significance level of 0.05. Present findings were reported significant differences on nerve conduction ( $p=0.00$ ) and upper flexibility test ( $p=0.04$ ) between two groups, where these differences were transferred to life quality indicator for experimental ( $p=0.00$ ) due to paired T test too. Based on obtained findings we can recommend elastic band training as a useful method to recovery joint motion range and neuromuscular parameters which are reflector on need of these special people with mostly arguable in main text.

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