

REACH CAPABILITIES IN OLDER MEXICAN AMERICAN ADULTS

by

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PREVIEW

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ABSTRACT

The increase in life expectancy, low childhood mortality rates, improved nutrition, declining fertility rates are resulting in the United States marked redistribution of the population towards an older median age in the U.S. (U.S. Administration on aging, 1999). The Hispanic older population was 2.0 million in 2002 and is projected to grow to over 13 million by 2050. In percentage terms, the 2002 Hispanic persons made up 5.5 percent of the older population. (U.S. Administration on aging, 2002)

A 53 percent increase in the number of people of Mexican origin fueled much of the nearly 13 million rise in the number of Hispanics between 1990 and 2000, according to new analysis released today by the Commerce Department's Census Bureau

Self-reports of difficulties with activities of daily living, and performance-based assessments of an elderly person's ability to performing tasks of daily living are the two commonly used approaches to evaluate functional capacity in the elderly. Current finding on the concordance between self-reported measures of functional capacity and performance-based measures of functional capacity show only moderate concordance (Angel et al., 2000; Cress et al., 1995; Kempen et al., 1996; Myers, 1995; Nagi, 1991; Verbugge and Jette, 1994).

Studies show that old Mexican Americans report more difficulty in performing activities of daily living including eating, toileting, dressing, meal preparation, shopping, using the telephone, and light house work (Markides et al., 1997)

The research hypothesis was that age and gender affect the reach capabilities of older Mexican Americans, in order to test this a group of old Mexican Americans 60 years or older were selected randomly from different senior centers of El Paso city, 125 males and 125 Females. The sample population was distributed into different census tracks, then the sample size for each census track meet the proportion of the original population of old Mexican American males and females for that particular census tract.

There were 22 measurements taken in this research, Weight, Height, Over head fingertip reach, over head grip reach, Arm Span, Upper hand Height, Lower Hand Height, Vertical Reach Distance, Horizontal distance from the Buttocks to the Hand, Forward Grip Reach, Forward Grip Reach, Rotation of the Head to the Right, Rotation of the Head to the Left, Flexion of the Head, Extension of the Head, Lateral Rotation of the Head, Medial Rotation of the Head, Abduction of the Shoulder, Adduction of the shoulder, Flexion of the shoulder, Extension of the Shoulder, Flexion of the Elbow.

Multivariate regression was conducted and the results are: Age effect (F-value 4.13 p-value 0.0001). The gender effect (F-value 1.63 p-value 0.0441) and the interaction of gender and age (F-value 1.68 p-value 0.0358) if a significance level of 0.05 is consider then age gender and the interaction of them are significant. Regression and correlation

analysis were performed also in this research. From the results it can be determined that age and gender and the interaction of these factors are significant.

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