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To establish normative data using the Jebsen Taylor hand function test (JHFT) for normal, ethnically diverse South Africans aged between 20 and 59 years

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TO ESTABLISH NORMATIVE DATA USING THE JEBSEN TAYLOR HAND FUNCTION TEST (JHFT) FOR NORMAL, ETHNICALLY DIVERSE SOUTH AFRICANS AGED BETWEEN 20 AND 59 YEARS.

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of
Master of Science in Occupational Therapy

Johannesburg, 2008

I, Paran Govender, declare that this research report is my own work. It is being submitted for the degree of Master of Science in Occupational Therapy in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree of examination at this or any other university.



10th June 2008

For my parents

Abstract

The use of outcome measures by occupational therapists to establish the effectiveness of treatment is important. The Jebsen-Taylor Hand Function Test (JHFT) was identified as a standardised assessment suitable for the evaluation of outcomes related to the treatment of hand function. This study established norms for this test on 120 normal, ethnically diverse South Africans between the ages of 20 and 59 years.

Statistically significant differences were found between the original norms published by Jebsen et al [(1)] and the South African sample for males and females, dominant and non-dominant hands and ethnic groupings. It is postulated that gender and cultural factors may influence the speed with which different groups complete functional tasks and these must be factored in when using the JHFT as an outcome measure in South Africa. The test appears to have limited application as a norm referenced test in South Africa, but may be valuable in determining progress in therapy or research.

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OPERATIONAL DEFINITIONS

Hand Function

– the ability of a patient to use the hands effectively in everyday activity, dependent on anatomical integrity, mobility, muscle strength , sensation and coordination [1].

Standardised Tests

- are tests given to a group in a similar setting under similar diagnoses in order to determine and evaluate against a "norm"[33]

Norm referenced

- norms against which a patients performance can be measured [1].

Functional limitation

- restriction or lack of ability to perform an action in the manner or within the range consistent with the purpose of an organ and organ system [2] .

ABBREVIATIONS

ADL	Activities of daily living
DASH	The Disability of Arm, Shoulder, and Hand questionnaire
FDT	Functional Dexterity Test
GP	general practitioner
ICF	International Classification of Functioning, Disability and Health.
JHFT	Jebsen-Taylor Hand Function Test. – In the original article by Jebsen et al [1] the test was not named. The name of the test varies in the literature published since then and abbreviations for the test vary and are reflected as JTHFT [12, 39], JT-HF [87] with Webster [88] abbreviating the test to JTT. The abbreviation JHFT was adopted for use in this study [10, 16].
NYPDG	New York Presbyterian glove
OT	Occupational Therapy/ist
PEDI	The Paediatric Evaluation of Disability Inventory
SWM	Semmes Weinstein monofilaments
Wee FIM	Wee Functional Independence Measure for Childre