Reliability Assignment

Stroke is the most common cause of disability among the elderly. In order to identify disabilities and manage their associated problems, both clinicians and researchers need a scientifically sound scale of disability. An assessment tool should be scientifically sound in terms of three basic psychometric properties: reliability, validity, and responsiveness.

**Objective: To examine understanding of the concept of ICF, and types and statistical aspect reliability**

**For this assignment, you'll be looking at a 15-item measure called the Frenchay Activities Index (FAI) through using data document presented in the following research work**

1. Wendel, K. A., et. al., (2013). Inter-rater agreement of a modified and extended swedish version of the frenchay activities index (FAI). European Journal of Ageing, 10(3), 247-255
2. Lin, K. C., Chen, H. F., et al. (2012). "Multidimensional Rasch validation of the Frenchay Activities Index in stroke patients receiving rehabilitation." J Rehabil Med 44(1): 58-64.
3. Lu, W. S., Chen, C. C., et al. (2012). "Smallest real difference of 2 instrumental activities of daily living measures in patients with chronic stroke." Arch Phys Med Rehabil 93(6): 1097-1100.

**After carefully reading the above mentioned research work try to answer the following:**

* What is the main purpose and benefit to use the Frenchay Activities Index?
* Please describe each item specific information and proved summary about method of administration, scoring, and group tested with this tools?
* How the FAI is linked to ICF and what is type of measurement tools?
* Has FAI is feasible and acceptable? if “yes” justify
* Based on your understanding what is the advantage and limitation regarding use of FAI?
* Has the measure been tested for use with proxy assessment?
* What is the Recommended Timeframe for Measurement?

Reliability addresses the internal consistency of the scale items and the reproducibility of the scores when the scale is applied by the same rater (intra-rater reliability) or different raters (inter-rater reliability).

* Please define each type of reliability reported in the above research papers?
* Please identity different statistical test used to evaluate corresponding types of reliability? , and summarize the results for each paper separately.
* Based on your understanding provide an overall conclusions regarding reliability studies of FAI in stroke rehabilitation.