OCTH 6260-Spring- Assessment Rating Form

I. General Information

Title of the test: The Naturalistic Action Test (NAT)

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Publisher: Harcourt Assessment [England]

Time required to administer: Typically takes an examinee about 45 minutes to complete all three tasks. Maximum amount of time allowed for each of the three tasks is 30 minutes.

Cost of the Test: The manual and score sheets can be accessed online for free through the website http://www.ncrrn.org/assessment/nat. The supplies needed for the NAT would likely need to be purchased while some items may be available in the rehab clinic.

II. Description of Test

Type/Purpose of Test: Assesses errors in naturalistic actions that occur in the performance of routine activities of daily living due to cognitive deficits. A naturalistic action is a learned, sequential, object-oriented behavior that is used when performing daily activities. The NAT specifically assesses errors in action during three tasks: Making toast and coffee, wrapping a present, and packing a lunchbox and schoolbag. For each task there are specific instructions given for the setup of the items and how to administer the instructions to the examinee. Results indicate the severity of the impairment of naturalistic action during these tasks, and may be used to determine goals and intervention plans.

Population: Used with people who have had a TBI, CVA, or dementia. It can also be used with people who have any condition that affects attention, working memory, goal formulation and execution, object recognition, or related cognitive functions.

Focus of measurement:

<u>Organic systems</u> <u>X</u> Abilities <u>Participation/life habits</u> <u>Environmental</u> Factors

III. Practical Administration

Ease of Administration: Simple- Because the assessment is standardized specific instructions are given on what to say as the test is administered. The manual also provides examples of the types of cues that may be used including generic cues (given anytime and as often as needed), initiation cues (as often as needed), and time-based cues which are limited during the assessment. The manual also includes diagrams and instructions on how each task should be positioned and setup for the examinee.

Clarity of Directions: Directions are very clear and easy to understand. Specific instructions are given in the manual for each task including setup, administration scripts, and scoring procedures.

Scoring Procedures:

Each task is scored separately. An overall NAT score for each of the three tasks is based on the combination of an accomplishment score and an error score. An accomplishment score determines how many steps were performed during the task. An error score is the amount of errors completed during the task (i.e. putting two slices of bread in the toaster when the instructions stated to put only one). The score sheet provides a percentile ranking of the accomplishment score that is paired with a range of error scores, which equals the overall NAT score. The NAT scores range between 0-6 for each task. The highest score you can receive on all three combined tasks is 18 which imply no concerns. Scoring example for one task:

| Accomplishment Score | Error Score | = NAT Score |
|----------------------|-------------|-------------|
| 100% | 0 or 1 | 6 |
| 100% | >1 | 5 |
| 75-99% | 0 or 1 | 4 |
| 75-99% | >1 | 3 |
| 50-74% | 0 or 1 | 2 |
| 50-74% | >1 | 1 |
| <50% | | 0 |

Examiner Qualification & Training:

No specific training or credentials are required of the examiner. The NAT is intended to be used by neuropsychologists, occupational therapists, and other rehabilitation specialists who work with neurological disorders. However, the NAT is not restricted to specific health professionals.

IV. Technical Considerations

Standardization: ____ Norms X Criterion Referenced ____ Other _____

Reliability: Inter-rater reliability was found to be high based on accomplishment and error coding across scorers. Internal consistency was based on Cronbach's coefficient alpha = .75-.79 which proved acceptable confidence of its internal measurement of naturalistic actions.

Validity: Criterion validity- correlated with the FIM physical and cognitive subscales Construct validity- excellent (p<0.0001) Predictive validity- Association between NAT scores and the IADL scale

Manual: X Excellent ____ Adequate ____ Poor

What is (are) the setting/s that you would anticipate using this assessment? EX: SNF, LTAC, Rehabilitation – outpatient and inpatient, mental health settings The NAT can be used widely across settings.

Summary of strengths and weaknesses: Weakness:

- Standardized way of completing each task
- Requires exact set up of materials which may be time intrusive or demanding
- May not be culturally sensitive for people who have not routinely participated in the three tasks

Strength:

- Can be used with people who require physical assistance such as hemiparesis during the tasks
- Can be used with people who have aphasia
- Optional Scoring: comprehensive error score (CES) to further assess specific error tendencies
- Optional Scoring: lateralized attention score (LAS) detects left or right spatial attentional biases during naturalistic action in people with CVA or unilateral brain lesions