I. Introduction

Neurologically-impaired patients often experience problems in naturalistic action (e.g., grooming, meal preparation, etc.); however, neuropsychologists rarely assess this ability in the clinic. This may be because traditional methods require videotaping and extensive training of coders. The Naturalistic Action Test (NAT; Schwartz et al., 2002a,b) is a standardized, performance-based measure that employs an on-line, easy to use coding system (NAT Score). The present study compared the NAT Score to a traditional coding method.

II. Methods

Participants - Videotapes of 100 patients and 28 healthy controls (HC) performing the NAT were reviewed. Videotapes were obtained for previous studies (Schwartz et al., 2002b; Giovannetti et al., 2000). The patient sample included individuals undergoing inpatient rehabilitation for closed head injury (CHI \( n = 11 \)) or cerebrovascular accident (CVA \( n = 35 \)) as well as individuals with degenerative dementia (\( N = 54 \)). Table 1 shows demographic data.

<table>
<thead>
<tr>
<th>Group</th>
<th>( n )</th>
<th>Age (SD)</th>
<th>Education (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC</td>
<td>28</td>
<td>55 (17)</td>
<td>13 (3)</td>
</tr>
<tr>
<td>TBI</td>
<td>11</td>
<td>29 (9)</td>
<td>11 (2)</td>
</tr>
<tr>
<td>CVA</td>
<td>35</td>
<td>60 (12)</td>
<td>11 (3)</td>
</tr>
<tr>
<td>Dementia</td>
<td>54</td>
<td>76 (9)</td>
<td>12 (2)</td>
</tr>
</tbody>
</table>

The NAT Score and CES significantly correlated in each patient group (dementia \( r = -0.79 \); CVA \( r = -0.82 \); CHI \( r = -0.71, p < .01 \) for all), but not controls (\( r = -0.32, p = 0.09 \)).

Finally, both methods significantly correlated with functional disability (CHI & CVA - Functional Independence Measure; Dementia - Lawton & Brody ADL/IADL Scale; see Table 4).

IV. Conclusions

The NAT Score is comparable to the traditional, labor-intensive CES method in detecting impairment in neurologically-impaired patients.

Correlations with functional disability measures indicate that the NAT Score has comparable concurrent validity to the CES.

We recommend the NAT score as a valid and reliable method for the efficient, on-line assessment of naturalistic action impairment in the clinic (Schwartz 2002a,b).

The CES captures substantially more errors than the NAT Score and is recommended for use in research (Schwartz et al., 2002a).

V. References


VI. Acknowledgements

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