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Evaluating MMPI-2-RF Infrequent Somatic Responses (Fs) Item Endorsement Rates Across Ethnic, Gender, and Age Groups with a Forensic Inpatient Sample

Rosemary Gutierrez
*California State University, Monterey Bay*

Kylin Peck
*California State University, Monterey Bay*

Danielle Burchett
*California State University, Monterey Bay*, dburchett@csumb.edu

David M. Glassmire
*Patton State Hospital*

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Evaluating MMPI-2-RF Infrequent Somatic Responses (Fs) Item Endorsement Rates Across Ethnic, Gender, and Age Groups with a Forensic Inpatient Sample

Rosemary Gutierrez*, Kylin Peck*, Danielle Burchett, Ph.D.1, & David M. Glassmire, Ph.D., ABPP2
1Department of Psychology, California State University, Monterey Bay, 2Patton State Hospital
* Contributed equally

Introduction

- The Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) contains nine Validity Scales to detect invalid responding
- Often used in clinical and forensic evaluations
- Created using the rare symptoms approach, the 16-item Fs scale is composed of somatic symptom items endorsed by < 25% of general medical & chronic pain patients

Aims & Hypotheses

- Individuals living with severe mental illnesses such as schizophrenia or bipolar disorder are at elevated risk for genuine medical symptoms such as type 2 diabetes mellitus, asthma, and chronic obstructive pulmonary disease
- We sought to examine whether endorsement rates for Fs items are similarly rare in a forensic inpatient sample, where individuals live with severe psychiatric conditions such as schizophrenia or bipolar disorder
- We hypothesized all Fs items would be rarely endorsed (< 25%), but would be most frequently endorsed by older patients given their elevated risk of medical problems

Method

Participants

- 437 forensic inpatients adjudicated not guilty by reason of insanity who completed the MMPI-2-RF as part of clinical or forensic evaluations

Procedure

- We excluded non-content-invalid protocols and examined Fs item endorsement rates for the overall sample as well as gender, age, and ethnicity subsamples

Results

- Nearly every item exhibited overall and subgroup endorsement rates below 25%
- Women had a 25.8% endorsement rate on Item 199, related to smelling strange odors
- Few items had age-related endorsement patterns, except Item 78, about hearing loss
- Over 25% of every subgroup endorsed item 186, about convulsion history

Discussion

- Fs was designed to be comprised of somatic items rarely endorsed by individuals experiencing genuine medical symptoms, such that endorsement of several items suggests somatic overreporting
- This study demonstrates that, in a forensic setting, self-reported convulsion history may be relatively common and not necessarily a sign of overreporting
- This may be due to the elevated risk of seizures associated with antipsychotic and antidepressant medication
- Future research should examine Fs endorsement rates in psychiatric inpatients with confirmed medical diagnoses
- Clinicians should consider documented medical history and item-level endorsements when interpreting modest Fs elevations

Table 1. Fs Item Endorsement Rates

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Sample N = 437</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>African American n = 73</td>
<td>Caucasian n = 240</td>
<td>Hispanic n = 63</td>
</tr>
<tr>
<td>15</td>
<td>5.5</td>
<td>4.1</td>
<td>4.2</td>
<td>12.7</td>
</tr>
<tr>
<td>33</td>
<td>5.5</td>
<td>4.1</td>
<td>7.1</td>
<td>1.6</td>
</tr>
<tr>
<td>43</td>
<td>3.2</td>
<td>2.7</td>
<td>3.8</td>
<td>3.2</td>
</tr>
<tr>
<td>122</td>
<td>15.1</td>
<td>17.8</td>
<td>12.9</td>
<td>14.3</td>
</tr>
<tr>
<td>133</td>
<td>4.3</td>
<td>4.1</td>
<td>3.8</td>
<td>6.3</td>
</tr>
<tr>
<td>137</td>
<td>9.4</td>
<td>9.6</td>
<td>9.6</td>
<td>11.1</td>
</tr>
<tr>
<td>159</td>
<td>16.0</td>
<td>15.1</td>
<td>17.9</td>
<td>9.5</td>
</tr>
<tr>
<td>170</td>
<td>5.0</td>
<td>8.2</td>
<td>3.3</td>
<td>4.8</td>
</tr>
<tr>
<td>199</td>
<td>20.6</td>
<td>16.4</td>
<td>21.7</td>
<td>20.6</td>
</tr>
<tr>
<td>216</td>
<td>16.9</td>
<td>16.4</td>
<td>19.6</td>
<td>15.9</td>
</tr>
<tr>
<td>225</td>
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<td>4.8</td>
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<tr>
<td>308</td>
<td>3.4</td>
<td>0.0</td>
<td>5.0</td>
<td>3.2</td>
</tr>
<tr>
<td>2(R)</td>
<td>3.7</td>
<td>2.7</td>
<td>3.3</td>
<td>4.8</td>
</tr>
<tr>
<td>78(R)</td>
<td>13.0</td>
<td>9.6</td>
<td>15.0</td>
<td>11.1</td>
</tr>
<tr>
<td>186(R)</td>
<td>29.7</td>
<td>26.0</td>
<td>28.3</td>
<td>28.6</td>
</tr>
<tr>
<td>272(R)</td>
<td>8.0</td>
<td>5.5</td>
<td>8.8</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Note. Endorsement rates ≥ 25% are bolded. (R) denotes items that have been reverse coded. Age groups are defined as younger (18-34), middle (35-49), and older (50+) adults.

References


Acknowledgements

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