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

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#### Introduction

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- 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

Infrequent Somatic Responses (Fs) Validity MMPI-2-RF Scale (rarely endorsed somatic complaints)

 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<sup>2</sup>

# 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<sup>3,4</sup>
- 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<sup>5</sup>

# 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

## Table I. Fs Item Endorsement Rates

		Ethnicity			Gender		Age		
ltem	Total Sample N = 437	African American n = 73	Caucasian n = 240	Hispanic n = 63	Men n = 344	Women n = 93	Young n = 151	Middle n = 193	Older n = 93
15	5.5	<b>4.</b> I	4.2	12.7	6.1	3.2	7.3	4.7	4.3
33	5.5	4.1	7.1	1.6	4.7	8.6	3.3	7.3	5.4
43	3.2	2.7	3.8	3.2	3.2	3.2	4.0	3.1	2.2
122	15.1	17.8	12.9	14.3	14.5	17.2	15.2	13.0	19.4
133	4.3	4.1	3.8	6.3	3.5	7.5	6.0	2.6	5.4
137	9.4	9.6	9.6	11.1	9.6	8.6	7.9	8.3	14.0
159	16.0	15.1	17.9	9.5	14.8	20.4	15.9	15.5	17.2
170	5.0	8.2	3.3	4.8	4.9	5.4	5.3	<b>4.</b> I	6.5
199	20.6	16.4	21.7	20.6	19.2	25.8	21.9	21.8	16.1
216	16.9	16.4	19.6	15.9	14.8	24.7	17.2	15.5	19.4
225	8.0	9.6	8.3	4.8	7.6	9.7	6.6	10.9	4.3
308	3.4	0.0	5.0	3.2	3.2	4.3	1.3	4. I	5.4
2(R)	3.7	2.7	3.3	4.8	3.2	5.4	6.0	1.6	4.3
78(R)	13.0	9.6	15.0	11.1	13.7	10.8	7.9	13.0	21.5
186(R)	29.7	26.0	28.3	28.6	30.5	26.9	<b>29.</b> I	31.6	26.9
272(R)	8.0	5.5	8.8	12.7	9.0	4.3	7.9	7.8	8.6

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

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#### 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 the elevated risk of seizures associated with antipsychotic and antidepressant medication<sup>6</sup>
- 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

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