

# Cognitive Symptom Trajectories of Forensic Inpatients with Psychotic Disorder Diagnoses with and without Comorbid Mood Symptoms

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## Introduction

- Most forensic inpatients and roughly 1% of the U.S. population are diagnosed with psychotic disorders<sup>1</sup>
- To better inform clinician assessment and treatment, cognitive symptom course should be determined as well as the impact of comorbid mood symptoms
- Two competing trajectory models exist for cognitive dysfunction: degenerative and developmental<sup>2-4</sup>
- Research on comorbid mood symptoms is limited and mixed<sup>5</sup>

## Aims & Hypotheses

- The current study sought to resolve the discrepancy between the trajectory models and explore the impact of comorbid mood symptoms within a large forensic inpatient sample diagnosed with

### Hypotheses

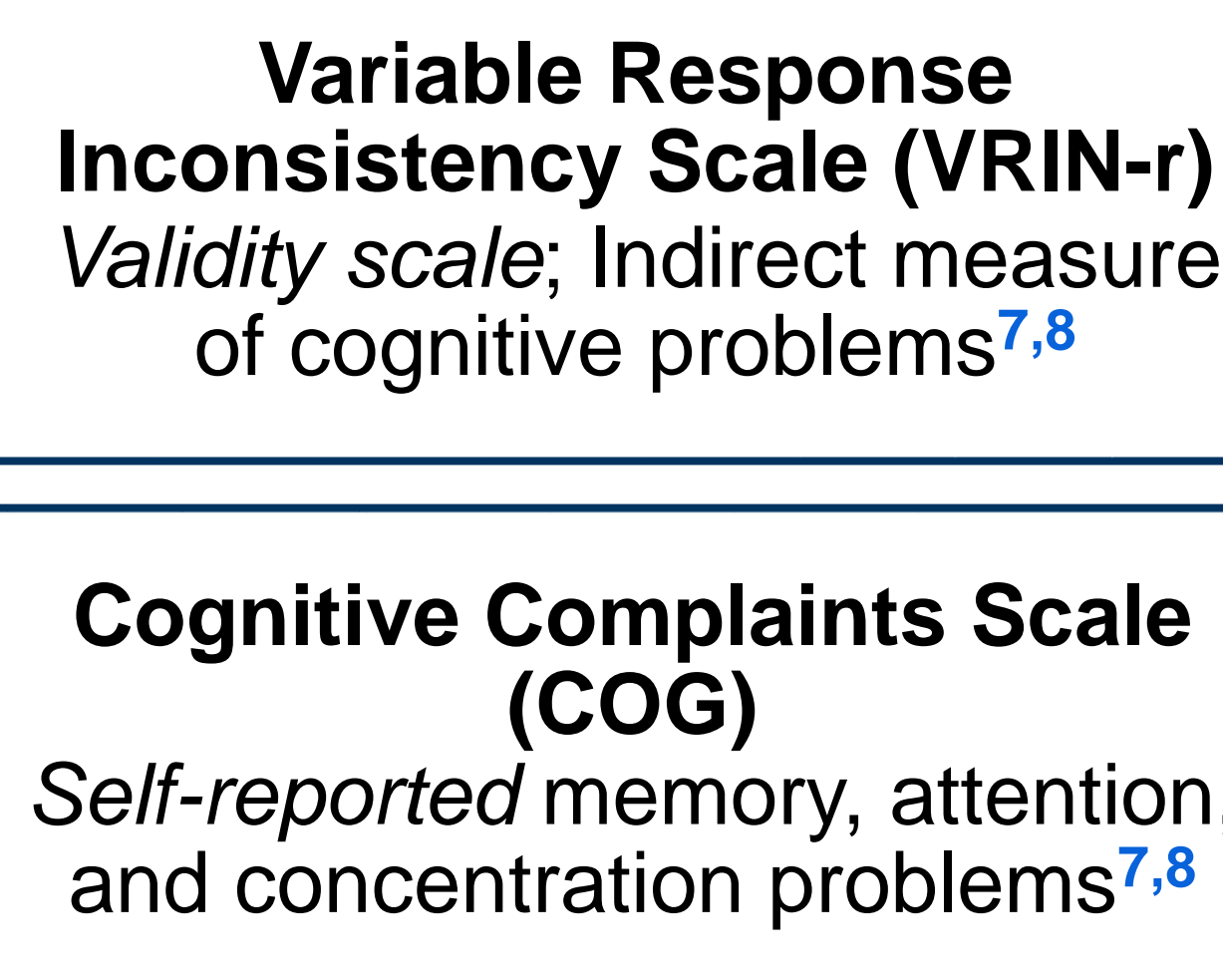
- For our overall analyses, based on extant cross-sectional studies<sup>6</sup>, we hypothesized:  
Young and Middle adults would show some cognitive impairment and Older adults would be the most impaired
- We conducted exploratory analyses to examine the impact of comorbid mood symptoms due to the mixed findings of current research

## Method

### Participants

- Sample consisted of 708 adult forensic inpatients ( $\geq 18$  years old) living with schizophrenia spectrum disorder diagnoses  
Mean age = 40.20 years ( $SD = 10.72$ )
- Patients were divided into groups: Young Adult (18-34 years), Middle Adult (35-49 years), & Older Adult ( $\geq 50$  years)
- For subsample analyses, the data set was split into two groups:  
1) Psychotic diagnoses only ( $n = 353$ )  
2) Psychotic + comorbid mood diagnoses ( $n = 355$ )

### Measures



### Procedure

- Our cross-sectional study compared mean scores between age groups on VRIN-r and COG
- For subsample analyses, we conducted independent samples *t*-tests to compare those with and without comorbid mood diagnoses (within age bands)

**Table 1: VRIN-r and COG Scores for Younger, Middle, and Older Patients with Psychotic Disorders**

	Young (18-34 Years)			Middle (35-49 Years)			Older ( $\geq 50$ Years)			<i>F</i>	<i>p</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
<b>VRIN-r</b>	236	59.94	17.10	338	59.36	14.12	134	57.12	15.03	1.52	.22
<b>COG</b>	148	51.18	11.62	216	50.37	9.95	95	51.84	10.54	0.51	.51

Note: Variable Response Inconsistency Scale (VRIN-r), Cognitive Complaints (COG). For Cognitive Complaints (COG) analyses, invalid protocols (CNS  $\geq 18$ ; VRIN-r  $\geq 80$ ; TRIN-r  $\geq 80$ ; F-r  $\geq 120$ ; Fp-r  $\geq 100$ ; RBS  $\geq 80$ ) were excluded.

**Table 2: VRIN-r and COG Scores for Patients with Psychotic Disorders with and without Comorbid Mood Disorders**

		Psychotic Only			Psychotic with Mood			<i>t</i>	<i>p</i>
		<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
<b>Young (18-34)</b>	VRIN-r	116	59.03	17.18	120	60.82	17.05	-0.80	.42
	COG	81	50.52	11.78	67	51.99	11.47	-0.76	.45
<b>Middle (34-49)</b>	VRIN-r	172	59.44	13.64	166	59.29	14.64	0.10	.92
	COG	116	50.59	10.03	100	50.12	9.89	0.34	.73
<b>Older (<math>\geq 50</math>)</b>	VRIN-r	65	57.12	16.16	69	57.12	14.00	0.003	.998
	COG	46	50.46	9.16	49	53.14	11.64	-1.25	.22

Note: Variable Response Inconsistency Scale (VRIN-r), Cognitive Complaints (COG). For Cognitive Complaints (COG) analyses, invalid protocols (CNS  $\geq 18$ ; VRIN-r  $\geq 80$ ; TRIN-r  $\geq 80$ ; F-r  $\geq 120$ ; Fp-r  $\geq 100$ ; RBS  $\geq 80$ ) were excluded.

## Results & Discussion

### Findings

- Found no significant differences for overall or subsample analyses
- Patients may not experience differences in cognitive dysfunction as they age and mood symptoms may not alter severity of cognitive dysfunction

### Limitations

- Used indirect (VRIN-r) and self-report (COG) measures of cognitive dysfunction that may not be as sensitive to changes in cognitive symptom severity compared to neuropsychological tests
- Could not control for medication use or age of onset

### Strengths

- Large sample of patients living with psychotic disorders
- Measured cognitive dysfunction in two distinct ways

### Future Directions

- Use multimethod and direct measures of cognitive dysfunction as well as clinician- and family-ratings
- Study cognitive symptom trajectories in outpatient and community samples

## References

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## Acknowledgements

This research was made possible by support from a grant from the University of Minnesota Press, Test Division in supporting data collection, and the California State University, Monterey Bay Undergraduate Research Opportunity Center (UROC) for additional financial, logistical, and mentorship support. This research was approved by the CA Human Services Agency Committee for the Protection of Human Subjects. The statements and opinions expressed are those of the authors and do not constitute the official views or the official policy of DSH-Patton, The California Department of State Hospitals, or the State of California.