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# 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

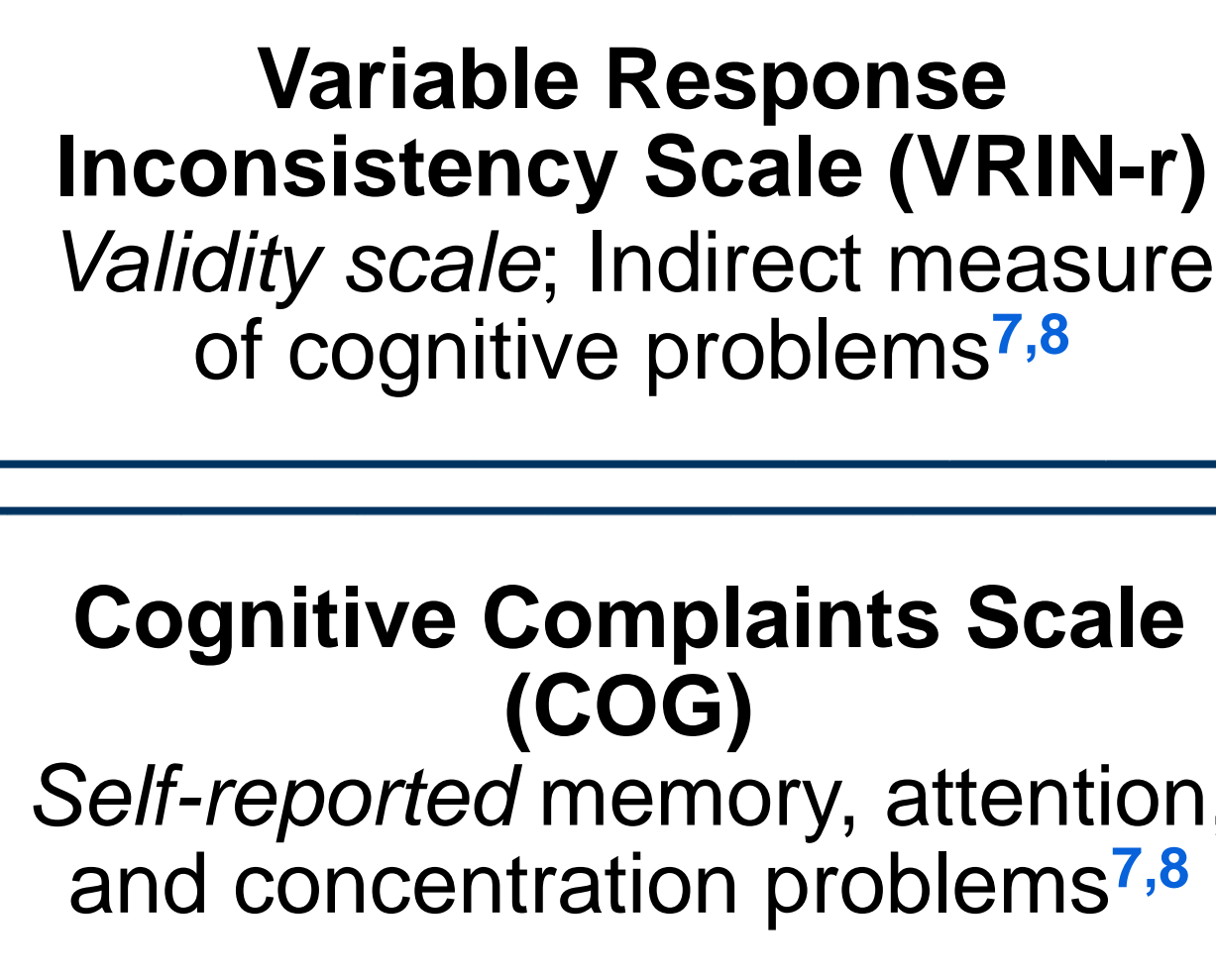
- For our overall analyses, based on extant cross-sectional studies<sup>6</sup>, we hypothesized:  
Young and Middle adults would show some cognitive impairment and Older adults would be the most impaired
- We conducted exploratory analyses to examine the impact of comorbid mood symptoms due to the mixed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

- <sup>1</sup>Fazel, S. & Danesh, J. (2002). Serious mental disorder in 23 000 prisoners: a systematic review of 62 surveys. *The Lancet*, 359(9306), 545-550. doi: 10.1016/S0140-6736(02)07740-1 <sup>2</sup>Kurtz, M. M. (2005). Neurocognitive impairment across the lifespan in schizophrenia: an update. *Schizophrenia research*, 74(1), 15-26. doi: 10.16/j.schres.2004.07.005 <sup>3</sup>Heaton, R. K., Gladsjo, J. A., Palmer, B. W., Kuck, J., Marcotte, T. D., & Jeste, D.V. (2001). Stability and course of neuropsychological deficits in schizophrenia. *Archives of General Psychiatry*, 58(1), 24-32. doi: 10.1001/archpsyc.58.1.24 <sup>4</sup>Irani, F., Kalkstein, S., Moberg, E. A., & Moberg, P. J. (2011). Neuropsychological performance in older patients with schizophrenia: A meta-analysis of cross-sectional and longitudinal studies. *Schizophrenia Bulletin*, 37, 1318-1326. doi: 10.1093/schbul/sbq057 <sup>5</sup>Bora, E., Yucel, M., & Pantelis, C. (2009). Cognitive functioning in schizophrenia, schizoaffective disorder and affective psychosis: meta-analytic study. *The British Journal of Psychiatry*, 195(6), 475-482. doi: 10.1192/bjp.bp.108.05573 <sup>6</sup>Herold, C. J., Schmid, L. A., Lässer, M. M., Seidl, U., & Schröder, J. (2017). Cognitive performance in patients with chronic schizophrenia across the lifespan. *The Journal of Gerontology and Geriatric Psychiatry*, 30(1), 35-44. doi: 10.1024/1662-9647/a000164 <sup>7</sup>Ben-Porath, Y. S. & Tellegen, A. (2008/2011). *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*. Minneapolis: University of Minnesota Press. <sup>8</sup>Ben-Porath, Y.S. (2012). *Interpreting the MMPI-2-RF*. Minneapolis: University of Minnesota Press.

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