

# Predicting Perceptual Aberration by the Aberrant Salience Inventory and Multidimensional Schizotypy Scale-Brief in a Non-Clinical, Urban Sample



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## INTRODUCTION

- Self-disturbance is posited to underlie perceptual and cognitive disturbances in schizophrenia<sup>1</sup>
- Aberrant salience has been proposed to be a neurocognitive correlate of basic self-disturbance<sup>2</sup>
- Disturbed corporeality, conceptualized as a form of self-disturbance<sup>3</sup>, can be captured via Perceptual Aberration Scale (PAS)
- Schizotypy reflects psychosis-like traits present in varying degrees throughout the general population<sup>4</sup>
- As part of an overarching investigation assessing effects of Pinocchio Illusion (PI)<sup>5</sup> in low- & high-schizotypy
- **Aim:** To examine differential prediction of PAS by aberrant salience vs. schizotypy in a non-clinical, urban sample
  - **Hypothesis 1:** Aberrant salience would explain significant variance in PAS scores
  - **Hypothesis 2:** Aberrant salience would explain greater variance in PAS scores than schizotypy

**Aberrant salience explains additional variance in perceptual aberration when added to schizotypy in regression model**

## METHODS

- **Sample:** 795 urban, undergraduate students (Table 3)
  - Majority female
- **Data Collection Method:** Qualtrics.com
- **Self Report Measures:** Aberrant Salience Inventory (ASI)<sup>6</sup>, Multidimensional Schizotypy Scale – Brief (MSS-B)<sup>7</sup>, PAS
- All 13 Chapman Infrequency Scale items randomly dispersed through battery
  - Cases with scores  $\geq 5$  excluded from analyses
- **Analyses:** Simple and multiple regression employed to assess prediction of PAS by ASI & MSS-B (Tables 1 & 2)
  - Forced entry; two-tailed;  $\alpha = .01$

## Abbreviated Selected References

1. Parnas, J., & Henriksen, M. G. (2014). Harvard Review of Psychiatry, 22(5), 251
2. Nelson, B., et al. (2014). Schizophrenia Research, 152(1), 20-27
3. Sass, L. A. (2014). Schizophrenia Research, 152(1), 5-11.
4. Grant, P., et al. (2018). Schizophrenia Bulletin, 44(2), 556-563.
5. Michael, J., & Park, S. (2016). Schizophrenia Research, 176(2-3), 392-397
6. Cicero, D. C., et al. (2010). Psychological Assessment, 22(3), 688
7. Gross, G. M., Kwapil, T. R., et al. (2018). Journal of Psychopathology, 40(4), 669-677

**Table 1 - Simple Linear Regression Results:**

Predictor	F	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE Estimate	$\beta$	t
ASI	268.59*	.25	.25	.31	.50	16.39*

\* p < .001; criterion: PAS

## RESULTS

- MSS-B explained 43% of variance in PAS scores
- ASI explained additional 3% of variance in PAS scores when added to MSS-B in regression model

**Table 2 - Multiple Linear Regression Results:**

Model 1 Predictor	F	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE Estimate	$\beta$	t
MSS-B	597.13*	.43	.43	.27	.66	24.44*
Model 2 Predictors	F	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE Estimate	R <sup>2</sup> Change	F Change
MSS-B & ASI	340.80*	.46	.46	.26	.03	48.62*

\* p < .001; criterion: PAS

**Table 3 - Demographic Data:**

<b>Age</b>	Range: 18 – 35 M = 20.77 (SD = 3.27)
<b>Sex</b>	-
Male	N = 248 (31.2%)
Female	N = 547 (68.8%)
<b>Race</b>	-
Asian	N = 196 (24.7%)
Black	N = 145 (18.2%)
White	N = 220 (27.6%)
Native American	N = 13 (1.6%)
Pacific Islander	N = 25 (3.2%)
Other	N = 196 (24.7%)
<b>Hispanic</b>	N = 281 (35.3%)

## DISCUSSION

- As hypothesized, PAS scores (capturing body-image aberrations) were significantly predicted by self-reported aberrant salience (via ASI)
- Schizotypy significantly predicted PAS scores (via total MSS-B)
- Aberrant salience was not a stronger predictor of PAS scores compared to total schizotypy
- However, aberrant salience did explain an additional 3% of variance in PAS scores when added to MSS-B in regression model
- Evidence supports validity of self-reported aberrant salience as a predictor of anomalous perceptual experiences
- These results in a non-clinical, urban sample of young adults provides valuable information for the assessment of psychosis risk
  - Self-reported aberrant salience may be an informative addition to psychometric assessment of risk
- Future research: Examine prediction of Pinocchio Illusion response by ASI; capture aberrant salience via cognitive task