

Sensory sensitivity as a characteristic of autism rather than PTSD

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Background

- ASD and PTSD frequently co-occur
- But they often remain underrecognized due to diagnostic overshadowing
- Sensory sensitivity = central to both conditions
- Sensory processing differences are rather unknown

Objective

Examine

- Prevalence of cross-disorder symptoms (ASD in PTSD; PTSD in ASD) in adults referred for diagnostic assessment
- Differences in sensory responsivity in ASD, PTSD, and ASD+PTSD patients

Methods

Design

Retrospective analysis of diagnostic data

Sample

- $N = 287$ adults referred for suspected ASD or PTSD
- Subgroups based on diagnosis (ASD/PTSD) and symptom levels (ASD, PTSD, both)

Questionnaires

M-ASD, PCL-5 + LEC-5 (PTSD), and Senses-R

Analyses

- Prevalence statistics
- One-way ANOVA's with post-hoc contrasts
- Correlations and mediation analyses

Results

Substantial symptom overlap

- 53% of PTSD group had elevated ASD symptoms
- 27% of ASD group had elevated PTSD symptoms
- 85% of ASD group met DSM criterion A for PTSD
- 31% of ASD group met DSM criterion A for PTSD and scored clinical on PCL-5, but had no formal PTSD diagnosis

Table Prevalences

Group	<i>N</i>	High M-ASD	High PCL-5	PTSD Criterion A	High PCL-5 + Criterion A	High PCL-5 + AE
PTSD	57	52.6%	87.7%	100%	87.7%	
		<i>n</i> = 30	<i>n</i> = 50	<i>n</i> = 57	<i>n</i> = 50	<i>n</i> = 0
ASD	127	65.4%	26.8%	85.0%	30.6%	
		<i>n</i> = 83	<i>n</i> = 34	<i>n</i> = 108	<i>n</i> = 33	<i>n</i> = 1

Note. High M-ASD = $V > 26$; $M > 20$; High PCL-5 > 29 ; AE = adverse events

Sensory hyper- and hyposensitivity

- ASD group = ASD+PTSD group $>$ PTSD group
 $F(2,198) = 19.55, p < .001, \eta^2 = .17$ and $F(2,195) = 7.91, p < .001, \eta^2 = .08$
- PTSD symptoms correlated weakly but significantly with hypersensitivity ($r = .22$) and hyposensitivity ($r = .26$), though effects were not clinically meaningful
- ASD symptoms mediated association between PTSD symptoms and sensory hypersensitivity
indirect effect = .056, 95% CI [0.031, 0.082]



Conclusion

- PTSD remains under-identified among autistic adults, and autistic characteristics are often overlooked in trauma
- Sensory hyper- and hyposensitivity appear core to autism and offer limited diagnostic discrimination from PTSD
- Sensory differences may contribute and shape how trauma is perceived and expressed
- Advise: integrate systematic PTSD screening into autism diagnostics - and vice versa