Characterizing Mental Health Symptoms and Caregiver Concerns for Autistic Children in Publicly-Funded Mental Health Services

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Background

Mental Health Needs of Autistic Children
- Autistic children often access mental health services to address diverse concerns, including externalizing behaviors, social difficulties, attention/regulation problems, and anxiety (Brookman-Frazee et al., 2018).
- Given these diverse needs and the individualized nature of evidence-based autism interventions, caregiver input is essential for prioritizing needs and informing intervention planning.

Latent Class Analysis
- Latent Class Analysis is a data-driven approach that identifies subgroups of autistic children based on mental health patterns, but prior studies have not incorporated caregiver-identified priorities.
- Identifying patterns in caregiver priorities may help guide evidence-based intervention selection, implementation planning, and broader capacity building related to serving autistic children in mental health services.

Methods

Participants
- Data from caregivers of 186 school-age autistic children (M_{age} = 9.7 years, SD = 2.3 years, range 5-13 years, 78% male, 40% Latinx) were drawn from baseline assessments conducted in a hybrid type 3 implementation-effectiveness trial testing implementation strategies for *An Individualized Mental Health Intervention for Autism* in outpatient and school-based mental health services.

Procedure
- At study baseline, caregivers completed the Top Problems Assessment (Weisz et al., 2011) and Brief Problem Checklist (BPC) (Chorpita et al., 2010).
- Top Problems were coded according to items on the Child Behavior Checklist (Achenbach & Rescorla, 2001) by a team of three trained coders.

Results

Using Latent Class Analysis, we identified **four distinct profiles of autistic children** based on caregiver intervention priorities and child mental health symptom severity.

Class membership was associated with **child gender** and **caregiver primary language.**

Determining the optimal number of classes:

	Log likelihood	AIC	BIC	BLRT p-value*	Entropy
1 class:	-1111.77	2235.54	2235.89	--	--
2 class:	-1111.77	2202.61	2203.25	< .00001	0.62
3 class:	-1090.31	2198.13	2199.06	.100	0.67
4 class:	-1082.94	2187.85	2189.08	**< .00001**	**0.78**
5 class:	-1066.99	**2185.97**	**2187.49**	.122	0.73

*Bootstrap LRT ran for 2,000 iterations
Bold values indicate optimal model fit based on fit indices.
Note. Entropy is included in this table as a standardized index of model-based classification accuracy used for evaluation of the optimal model.

Four-Class Solution:

Class 1: *Primarily Externalizing Priority* $n = 65$

Class 2: *Mixed Priority, Low Severity* $n = 69$

Class 3: *Mixed Priority, High Severity* $n = 28$

Class 4: *Primarily Internalizing Priority* $n = 24$

Top Problem Proportions by Class

Distribution of BPC Externalizing and Internalizing Scores by Class
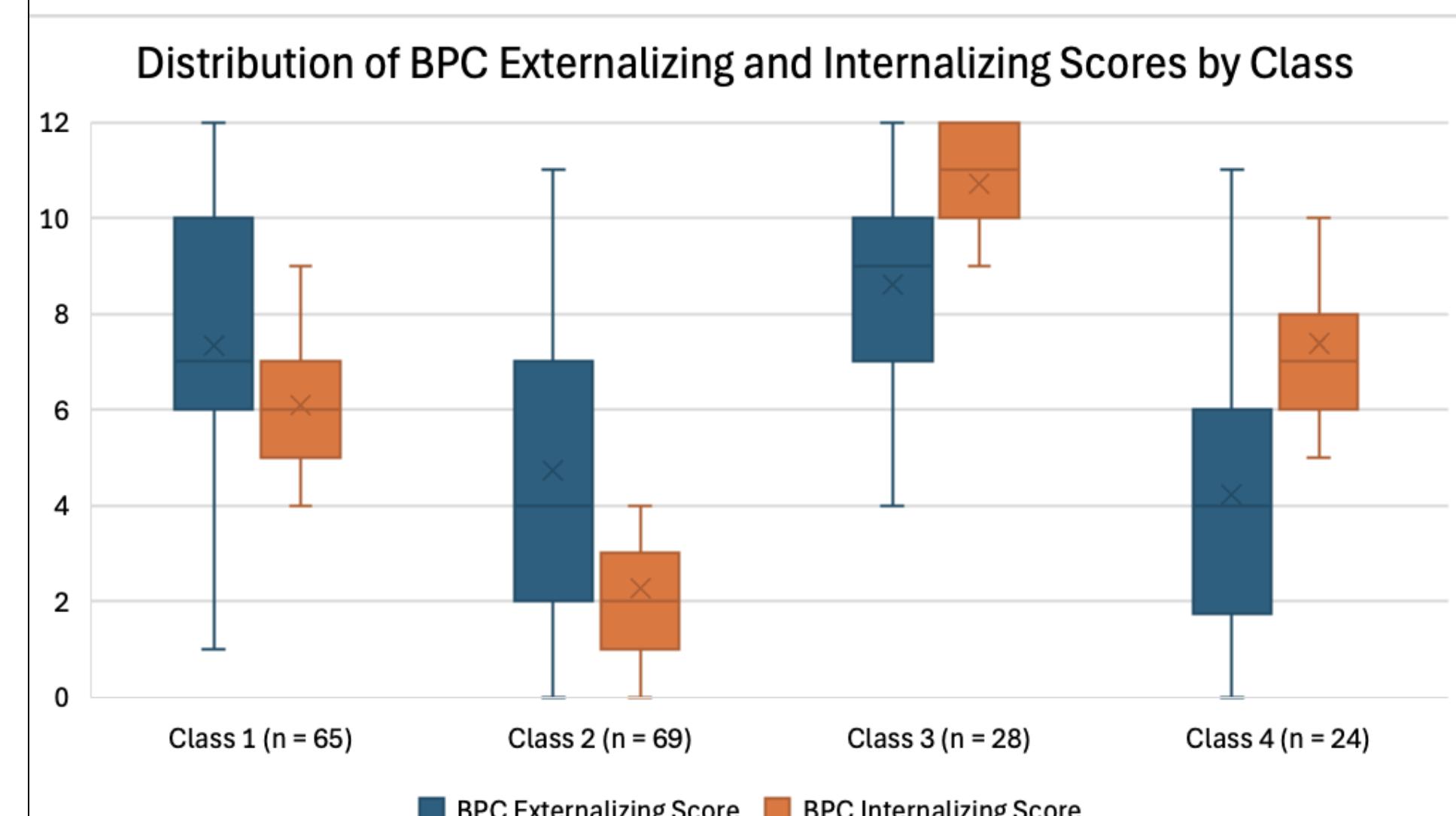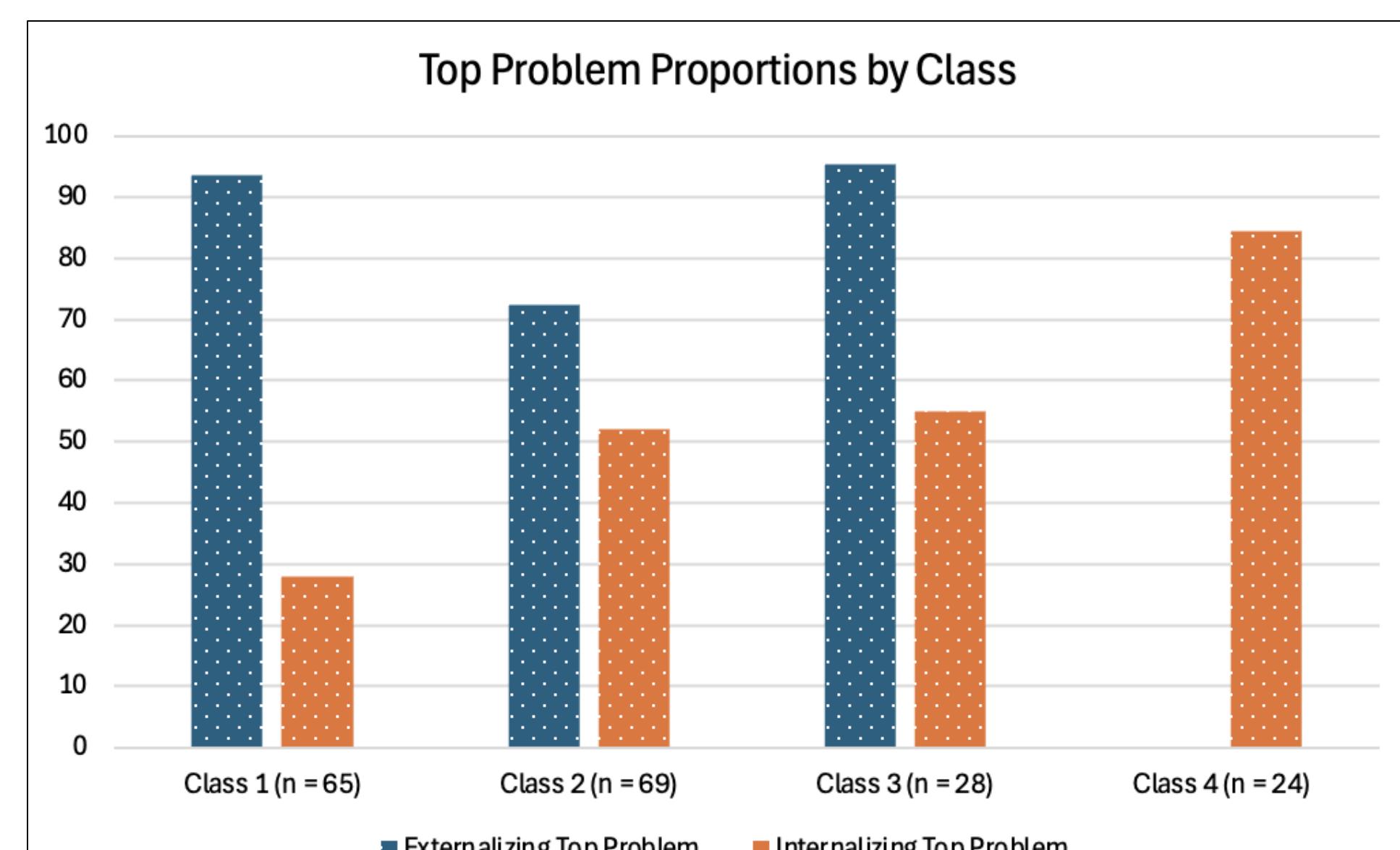
Child and Family Characteristics Associated with Class Membership:

Profile	2 – Mixed Priority, Lower Severity			3 – Mixed Priority, Higher Severity			4 – Primarily Internalizing Priority		
	OR	95% CI	*p*	OR	95% CI	*p*	OR	95% CI	*p*
Child Age	0.88	.76, 1.03	.123	1.01	.83, 1.23	1.01	1.11	.89, 1.38	.927
Child Gender (F)	1.86	.76, 4.55	.172	0.96	.27, 3.45	.962	**3.45**	**1.17, 10.15**	**.025**
Caregiver Preferred Language (Spanish)	1.50	.70, 3.23	.303	**0.10**	**.01, .81**	**.031**	1.12	.39, 3.24	.833

McFadden's Pseudo R^2 = .133
OR: Odds Ratio; CI: Confidence Interval.
Bold equals significant at p < .05.

Data Analysis

- An exploratory Latent Class Analysis was conducted with four indicators:
  - BPC externalizing score
  - BPC internalizing score
  - Externalizing Top Problem presence
  - Internalizing Top Problem presence
- Multinomial logistic regression was used to examine child and family factors that predict group membership.

Discussion

- Four classes were identified:
  1. Primarily Externalizing Priority
  2. Mixed Priority, Lower Severity
  3. Mixed Priority, Higher Severity
  4. Primarily Internalizing Priority
- Child gender and caregiver primary language were significantly associated with class membership.
- Findings highlight the diverse mental health needs of autistic children and the need to implement individualized, caregiver-informed intervention strategies.
- Results particularly underscore the need to attend to internalizing symptoms in this population, even when externalizing behaviors appear more prominent.

Acknowledgments