

The Effect of Behavioral Interventions on Caregiver Stress Measured Using the Autism Parenting Stress Index Pre- and Post-intervention

Abstract

The purpose of this article is to review the literature to determine the effects of behavioral interventions on parenting stress as measured using the Autism Parenting Stress Index (APSI). Using predetermined inclusion criteria, a total of six studies were included and summarized in terms of the following: (1) participant characteristics of the child and caregivers (e.g., sex, age, and diagnosis), (2) behavioral intervention used (e.g., antecedents, consequence, training procedure, and number of sessions), (3) APSI results (e.g., pre-, and post-intervention results, total results). Of the six studies, three studies demonstrated statistically significant reduction in parent stress levels with two studies reporting that statistical significance was not met. One of the six studies in this review reported qualitative data stating a decrease in parent stress level. The findings of this review suggest that behavioral interventions may decrease parental stress levels, as measured by the APSI. However, there are limited studies indicating more research is needed.

Methods

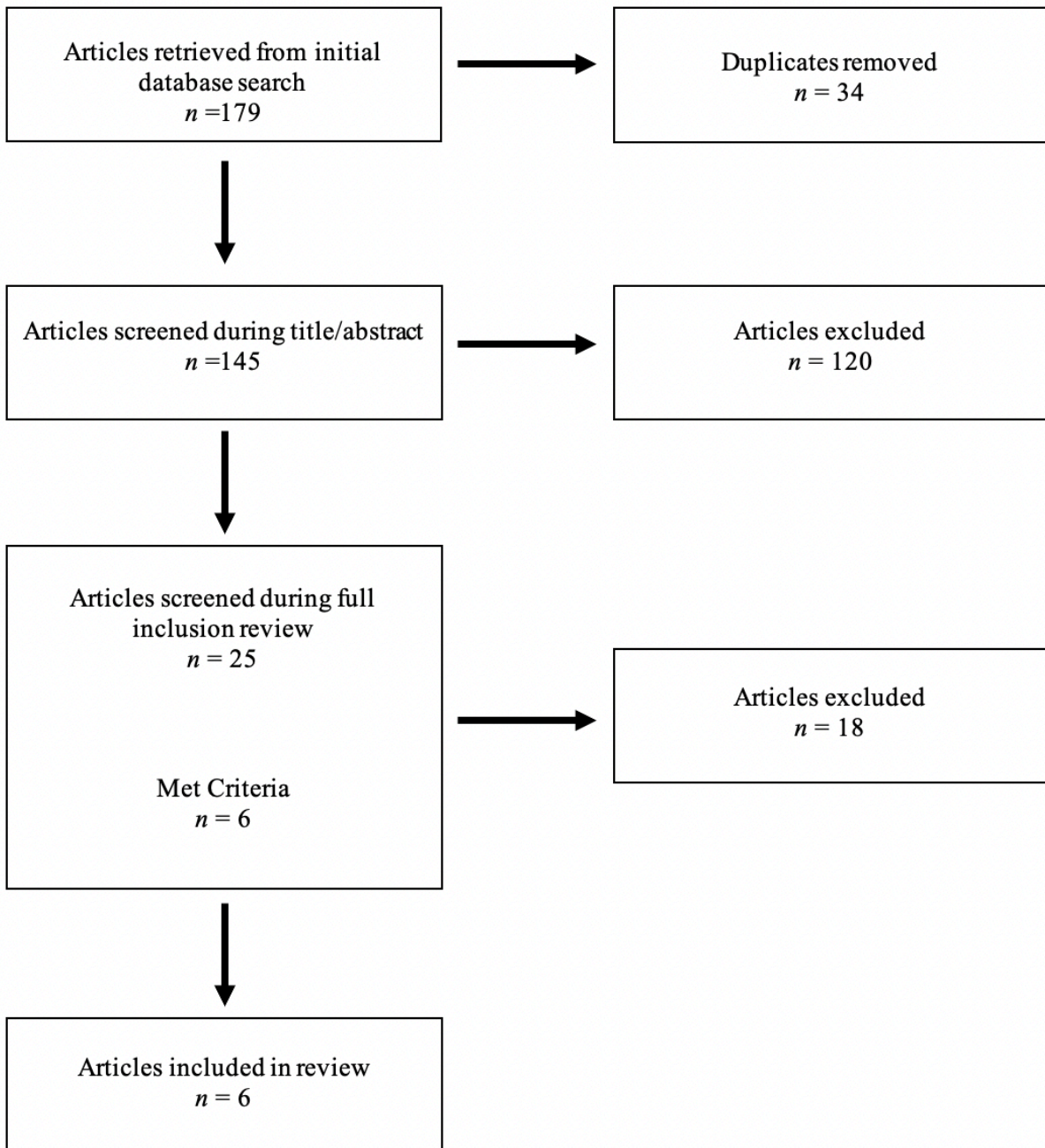


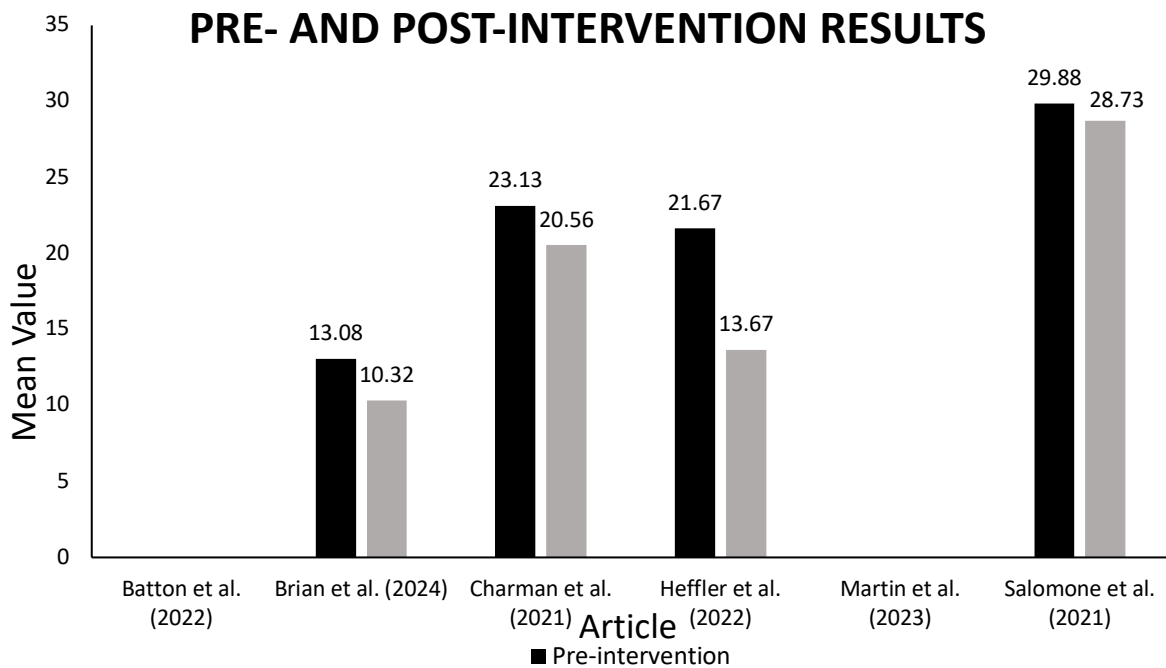
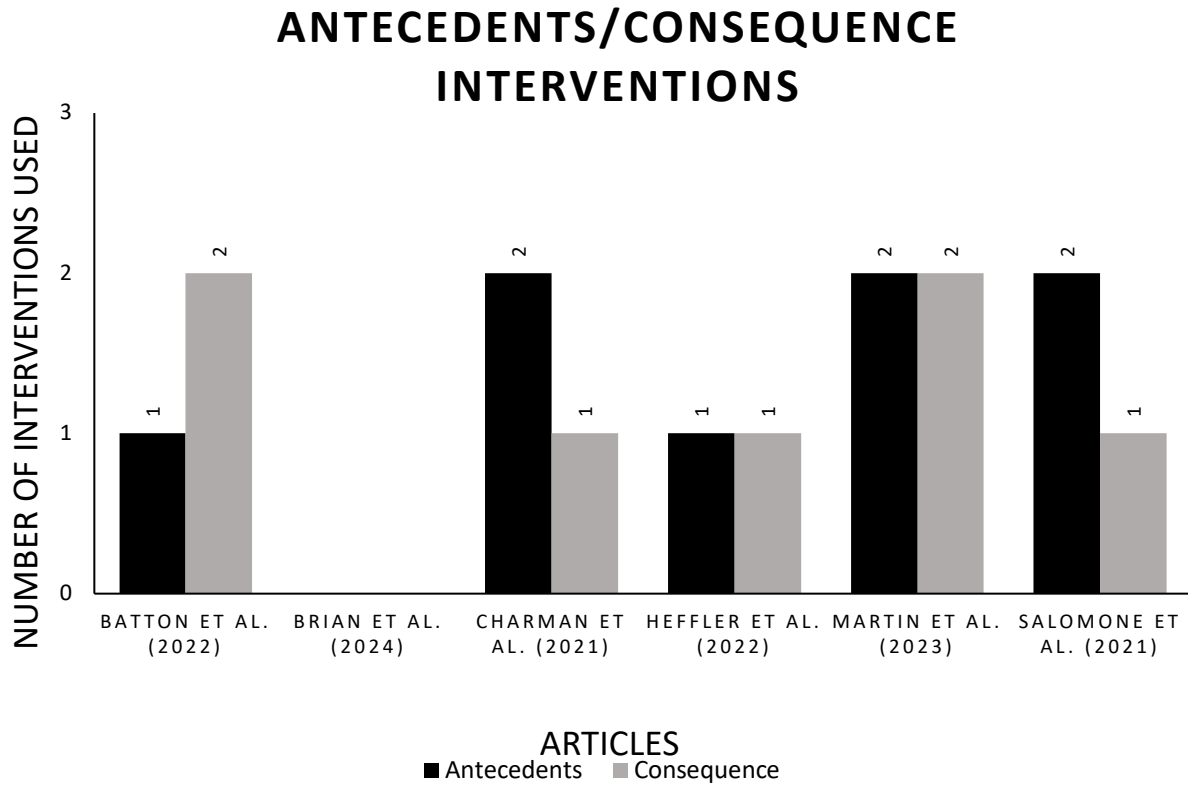
Figure 1 Search Graphic

Table 1 Summary of studies

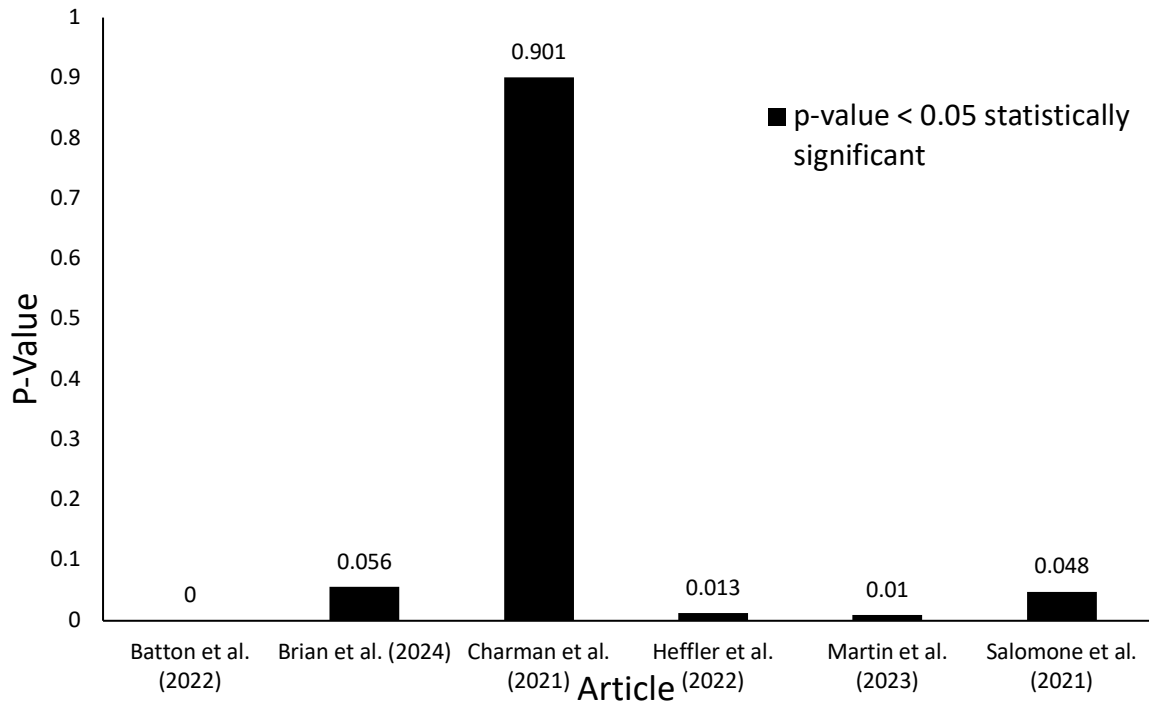
Reference	Participant Characteristics		Behavioral Intervention				APSI Results		
			Antecedents	Consequences	Training procedures	Number of sessions	Pre-intervention Mean value	Post-intervention Mean value	Total (<i>p</i> -value)
	Child Characteristics	Caregiver Characteristics							
Batton et al. (2022)	Child <i>n</i> = 3; males Ages: 3 years Autism	Caregivers <i>n</i> = 3; mothers	Stimulus control, prompting, teaching strategies, antecedent control	Reinforcement strategies, use of extinction, consequential control	Pilot study Caregiver behavior skills training to evaluate OASIS program and parent outcome	Did not specify	NA	NA	Qualitative report of parent reduction
Brian et al. (2024)	Child <i>n</i> = 51 males <i>n</i> = 13; females Ages: 28.5 months Autism	Caregivers <i>n</i> = 55; mothers <i>n</i> = 7; fathers <i>n</i> = 1; aunt <i>n</i> = 1; grandmother	Manualized Social ABCs	Manualized Social ABCs	RCR Caregiver behavior skills training to evaluate feasibility, acceptability, efficacy of Social ABCs program	<i>n</i> = 1; baseline <i>n</i> = 6; group sessions <i>n</i> = 9; individual sessions <i>n</i> = 2; follow-up sessions	<i>M</i> = 13.08	<i>M</i> = 10.32	<i>p</i> = .056; statistical significance not met
Charman et al. (2021)	Child <i>n</i> = 50; males <i>n</i> = 12; females Ages: <i>M</i> = 7 years Autism	Caregivers <i>n</i> = 57; mothers <i>n</i> = 3; fathers <i>n</i> = 2; grandmothers	Visual schedules, techniques to identify precursors and prevent disruptive behavior	Response techniques to disruptive behavior	RCT Caregiver behavior skills training to evaluate feasibility and efficacy of parenting intervention for emotional and behavioral problems	<i>n</i> = 12 sessions	<i>M</i> = 24.52 <i>M</i> = 21.74	<i>M</i> = 21.33 <i>M</i> = 19.79	<i>p</i> = .901; statistical significance not met
Heffler et al. (2022)	Child <i>n</i> = 8; male <i>n</i> = 1; female Ages: <i>M</i> = 28.2 months Autism	Caregivers <i>n</i> = 9 Did not specify caregivers	Pairing, transitions, social stories, contriving the environment	Reinforcement	Pilot study Caregiver education program to decrease screen time and increase social time	Did not specify	<i>M</i> = 21.67	<i>M</i> = 13.67	<i>p</i> = .013; significant reduction
Martin et al. (2023)	Child <i>n</i> = 10; male <i>n</i> = 4; female Ages: <i>M</i> = 7 years Autism; diagnosis not confirmed	Caregivers <i>n</i> = 10; females <i>n</i> = 4; others Did not specify caregivers	Prevention strategies, create daily schedules, compliance training, token economy systems	Reinforcement, planned ignoring, time-out	Feasibility trial design Caregiver behavior skills training to reduce disruptive behavior	<i>n</i> = 11; core sessions <i>n</i> = 2; supplemental session; optional <i>n</i> = 3; booster sessions; optional	<i>M</i> = 24 (Median Value)	<i>M</i> = 14 (Median Value)	<i>p</i> = .01; significant reduction
Salomone et al. (2021)	Child <i>n</i> = 67 males <i>n</i> = 19; females Ages: 44.24 months; eTAU 45.56 months; WHO CST Autism	Caregivers <i>n</i> = 67; mothers <i>n</i> = 19; others; did not specify caregiver	Visual aids, home and play routines, child engagement, preventing and reducing challenging behaviors	Coping exercises	RCT Caregiver behavior skills training to evaluate feasibility, acceptability, efficacy of community implementation of the CST program	<i>n</i> = 9 group sessions <i>n</i> = 3 home sessions	<i>M</i> = 30.66 <i>M</i> = 29.10	<i>M</i> = 30.58 <i>M</i> = 26.87	<i>p</i> = .048; significant reduction

APSI = Autism Parenting Stress Index, *p*-value < 0.05 was considered statistically significant

Results



APSI P-VALUE RESULTS



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