



Parenting Styles and Attention Deficit Hyperactivity Disorder

Gillian H. Pavia, Amanda Sumner, Jennifer U. Le, Grace M. Kinne, & Jonathan Garcia. Faculty Sponsor: Katherine S. L. Lau, Ph.D.

Department of Psychology

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is characterized by inattention, hyperactivity, and impulsivity (APA, 2013). Individuals with ADHD may experience low frustration tolerance, irritability, and mood lability (Sobanski et al., 2010). ADHD can interfere with functioning and development. Studies have shown that by early adulthood, individuals with ADHD have an increased risk of substance use problems, mood disorders, and suicide (Cabral et al., 2020).

Parenting styles that may lead to strife, tension, and negative interactions during early childhood may influence the course of the disorder and the development of associated problems (APA 2013). For example, in study of youth and young adults with and without ADHD, authoritarian parenting styles were associated with poorer executive functioning skills among those with ADHD than the control group (Hutchison et al., 2016; Stevens et al., 2018). An authoritarian parenting style is characterized by high coercive control and parental demandingness, and low parental warmth and behavioral control (Gafar et al., 2014). Coercive control is characterized by pressure, intrusion, domination, and discouragement of a child's independence and individuality. Behavioral control refers to the disciplining, monitoring of a child's activities, and demandingness by a parent. (Sleddens et al., 2014).

Research on which parts of authoritarian parenting contribute to more severe ADHD during young adulthood is lacking. This study expands on past research by examining nurturant, and coercive and behavioral control parenting styles in relation to ADHD symptoms in emerging adults. Understanding what specific components of parenting are associated with more ADHD symptoms can help inform prevention and intervention practices.

Methods

Participants were 414 undergraduate students (71.5% female; ages 17-27) were recruited from a northeastern university (76.1% white, 3.6% black, 13.5% Hispanic or Latino, 1.9% Asian, 3.5% other).

Measures were a demographics questionnaire to assess age and sex, the Brief Symptom Inventory (Derogatis & Melisaratos, 1983), the Adult Self Report (Achenbach & Rescorla, 2003), and the Comprehensive General Parenting Questionnaire (Sleddens et al. 2014).

Procedures involved collecting data via online self-report surveys. Participants received credit for their participation.

Results and Discussion

A one-way multivariate analysis of variance (MANOVA) was used to examine the differences in ADHD groups (no ADHD, borderline, clinically significant) on nine dependent variables (autonomy support, social rewarding, responsiveness, involvement, monitoring, maturity demands, non-intrusive discipline, psychological control, physical punishment). The results indicated that there were significant differences between the groups on parenting styles, Wilk's $\lambda = .86$, $F(18.00, 806.00) = 3.54$, $p < .01$.

To examine effect of ADHD group, univariate analyses of variance (ANOVAs) on each dependent variable were conducted as follow-up tests to the MANOVA using a Bonferroni adjusted alpha level of .0055 per ANOVA (.05/9). As shown in Table 1, significant differences were found for the autonomy support, social rewarding, involvement, psychological control, and physical punishment parenting styles.

Post hoc analyses to the significant ANOVAs consisted of conducting pairwise comparisons to find which ADHD groups were different. Using the Bonferroni method, each pairwise was tested at the .00183 level (.0055/3). For our nurturing parenting styles, the results found significant differences between the no ADHD group and borderline ADHD group for autonomy support and social rewarding. There were no significant differences found between our groups for the coercive control parenting styles at the .00183 alpha level.

The results suggest that young adults with ADHD symptoms may receive less praise, engagement, and support for their independence than those without ADHD symptoms. This is consistent with prior research that shows that low maternal nurturance during childhood is associated with greater severity of ADHD symptoms, and may lead to poorer outcomes (Nelson, 2019). Correlations in our study showed that individuals who experience greater ADHD symptoms also report experiencing greater overall distress, depression, anxiety, and substance-use problems (Table 2). Lastly, young adults with ADHD symptoms report experiencing slightly greater levels of psychological control and physical punishment. This may be explained by coercion theory (Patterson, 1982), where a parent makes a demand and the child does not comply, leading to an escalating cycle of negative interactions until someone gives in. Over time, a child's noncompliance may cause a parent to become more punitive, less nurturing, and less supportive towards their child, and ultimately to have a poor parent-child relationship which is essential for the physical and mental health of the developing individual.

Table 1. One-Way ANOVAs and Pairwise Comparisons for Parenting Style by ADHD Group

ADHD Group	Monitoring		Maturity Demands		Non-Intrusive Discipline		Autonomy Support		Social Rewarding		Responsiveness		Involvement		Psychological Control		Physical Punishment	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
No ADHD	12.31	4.78	15.52	3.90	13.85	4.31	17.12 ^a	3.25	16.79 ^{ab}	3.75	14.44	4.54	15.25 ^b	4.53	7.98 ^b	4.88	2.48 ^b	5.11
Borderline	10.81	4.14	13.61	4.52	11.99	4.32	13.71 ^a	4.82	14.26 ^a	5.55	12.22	5.43	12.84 ^b	5.69	8.56	4.82	5.19 ^b	6.21
Clinically Significant	11.08	5.49	15.11	4.40	12.88	4.59	14.85	4.31	14.63 ^b	4.90	13.13	4.99	13.70	4.82	10.75 ^b	4.92	4.78	6.00
F(2, 411)	2.55		3.85		3.69		21.08*		10.52*		4.80		5.85*		5.85*		6.97*	
η^2	.01		.02		.02		.09		.05		.02		.03		.03		.03	

Note. ADHD = attention-deficit hyperactivity disorder.
* $p < .0055$.
^a groups are significantly different at $p < .00183$ level; ^b groups are significantly different at $p < .01$ level.

Table 2. Descriptive Statistics and Correlations with Attention-Deficit Hyperactivity Symptoms

	Age	Sex	BSI	DE	AX	SU	AS	SR	RE	IN	MO	MD	NI	CI	PC	PP	AC
ADHD	-.03	-.39	.63**	.77**	.55**	.17*	-.28**	-.22**	-.18**	-.18**	-.14*	-.13*	-.15*	-.05	.19**	.15*	.09
M	19.14	-	50.10	7.28	5.50	56.02	16.60	16.40	14.12	14.88	12.06	15.31	13.59	10.15	8.30	2.95	9.27
SD	1.38	-	40.32	5.51	3.12	8.62	3.69	4.15	4.71	4.72	4.82	4.04	4.37	3.52	4.93	5.38	4.25
α	-	-	.97	.87	.79	-	.88	.92	.89	.90	.83	.87	.80	.57	.82	.98	.73

Note. Sex coded as 0 = female and 1 = male. ADHD = attention-deficit hyperactivity disorder, EDU = education level, ETH = racial/ethnic identity, BSI = brief symptom inventory, DE = depression, AX = anxiety, SU = substance-use, AS = autonomy support, SR = social rewarding, RE = responsiveness, IN = involvement, MO = monitoring, MD = maturity demands, NI = non-intrusive discipline, CI = considering child input, PC = psychological control, PP = physical punishment, AC = authoritarian control. Cronbach's alpha for ADHD = .86.
* $p < .01$, ** $p < .001$.

Figure 1. Percentage of sample by ADHD Group

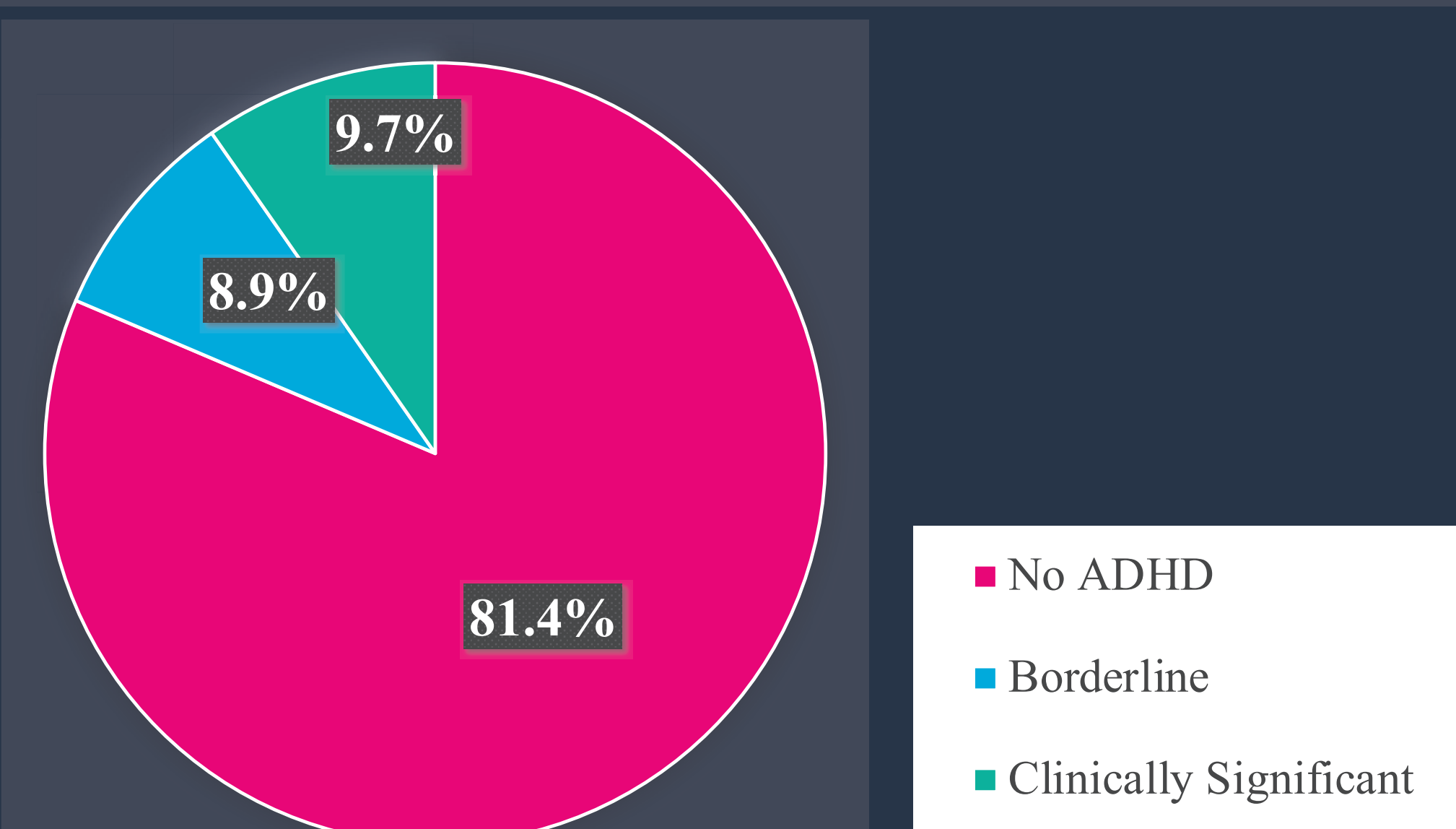


Figure 2. Means for Study Variables by ADHD Group

