

Sleep Problems in Parents and its Relation to Their Child with Autism Spectrum Disorder



Paige M. Bussanich, Sigan L. Hartley & Iulia Mihaila
Waisman Center, University of Wisconsin-Madison



Introduction

Mothers and fathers of children with autism spectrum disorder (ASD) are at an increased risk for parenting stress and negative affect as compared to parents of children without developmental disabilities as well as parents of children with other types of disabilities (e.g. Abbeduto et al., 2004). Parenting stress has been shown to impact parental sleep problems. Additionally, children with ASD exhibit a high rate of their own sleep problems (Hodge et al., 2014), which may further contribute to sleep problems in parents. The goal of the present study was to examine child, parent, and family variables associated with sleep problems in 184 married couples who have a child with ASD. A secondary goal was to evaluate the relation between sleep problems and negative affect in these parents.

Study Objectives

- 1.Examine the prevalence of sleep problems in parents who have a child with ASD.
2. Identify child, parent, and family variables that are associated with sleep problems in parents of children with ASD.
3. Evaluate the association between sleep problems and negative affect in parents of children with ASD.

Methods

Sample

- 184 married couples with a child with ASD
- Parents: Age ($M = 39.60$, $SD = 5.86$); 89.70% White, non-Hispanic, 86.20% at least some college education
- Child with ASD: Age ($M = 7.92$, $SD = 2.25$); 85.30% male; 34.80% Intellectual Disability (ID)
- Child Overall Behavior Problems (BP) ($M = 64.82$, $SD = 9.60$)
- Child ASD severity ($M = 76.98$, $SD = 10.33$)

Measures

Parents independently reported on:

- Child BP measured by Child Behavior Checklist (CBCL) for Ages 1 ½ -5 (Achenbach & Rescorla, 2000) and Ages 6-18 (Achenbach & Rescorla, 2001)
- Severity of ASD symptoms measured by Social Responsiveness Scale-Second Edition (SRS) (Constantino & Gruber, 2012)
- Negative Affect measured by the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988)
- Average sleep per night in the past month (measured in hours), sleep quality overall in the past month (4 point scale), and problems keeping up enough enthusiasm to get things done in the past month (4 point scale)

Parents jointly reported on their child’s age, ID status, and difficulty getting to sleep and/or staying asleep in a typical month (7 point scale).

Results

Table 1. Frequencies of Parent and Child Sleep Problems.

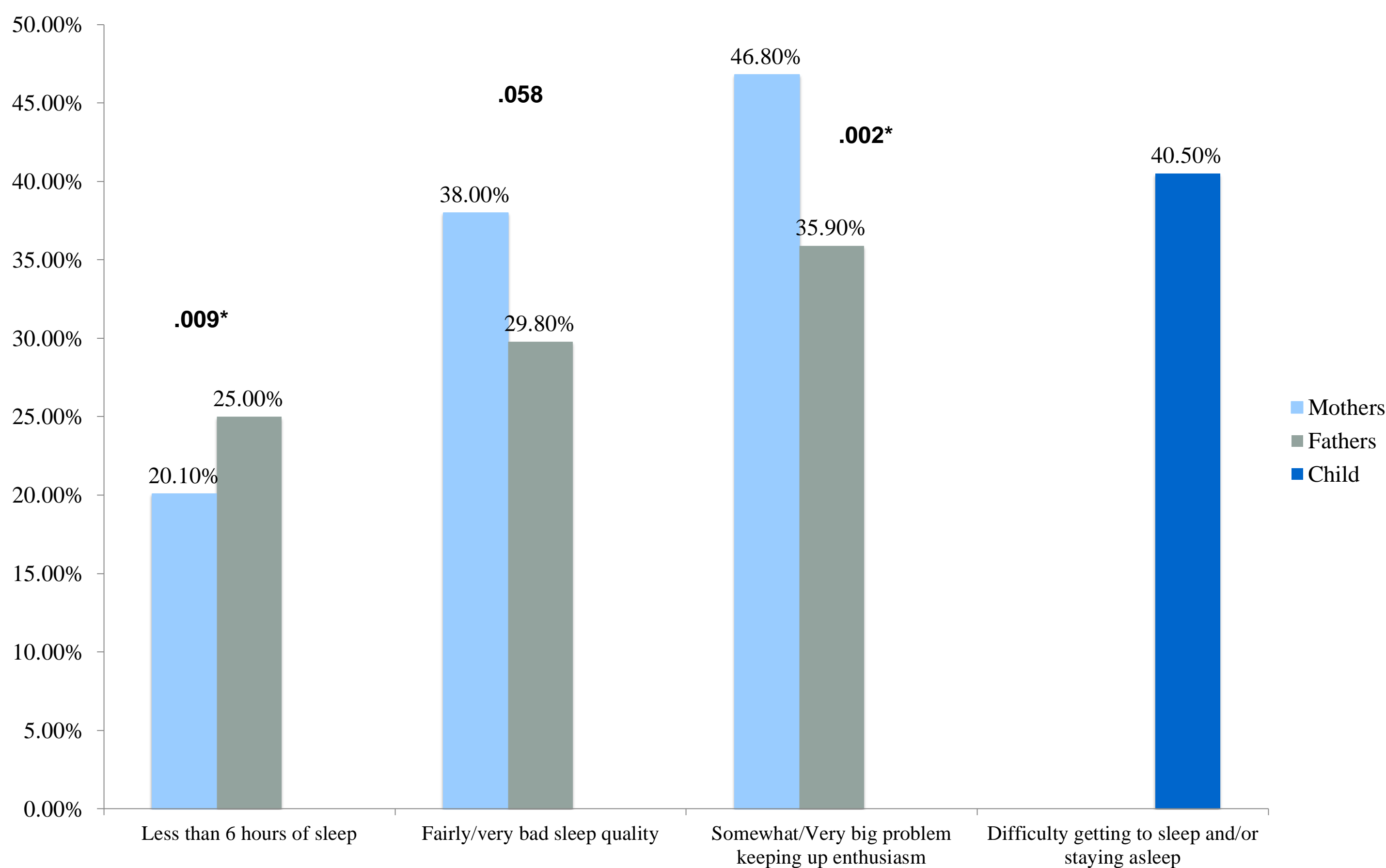


Table 2. Pearson Correlations

Variables	Child Age	ID Status	Child Sleep	Child BP	Child SRS	Edu	Sleep	Sleep Quality	Enthusiasm	Negative Affect
1. Child Age	-	-.07	-.03	-.01	.02	.07	.09	.15*	-.05	-.07
2. ID Status	-.07	-	.11	.18*	.21**	-.19*	-.12	-.17*	.01	-.01
3. Child Sleep	-.04	.10	-	.36**	.21**	.08	-.02	-.08	.18*	.19**
4. Child BP	-.01	.16*	.30**	-	.65**	-.04	-.20**	-.31**	.35**	.36**
5. Child SRS	.04	.24**	.27**	.72**	-	-.06	-.14	-.21**	.28**	.29**
6. Education	-.03	-.06	.03	.02	.05	-	.16*	.15*	-.06	-.02
7. Sleep	.01	.04	-.11	-.17*	-.18*	.06	-	.45**	-.25**	-.20**
8. Sleep Quality	.04	-.09	-.19*	-.24**	-.27**	.20**	.48**	-	-.32**	-.29**
9. Enthusiasm	-.01	.10	.29**	.32**	.24**	-.18*	-.17*	-.26**	-	.42**
10. Negative Affect	-.06	.09	.13	.28**	.25**	-.17*	.01	-.21**	.52**	-

*p < 0.05; **p < 0.01

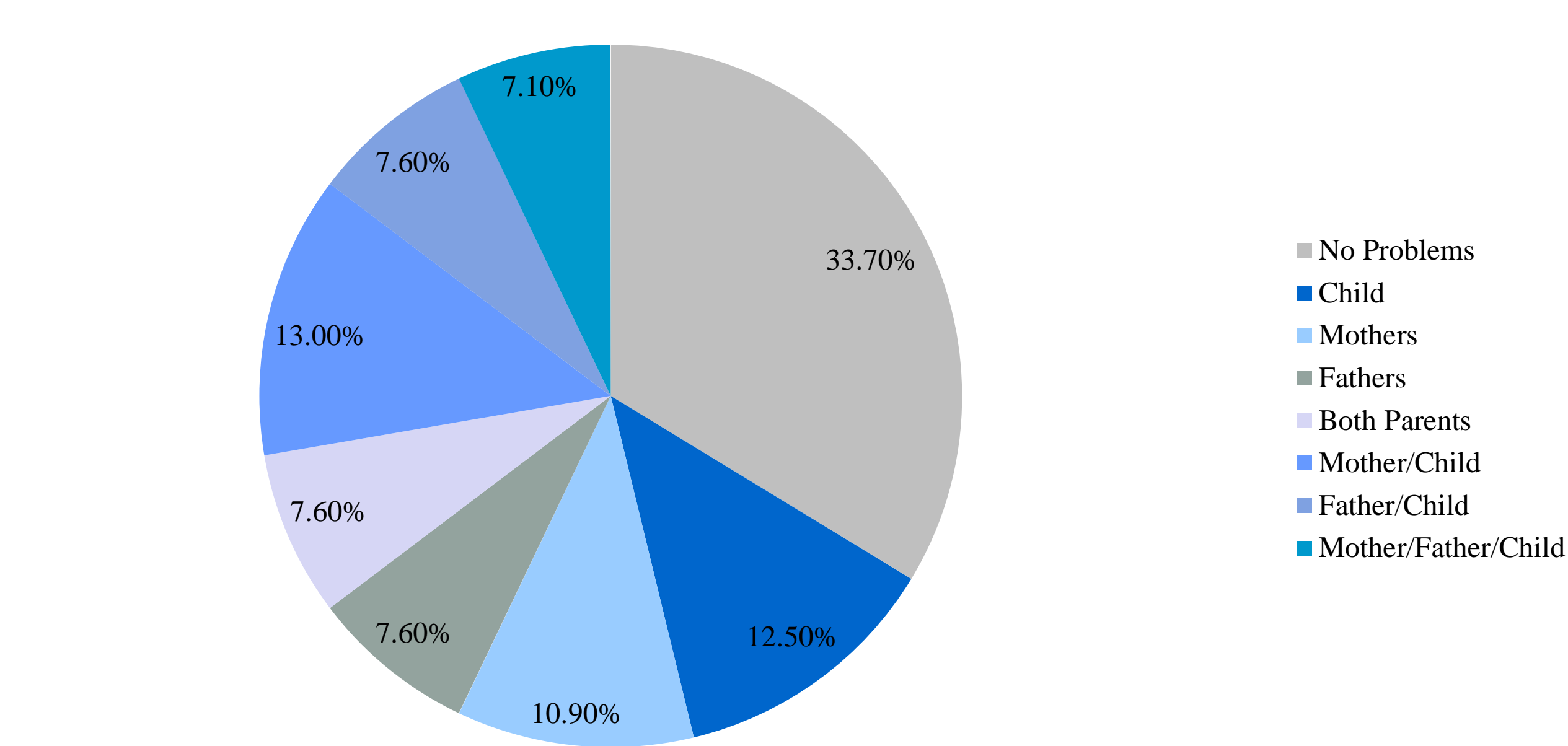
Table 3. Hierarchical Linear Model Predicting Negative Affect

	Coefficient	SE	t-ratio
Intercept	8.63	1.29	6.68**
Within-Couple Variables			
Parent Gender (PG)	3.75	1.41	2.65**
Average hours of Sleep	0.51	0.29	1.73
Sleep Quality	-1.15	0.46	-2.49*
Problems w/ Enthusiasm	2.70	0.29	9.47**
PG X Average hours of Sleep	-0.59	0.25	-2.34*
PG X Sleep Quality	-0.07	0.48	-0.15
PG X Problems w/ Enthusiasm	-0.21	0.31	-0.69
Between-Couple Variables			
Child Age	-0.13	0.12	-1.14
Child ID Status	-0.10	0.61	-0.16
Child Sleep Problems	0.18	0.13	1.43
Household Income	-0.09	0.07	-1.23

**P < .01, *p < 0.05

Findings

Table 4. Family-Wide Sleep Problems



- Mothers and fathers of children with ASD showed similar patterns in their report of sleep problems, with mothers showing lower levels of enthusiasm, worse sleep quality, and higher levels of negative affect when compared to fathers.
- Sleep quality of mothers and fathers of children with ASD was positively correlated with average amount of sleep and negatively correlated with enthusiasm and negative affect.
- More than one-third of children with ASD exhibited sleep problems. Sleep problems in children with ASD were positively correlated with their severity of ASD symptoms and behavior problems.
- Mothers reported higher levels of negative affect than fathers, Sleep quality and problems keeping up enthusiasm were related to negative affect in both mothers and fathers. Average hours of sleep impacted fathers’ negative affect more than mothers.

Discussion

A marked subgroup of children with ASD and their parents experience sleep problems. Parental sleep quality was associated with the child with ASD's sleep quality as well as their symptoms, behaviors, and ID status. Sleep quality had important connections to negative affect, as it may reduce resources for coping with child-related stressors. Findings indicate a need to consider sleep problems through a ‘family-wide’ lens, as sleep problems of parents and children with ASD are linked.

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Correspondance: Paige Bussanich (bussanich@wisc.edu)

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