Relations Between Sleep Disturbance, General Health, and Memory Among Parents of Children with Special Health Care Needs

Introduction

• About 15.1% or 11 million children across the United States have a special health care need [1].

• Parents of children with special healthcare needs (CSHCNs) perform extra duties that demand high levels of health and functioning, including becoming medical caregivers and coordinating appropriate medical care and education for their child [2].

• But parents of CSHCNs report poorer general health [3], more physical health problems [4], worse sleep [5], and increased depressive symptoms [6] compared to parents of typically developing (TD) children.

• In general, poor sleep is related to both poorer general health [7] and poorer memory [8], but this has never been assessed among parents of CSHCNs.

• The current study sought to replicate the findings of previous studies that parents of CSHCNs report poorer sleep quality than parents of TD children, and then further examine how this may be related to general health and memory.

Methods

The study was conducted through the West Virginia University Center for Excellence in Disabilities.

Subjects completed an online questionnaire consisting of: a demographics sheet, questions about their child's age and disability (for parents of CSHCNs), the Pittsburgh Sleep Quality Index (PSQI), the Prospective Retrospective Memory Questionnaire (PRMQ), and the 14item Healthy Days Measure.

	Demographics		
	Parent of TD Child	Parent of CSHCNs	p
Ν	85	102	
Age (SD)	29.8 (5.4)	41.9 (8.1)	<.001
Sex (% Female)	72.9%	94.1%	<.001
Race (%White)	92.9%	91.2%	
Marital Status	92.9%	92.9% 84.3%	
(%Married/Partnered)	92.9% 04.3%		<.05
Education (% Bachelor's	61 70%	52 00%	
Degree+)	61.2%	52.0%	
Income (Median)	\$60,001-80,000	\$60,001-80,000	

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•All analyses controlled for parent's age

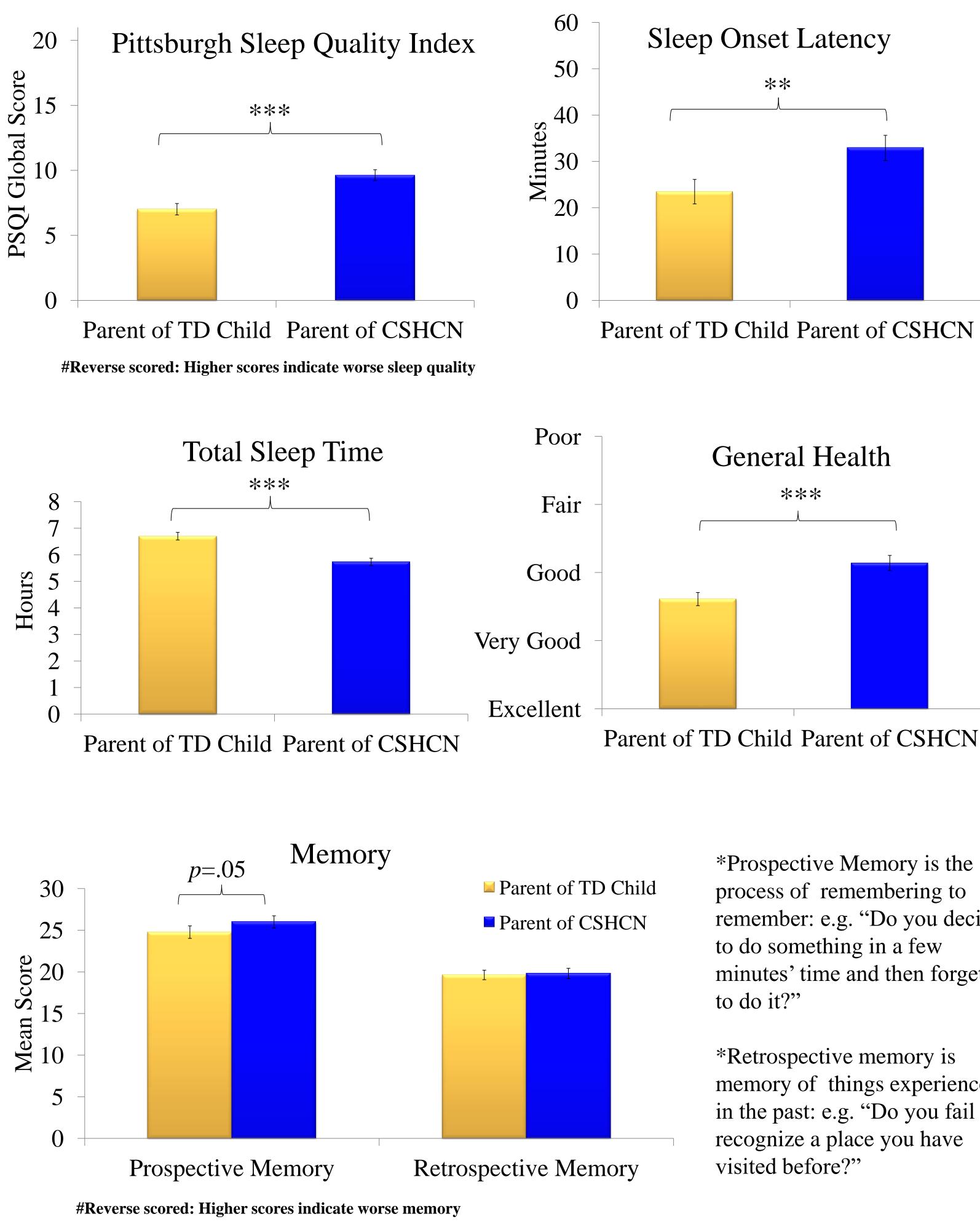


Table 1: Correlations (Pearson's r) between Sleep Quality and Health, Prospective, & Retrospective Memory, Split by Parent Group						
		General Health	Prospective Memory	Retrospective Memory		
Sleep Quality (PSQI Score)	Parent of TD Child	.32**	.29*	.39**		
	Parent of CSHCN	.34**	.25*	.28*		

*p<.05 **p<.01 ***p<.001

Results

*Prospective Memory is the remember: e.g. "Do you decide minutes' time and then forget

memory of things experienced in the past: e.g. "Do you fail to

• Parents of CSHCNs reported overall worse sleep quality than parents of TD children. •Parents of CSHCNs took significantly longer to fall asleep at night and had less total sleep time than parents of TD children.

retrospective memory. could be very serious.

•Within both parents of CSHCNs and parents of TD children, better sleep quality was significantly related to better general health, prospective memory, and retrospective memory.

•Results from this study highlight the importance of addressing the sleep complaints of parents of CSHCNs. By recognizing factors associated with parental health and functioning, providers will be better able to implement support programs for parents of CSHCNs.

[1] National Survey of Children with Special Health Care Needs, 2010 [2] Silver EJ et al. (1998). Journal of Pediatric Psychology, 23(1), 5-15. [3] Murphy NA et al. (2006). *Child: care, health and development, 33, 2,* 180-187. [4] Behaut JC et al. (2004). *Pediatrics*, 114(2), e182-191. [5] Chu J & Richdale AL (2009). Research in Developmental Disabilities, 30, 1512-

- 1522.

[6] Bailey Jr DB et al. (2007). *Mental Retardation and Developmental Disabilities Research Reviews*, 13, 321-329.

- 13-18.



Conclusions

•Parents of CSHCNs self-reported worse general health and worse prospective memory than parents of TD children, but did not differ on

•Poorer parental health is associated with recurrent hospitalizations for their children with disabilities [9].

•Prospective memory failures, such as failing to remember to give a child their medication, or forgetting about medical appointments,

References

[7] Fagerström C& Hellström A (2011). Aging & Mental Health, 15(2), 204-213. [8] Scullin MK & McDaniel MA (2010). *Psychological Science*, 21(7), 1028-1035. [9] Kelly AF & Hewson PH (2000). Journal of Paediatrics and Child Health, 36,

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