

Title: Spillover of Parenting Stress and Marital Interactions Among Parents of Children with ASD

Authors: Megan L. Krantz¹, Sigan Hartley², & Cameron L. Neece¹

Introduction: Parents of children with Autism Spectrum Disorder (ASD) consistently report alarming levels of stress, typically above levels reported by parents of children with other developmental disabilities and chronic illnesses (Abbeduto et al., 2004; Barroso, Mendez, Graziano, Bagner, 2018; Dabrowska & Pisula, 2010; Eisenhower, Baker, & Blacher, 2005). Previous studies suggest parenting stress drives an exacerbation in child problem behaviors, which may further contribute to heightened parenting stress over time (Lecavalier et al., 2006; Neece, Green, & Baker, 2012; Osborne & Reed, 2009). For managing stress, research suggests that a spouse or romantic partner is often a primary source of emotional support for the many demands of parenting (Belsky, 1984) and may be protective against the detrimental long-term effects of parenting stress. Yet less is known about marital quality among parents of children with ASD. Previous studies indicate that parents of children with ASD report lower marital satisfaction (Gau et al., 2012) and higher risk of divorce (Hartley et al., 2010) than parents of typically developing (TD) children. Few studies have examined how more nuanced, day-to-day interactions between parents may contribute to, or serve as a protective factor against stress. The spillover hypothesis suggests that the tension, affect, and behaviors originating in parents' marital interactions may ultimately impact (or spillover into) interactions with their child (Cox, Paley, Harter, 2001; Repetti, 1987). Among parents of children with ASD experiencing chronic stress, this effect may be exacerbated. The current study aims to further examine the day-to-day relationship between parenting and marital stress, and may provide insight into how to more effectively support parents and families in reducing stress.

Methods: The current study used data from an elective sub-study of the Stress-Reduction Techniques for Enhancing Parenting Skills (STEPS) Study, which included 44 parents of children ages 3 to 5 years old with ASD (parent mean age = 34.6 years; Hispanic/Latino = 49.4%; family income < \$50k = 42.9%) with a partner living in the home (Married = 63.6%). Once enrolled in the NIH-funded study examining the efficacy of MBSR (Mindfulness Based Stress Reduction; Kabat-Zinn, 1992) compared to Psychoeducational Support (PE) in reducing parenting stress and child behavior problems, parents were asked to report daily (for 14 days) on their parenting and marital stress, and their child's behavior problems. Each day, parents were asked to report: 1) ratings of stress associated with parenting and 2) the occurrence of eight positive (e.g., shared a joke or funny story, gave a compliment, kissed or hugged, had sex, communicated positive feelings toward) and eight negative (e.g., avoided talking to or being around, made a critical comment, expressed frustration or anger, and was impatient or short tempered with) interactions with their spouse. Multilevel modeling (MLM) analyses were conducted to examine the bidirectional lagged-effect associations between level of parenting stress and number positive and negative marital interactions. To capture changes in these relationships both within- and between-individuals, in each model the predictor of interest was partitioned into its between- and within-person components.

Results:

Marital interactions predicting parenting stress. A time-lagged MLM model was run in which previous-day positive and negative marital interactions were used to predict next-day level of parenting stress, controlling for the autoregressive effect of the within-person centered previous-day level of parenting stress. On average, previous-day parenting stress did not significantly predict next-day parenting stress, $p > .05$.

Negative marital interactions predicting parenting stress: *Between-parent results.* Parents who reported more negative interactions across days tended to report significantly higher levels of parenting stress, $b = .38, p < .05$. *Within-parent results.* Within-parent fluctuations in previous-day negative marital interactions did not significantly predict differences in next-day levels of parenting stress, $p > .05$.

Positive marital interactions predicting parenting stress: Neither previous-day between- nor within-person differences in positive marital interactions significantly predicted differences in next-day parenting stress, $ps > .05$.

Parenting stress predicting marital interactions. Two time-lagged MLM models in which previous-day level of parenting stress was used to predict next-day number of positive and negative marital interactions, controlling for the autoregressive effects of within-person centered number of previous-day positive and negative marital interactions.

Parenting stress predicting negative marital interactions: On average, previous-day negative marital interactions significantly and positively predicted next-day negative marital interactions, $b = .10, p < .05$. *Between-parent results.* On average, parents reporting higher levels of previous-day parenting stress across days tended to report more negative

marital interactions, $b = .32, p < .05$. *Within-parent results.* Within-parent fluctuations in previous-day parenting stress did not significantly predict differences in next-day number of negative marital interactions, $p > .05$.

Parenting stress predicting positive marital interactions: On average, previous-day number of positive marital interactions significantly and positively predicted number of positive marital interactions, $b = .27, p < .05$. Parenting stress did not significantly predict differences in number of positive marital interactions either within- or between-parents, $ps > .05$.

Discussion: The current study highlights the impact of day-to-day marital interactions on stress among parents of children with ASD. Consistent with previous literature, the quality of parents' daily interactions was predictive of their parenting stress; specifically, negative marital interactions and parenting stress flowed bidirectionally. Having more positive marital interactions was not predictive of lower parenting stress, suggesting that fluctuations in stress associated with the occurrence of negative marital interactions between spouses may not be mitigated by positive marital interactions alone. These results suggest that an intervention targeting parenting stress may have beneficial effects in improving parents' relationship quality, which may help parents to more effectively navigate the challenges of parenting a child with ASD. Future research will examine the longitudinal relationship between parenting and marital stress, and examine the effect of an eight-week MBSR intervention (versus psychoeducational support) on parenting stress and parents' relationship quality.

References/Citations:

- Abbeduto, L., Seltzer, M. M., Shattuck, P., Krauss, M. W., Orsmond, G., Murphy, M.M. (2004). Psychological well-being and coping in mothers of youths with autism, Down syndrome, or fragile x syndrome. *American Journal of Mental Retardation*, 109(3), 237–254.
- Barroso, N.E., Mendez, L., Graziano, P. A., & Bagner, D. M. (2018) Parenting stress through the next of different clinical groups: a systematic review and meta-analysis. *Journal of Abnormal Child Psychology*, 46(3), 449-461.
- Belsky, J. (1984). The determinants of parenting: a process model. *Child Dev*, 55(1), 83-96.
- Cox, M. J., Paley, B., & Harter, K. (2001). Interparental conflict and parent-child relationships. In: J. H. Grych & F. D. Fincham (Eds.), *Interparental conflict and child development: Theory, research, and application* (pp. 249-272). New York, NY: Cambridge University Press.
- Dabrowska, A., & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and Down syndrome. *Journal of Intellectual Disability Research*, 54(3), 266-280.
- Eisenhower, A. S., Baker, B. L., Blacher, J. (2005). Preschool children with intellectual disability: Syndrome specificity, behavior problems, and maternal well-being. *Journal of Intellectual Disability Research*, 49(9), 657–671.
- Gau, S. S., Chou, M., Chiang, H., Lee, J., Wong, C., Chou, W., & Wu, Y. (2011). Parental adjustment, marital relationship, and family function in families of children with autism. *Research in Autism Spectrum Disorders*, 6, 263–270.
- Hartley, S. L., Barker, E.T., Seltzer, M.M., Floyd, F.J., Orsmond, G.I., Greenberg, J.S., et al. (2010). The relative risk and timing of divorce in families of children with an autism spectrum disorder. *Journal of Family Psychology*, 24, 449–457.
- Kabat-Zinn, J., Massion, A. O., Kristeller, J., & Peterson, L. G. (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *The American Journal of Psychiatry*, 149, 936-943.
- Lecavalier, L., Leone, S., & Wiltz, J. (2006). The impact of behaviour problems on caregiver stress in young people with autism spectrum disorders. *Journal of Intellectual Disability Research*. 50, 172–183.
- Neece, C. L., Green, S. A., & Baker, B. L. (2012). Parenting stress and child behavior problems: A transactional relationship across time. *American Journal on Intellectual and Developmental Disabilities*, 117(1), 48-66.
- Osborne, L. A. & Reed, P. (2009). The relationship between parental stress and behavior problems of children with autistic spectrum disorders. *Exceptional Children*, 76, 54-73.
- Repetti, R. L. (1987). Linkages between work and family roles. *Applied Social Psychology Annual*, 7, 98–127.

¹Loma Linda University, Department of Psychology

²University of Wisconsin – Madison