# Observed Couple Problem-Solving Interactions in Parents who have a Child with Autism Spectrum Disorder Iulia Mihaila ${ }^{1,2}$, Sigan L. Hartley ${ }^{1,2}$, Aubrey M. Fisher ${ }^{2}$, \& Sarah K. Dietrich ${ }^{2}$ <br> ${ }^{1}$ University of Wisconsin - Madison, Waisman Center <br> ${ }^{2}$ University of Wisconsin - Madison, Department of Human Development and Family Studies 

## INTRODUCTION

Parents of children with autism spectrum disorder (ASD) report poorer psychological well-being than parents of typically developing children, however little is known about how parent and child characteristics and challenges influence observed marital quality. Few studies have examined marital quality in parents with a child with ASD, and these studies have been limited to self-reported measures.

## STUDY AIMS

1. Determine whether couple problem-solving interactions about the child with ASD were observed to be more negative than interactions about other topics.
2. To examine associations between parent and child characteristics and observed quality of couple interactions.

## SAMPLE

- Time 1 of an ongoing longitudinal study in WI
- 184, predominantly married, couples with a child with ASD
- Parents
- Predominantly White, non-Hispanic (89.7\%)
- Median household income = \$105,000
- Aged 22-60 years ( $M=39.59, S D=5.76$ )
- Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) Mom ( $M=17.95, S D=6.33$ ) Dad ( $M=15.96, S D=5.53$ )
- Children with ASD
- Aged 5-12 years ( $M=7.92, S D=2.25$ )
- 85.3\% male
- $34.8 \%$ had an intellectual disability (ID)
- Child Behavior Checklist (CBCL; Achenbach \&

Rescorla, 2001) ( $M=64.81, S D=8.52$ )

- Social Responsiveness Scale (SRS; Constantino \& Gruber, 2012) ( $M=76.98, S D=9.10)$


## METHOD

- Couples completed a 7-minute videotaped problem solving interaction, in which they discussed a disagreement that they rated as problematic for their relationship.
- Three trained lab members coded the interactions on dimensions of positive and negative affect, sensitivity, conflict resolution, and global interaction quality using well-defined criteria (Frosch, Mangelsdorf, \& McHale, 1998).

FIGURE 1. Percent of Observed Couple ProblemSolving Interaction Topics


FIGURE 2. Mean Fathers' Observed Positive Affect by Interaction Topic
 KEY FINDINGS
Difference in fathers' observed positive affect based on interaction topic $(F(12,161)=2.17, p=.02)$ No significant differences by interaction topic in observed positive affect for mothers, observed negative affect for mothers or fathers, or sensitivity, conflict resolution, and global quality ( $p>.05$ ).

## TABLE 1. Mean Parents' Age, Education, Household Income,

 and Depressive Symptoms by Interaction Topic
Topic Mother Age Father Age Mother Ed Father Ed Income Mother CESD Father CESD

 $\begin{array}{lllllllll}1 & 36.75(3.42) & 39.67(5.81) & 6.92(2.23) & 6.25(2.23) & 8.92(3.09) & 15.36(6.59) & 14.50(2.94) \\ 2 & 37.82(4.79) & 38.00(3.61) & 6.55(0.93) & 6.45(1.64) & 8.60(2.68) & 19.36(5.59) & 21.82 \text { (10.48) }\end{array}$ \begin{tabular}{l|llll|l|l|}
\hline \& $39.75(4.97)$ \& $41.38(4.39)$ \& $7.08(1.84)$ \& $6.92(1.98)$ \& $9.58(3.19)$ \& $16.45(5.36)$ <br>
\hline

 $17.50(5.60)$ $\begin{array}{lllllllll}4 & 40.67(4.93) & 43.33(2.31) & 7.00(0.00) & 4.00(3.00) & 8.00(1.73) & 17.67(6.66) & 14.00(2.65)\end{array}$ 

\hline 5 \& $38.24(5.73)$ \& $41.24(6.14)$ \& $7.41(2.29)$ \& $6.29(2.44)$ \& $9.82(2.86)$ \& $16.47(5.54)$ \& $14.29(3.62)$

 $\begin{array}{lllllllll}35.75(0.96) & 37.50(4.04) & 5.50(1.92) & 6.75(2.06) & 10.50(1.73) & 20.75(2.50) & 12.50(2.38)\end{array}$ $\begin{array}{llllllll}39.41(6.00) & 43.24(7.06) & 7.47(1.33) & 6.35(1.58) & 9.59(2.24) & 17.47(6.60) & 16.35(5.69)\end{array}$ $8 \quad 30.67(6.03) \quad 29.33(11.02) 5.67(1.16) \quad 5.33(3.22) \quad 3.00(1.00) \quad 18.67(5.51) \quad 12.67(4.04)$ $9 \quad 39.29(5.11) ~ 42.29(6.27) ~ 6.65(1.17) ~ 6.82(1.38) ~ 8.76(2.66) ~ 17.53(7.84) \quad 16.53$ (5.85) 

\& 10 \& $38.65(4.64)$ \& $40.58(4.35)$ \& $7.31(2.06)$ \& $6.04(2.01)$ \& $9.54(3.38)$ <br>
$19.71(6.74)$ \& $16.12(5.02)$ <br>
\hline

 $\begin{array}{lllllllll}11 & 35.73(5.05) & 38.67(7.20) & 6.87(2.13) & 7.20(1.42) & 9.57(3.35) & 19.21(8.21) & \mathbf{1 3 . 1 4 ( 2 . 8 3 )}\end{array}$ 

\hline 12 \& $40.00(6.11)$ \& $42.00(6.34)$ \& $7.09(1.56)$ \& $7.04(1.61)$ \& $9.35(3.11)$ \& $19.52(6.56)$ <br>
\hline $15.39(5.46)$
\end{tabular} $\begin{array}{llllllll}47.50(9.19) & 46.50(6.36) & 7.00(1.41) & 7.00(4.24) & 6.50(0.71) & 16.50(0.71) & 16.50(3.54)\end{array}$

## KEY FINDINGS

 Difference in fathers' age ( $F$ $(12,149)=1.91, p=.04)$, and fathers' depressive symptoms $(F(12,149)=2.01$, $p=.02$ ) by interaction topic. No significant differences by interaction topic in mothers age, mother or fathers' education, household income, or mothers' depressive symptoms ( $p>$ 05).TABLE 2. Multiple Linear Regressions for Mother and Father Negative Affect, Sensitivity, Conflict Resolution, and Global Interaction Quality

|  | Mother Negative Affect |  |  |  | Father Negative Affect |  |  |  | Sensitivity |  |  |  | Conflict Resolution |  |  |  | Global Quality |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | SE B | $\beta$ | p | B | SE B | $\beta$ | $p$ | B | SEB | $\beta$ | p | B | SE B | $\beta$ | p | B | SE B | $\beta$ | $p$ |
| Constant | 2.69 | 1.09 |  | . 01 | 3.21 | . 98 |  | . 00 | 2.51 | . 90 |  | . 01 | 3.26 | . 80 |  | . 00 | 3.80 | . 94 |  | . 00 |
| ID | . 36 | . 22 | . 13 | . 10 | . 39 | . 20 | . 16 | .05* | -. 37 | . 18 | -. 17 | .04* | -. 37 | . 16 | -. 18 | .03* | -. 39 | . 19 | -. 17 | .04* |
| SRS | -. 01 | . 01 | -. 10 | . 30 | -. 04 | . 01 | -. 27 | .00** | . 02 | . 01 | . 16 | . 10 | . 02 | . 01 | . 18 | .05* | . 02 | . 01 | 16 | . 09 |
| CBCL | . 03 | . 01 | . 22 | .02* | . 03 | . 01 | . 22 | .02* | -. 02 | . 01 | -. 13 | . 17 | -. 01 | . 01 | -. 13 | . 16 | -. 02 | . 01 | -. 15 | . 10 |
| MomCESD | -. 04 | . 02 | -. 21 | .01** | -. 01 | . 01 | -. 06 | . 47 | . 03 | . 01 | . 15 | . 06 | . 00 | . 01 | . 03 | . 71 | . 03 | . 01 | . 16 | .05* |
| DadCESD | -. 00 | . 02 | -. 01 | . 92 | . 02 | . 02 | . 09 | . 23 | . 00 | . 02 | . 00 | . 98 | -. 00 | . 01 | -. 02 | . 76 | -. 01 | . 02 | -. 07 | . 39 |
| Income | -. 06 | . 03 | -. 15 | . 06 | -. 06 | . 03 | -. 15 | . 06 | . 05 | . 03 | . 15 | . 06 | . 05 | . 03 | . 16 | .04* | . 04 | . 03 | . 09 | . 24 |
| R ${ }^{2}$ | . 08 |  |  |  | . 07 |  |  |  | . 05 |  |  |  | . 04 |  |  |  | . 04 |  |  |  |
| F | 3.35 |  |  |  | 2.98 |  |  |  | 2.32 |  |  |  | 2.18 |  |  |  | 2.21 |  |  |  |
| p -value | .00** |  |  |  | .01** |  |  |  | .04* |  |  |  | .05* |  |  |  | .05* |  |  |  |

## MPLICATIONS

Findings indicate that parents engaged in couple problem-solving interactions about their child with ASD were not observed to be more negative than parents problem-solving other topics. In contrast, fathers who discussed work exhibited less positive affect than those who discussed chores, and reported greater depressive symptoms than those who discussed their children without ASD and money. This suggests that
interactions outside of the child with ASD may be more problematic. As challenges associated with having a child with ASD may be more stable, interventions should provide parents strategies to negotiate more alterable aspects of couple conflict.
ID status, behavior problems, and severity of autism symptoms were associated with observed quality of couples' interactions. Couples whose child with ASD had ID, and greater severity of behavior problems and autism symptoms may be at risk for more negative couple problem-solving interactions.
Unexpectedly, mothers with higher levels of depressive symptoms had less negative interactions than mothers with lower levels. Perhaps, these couple problem solving interactions flow more smoothly because these mothers are tapped out, have fewer resources to draw from, and exhibit more flat affect, and therefore are less likely to disagree and engage in the interaction.
These findings have implications for the development of marital therapies aimed at teaching strategies that assist couples in problem-solving alterable aspects of couple conflicts. Therapies should specifically target couples experiencing greater child-related challenges and tackling issues of depression, as these stressors are likely to impact marital quality and adjustment.

## ACKNOWLEDGEMENTS

National Institute of Mental Health (to S. L. Hartley, R01MH099190)

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