Symposium Title: Implications of the Broader Autism Phenotype in Couples with a Child with ASD for Family Functioning

Chair: Chelsea N. Carson¹

Discussant: Leann E. Smith Dawalt²

Overview: The Broader Autism Phenotype (BAP) refers to subclinical characteristics of autism, including emotionally aloof and rigid personality traits as well as communication difficulties. Previous research suggests that relatives of individuals with autism have higher than average levels of BAP traits. Whereas there has been extensive research suggesting that having a child with autism spectrum disorder (ASD) is associated with marital discord (Saini et al., 2015; Sim, Cordier, Vaz, & Falkmer, 2016) and increased parenting stress (Ekas & Whitman, 2010; Hartley, Seltzer, Head, & Abbeduto, 2012), relatively little work has been conducted directly linking BAP traits in parents of children with ASD with their parenting and relationship functioning. The three presentations in this symposium will address the family impact of parents’ BAP traits in three independent samples of couples who have a child with ASD. The first presentation examined the relation between BAP traits and relationship satisfaction, as well as the extent to which discrepancy in BAP traits between partners predicts relationship satisfaction. The second presentation examined the link between BAP traits and dyadic coping within couples. The third presentation considered the relation between parents’ BAP traits and their parenting warmth and competence. Collectively, these presentations show the importance of considering parents’ BAP traits, over and above their child’s ASD status or symptom severity, for understanding the potential impact of autism on families. Our discussant will provide insight into the implications of these findings for future research as well as family- and marital-based interventions.

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Paper Title: Characterizing the Relation between Broader Autism Phenotype and Relationship Satisfaction in Parents of a Child with Autism

Authors: Chelsea N. Carson¹, Chrystyna D. Kouros¹

Introduction: Previous research has linked poor relationship satisfaction with parenting a child with Autism Spectrum Disorder (ASD; Hartley et al., 2010; Sim, Cordier, Vaz, & Falkmer, 2016). However, relatives of individuals with ASD, including parents, also have higher levels of Broader Autism Phenotype (BAP) traits—that is, they evidence subclinical levels of autism symptoms, including communication difficulties, rigid personality traits, and being emotionally aloof in social relationships. Therefore, children’s ASD symptoms may not fully account for why couples with a child with ASD are at greater risk for marital discord. Supporting this view, emerging literature has linked BAP traits with communication difficulties in parents of a child with ASD, above and beyond their child’s ASD symptom levels (Hartley, Hickey, DaWalt, & Rodriguez, 2019). Extending this work, the present study tested the extent to which BAP traits in parents of children with ASD predict their romantic relationship satisfaction, controlling for their child’s ASD symptom severity. We also explored the extent to which discrepancies in partners’ BAP traits were associated with relationship satisfaction. We hypothesized that (a) husbands would have higher BAP levels than wives, but that both husbands’ and wives’ BAP traits would be negatively associated with their relationship satisfaction, and (b) greater similarity in BAP traits between partners would be associated with higher levels of relationship satisfaction, whereas discrepancies in BAP traits would be associated with lower levels of relationship satisfaction.

Methods: Preliminary analyses were conducted with 76 families with a child with ASD (Mage = 12.83 years, SD = 2.23, 82% male), who were recruited to participate in a larger study about family dynamics (total anticipated N = 130). Parents were in established relationships (91% were married, Mlength = 15.21 years, SD = 5.72). Couples completed the Broader Autism Phenotype

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Questionnaire (BAPQ; Hurley, Losh, Parlier, Reznick, & Piven, 2007), which includes a total score, plus subscale scores for emotional aloof traits, rigid personality, and pragmatic communication difficulties. Couples also completed the Couple Satisfaction Inventory (CSI; Funk & Rogge, 2007), and wives reported on children’s ASD symptom severity on the Social Responsiveness Scale-2 (SRS-2; Constantino, 2012). Our main analyses were tested with the Actor Partner Interdependence Model (APIM), using Mplus version 7. Discrepancy in BAP traits as a predictor of relationship satisfaction was tested by creating an interaction term between husbands’ and wives’ BAP scores. All analyses controlled for children’s ASD symptom severity.

**Results:** Partners’ total and subscale BAP scores were not significantly correlated. Husbands were significantly higher in total BAP, \( t(74) = 3.18, p = .002 \), and aloof scores, \( t(74) = 4.23, p < .001 \). Husband’s total BAP negatively predicted their own relationship satisfaction, above and beyond their child’s ASD symptom severity, \( b = -3.60, SE = 1.45, p = .013 \), as did husbands’ pragmatic communication traits, \( b = -3.22, SE = 1.45, p = .027 \), and rigid personality traits, \( b = -2.87, SE = 1.19, p = .016 \). Discrepancy in total and pragmatic communication BAP levels between husbands and wives significantly predicted husbands’ (Total: \( b = 6.37, SE = 2.36, p = .007 \); Pragmatic: \( b = 7.50, SE = 1.74, p < .001 \)) and wives’ (Total: \( b = 5.81, SE = 2.77, p = .036 \); Pragmatic: \( b = 4.37, SE = 2.16, p = .044 \)) relationship satisfaction. Specifically, discrepancy between partners’ BAP traits was associated with lower relationship satisfaction, especially when wives were lower and husbands were higher on BAP traits.

**Discussion:** These findings are consistent with hypotheses and previous research suggesting that husbands have higher BAP scores on average, and BAP traits are associated with poor relationship outcomes. Interestingly, BAP trait levels were only associated with lower satisfaction for husbands, suggesting that husbands’ BAP levels may interfere with their ability to obtain a satisfied relationship, or that their partners may be less effective at meeting their needs in the context of these traits, particularly when they have higher levels of rigid personality traits and pragmatic communication difficulties. This study is the first to provide evidence that discrepancy in BAP levels between partners is related to worse relationship satisfaction; this finding is especially relevant given that couple BAP levels were not significantly correlated. These findings provide important implications for marital therapy and interventions for couples raising a child with ASD.

**References/Citations:**

**Paper Title:** Optimizing Romantic Relationships in the Context of Broader Autism Phenotype

**Authors:** Jen Putney & Sigan L. Hartley

**Introduction:** The presence and quality of romantic relationships is a robust predictor of adult physical and mental well-being (Carr & Springer, 2010). It has long been known that certain traits (e.g., neuroticism) or conditions (e.g., depression) are associated with difficulties establishing positive and lasting romantic relationships. Recent evidence suggests that broader autism phenotype (BAP) traits are also linked to negative romantic relationship outcomes including low marital satisfaction (Pruitt, Rhoden, & Ekas, 2018). BAP refers to sub-clinical autism traits such as rigid and inflexible behaviors, social-emotional
communication challenges, and pragmatic language difficulties (Losh & Piven, 2007). An elevated level of BAP traits is present in approximately 14-23% of parents of children with ASD and 5-9% of adults in the general population (Sasson et al., 2013). There is a need to identify the specific romantic relationship behaviors affected by BAP. In the current study, actor-partner interdependence models (APIM) were used to examine the association between one’s own and one’s partner’s BAP traits and dyadic coping (i.e., how couples work together to solve problems) in parent couples.

**Methods:** Both partners in 367 couples were included in analyses. Approximately half of these couples had a child with ASD (N = 184) and half had typically developing children (N = 183). Analyses involved data collected at Time 1 of a longitudinal study. Partners independently completed the Broader Autism Phenotype Questionnaire (BAPQ; Hurley, Losh, Parlier, Reznick, & Piven, 2007) and Dyadic Coping Index (DCI; Bodenmann, 2008). APIM models were conducted in HLM with positive and negative dyadic coping as the dependent variables. Level 1 (within couple): gender, actor BAP, partner BAP, and the interactions of gender x actor BAP and gender x partner BAP. Level 2 (between couple): household income, child ASD status, and couple relationship length.

**Results:** Actor BAP was significantly associated with dyadic coping; wives/husbands with higher BAP reported using less positive and more negative dyadic coping. Partner BAP was also significantly associated with dyadic coping. Gender moderated the effect of partner BAP on positive dyadic coping. Specifically, wives who had a partner with high BAP traits reported using less positive dyadic coping than wives who had a partner with low BAP traits. In contrast, partner BAP was not associated with positive dyadic coping in husbands. Child ASD status did not moderate the above effects; thus, the impact of BAP traits on dyadic coping is similar across parent couples with and without a child with ASD.

**Discussion:** BAP traits (both one’s own and one’s partner’s) may alter romantic relationships by making it difficult for partners to work together to solve problems. This appears to be true regardless of whether there was a child with ASD in the home. These findings are relevant to marital support programs; teaching dyadic coping strategies may enhance romantic relationship outcomes in adults with BAP traits.

**References/Citations:**


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**Title:** The Broad Autism Phenotype and Parenting in Mothers and Fathers of Children with Autism Spectrum Disorder

**Authors:** Naomi Ekas³ & Deborah Rafferty⁴

**Introduction:** The broad autism phenotype (BAP) refers to subclinical behaviors characteristic of autism spectrum disorder (ASD). Higher levels of BAP in individuals are associated with pragmatic language impairments, social difficulties, and rigidity (e.g., Losh

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Previous research has also found BAP behaviors to be negatively associated with the quality of social relationships (Pruitt et al., 2018). Given the difficulties associated with elevated BAP behaviors, it is possible that the quality of parent-child interactions may also be affected. For example, following a parent-mediated intervention, the parent-child interaction quality of the group of mothers with higher BAP behaviors were unchanged as compared to the group of mothers with lower BAP behaviors (Parr et al., 2015). The authors hypothesized that mothers in the higher BAP group may have been unable to adapt their social communication style. Given the paucity of research examining associations between BAP behaviors and parenting, the current study sought to examine these associations in mothers and fathers raising children with ASD.

**Method:** Participants consisted of 69 cohabitating, heterosexual couples raising a child with ASD under 10 years of age. Parents individually completed a series of questionnaires online and were compensated for their time. The Broad Autism Phenotype Questionnaire was used to assess BAP behaviors. Parents also completed the Parent Behavior Inventory to assess parental warmth and the Parenting Sense of Competence Scale to measure how well parents rated their parenting ability.

**Results:** A series of separate moderation models were tested using the PROCESS macro in SPSS. Parent BAP was entered as a predictor of parental warmth (model 1) and parenting sense of competence (model 2). Parent gender was specified as the moderator. Parent BAP was significantly associated with parental warmth, \( b = -8.61, p = .008 \). This effect was moderated by parent gender, such that the relationship was significant only for fathers, \( b = -3.60, p = .01 \). Similarly, parent BAP was negatively associated with parenting sense of competence, \( b = -14.72, p = .01 \), but only for fathers, \( b = -7.19, p = .006 \).

**Discussion:** The BAP in parents of children with ASD was associated with parenting; however, this effect was only significant for fathers. This is in contrast to research with parents of typically developing children wherein parent personality traits impact parenting similarly for mothers and fathers. However, there is no research examining the BAP specifically. It is possible that in the context of parenting a child with ASD, mothers are able to effectively parent regardless of their levels of BAP. Further research is needed to disentangle the potential mechanisms explaining these associations among fathers.

**References/Citations:**