



# Controversy or consensus? A response to Green and Wan

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We appreciate the opportunity to discuss the relationship between autism spectrum disorder (ASD) and attachment provided by Green and Wan's commentary on Martin et al. (2020). Martin et al., for the first time, assessed the attachment of infants at high risk for ASD prior to an ASD diagnosis. Blinded coding of the Strange Situation indicated that high-risk infants with ASD outcomes were nine times more likely than high-risk infants without ASD outcomes to exhibit insecure-resistant attachments at 15 months. The results suggest that resistant attachment may serve as both a biomarker of ASD and a target for early intervention among children at high risk for the disorder.

Green and Wan raise issue with the use of a non-abbreviated Strange Situation among high-risk infants prior to diagnosis. Barring potential ethical concerns, we heartily endorse the use of standardized, validated procedures such as the Strange Situation in developmental research, including investigations of children with developmental disabilities (Naber et al., 2008; Oppenheim et al., 2009; van Ijzendoorn et al., 2007). Likewise, as in Martin et al., validated population-specific coding schemes should be adopted when available.

Green and Wan are concerned about the implications of the Martin et al. results. We share their sensitivity to the unfounded, anachronistic suggestion that parental behavior is causally associated with ASD. Martin, et al. address this concern directly, noting there is no evidence for sensitivity differences between the parents of high-risk infants with and without ASD outcomes (Baker et al., 2010; Wan et al., 2013). Moreover, although sensitivity typically predicts secure attachment, this does not appear to be the case among children with ASD (van Ijzendoorn et al., 2007).

The Strange Situation yields expressions of negative affect among infants with later ASD both when separated from and when reunited with their parents (Esposito et al., 2014; Martin et al., 2020). Green and Wan argue that negative affect in such situations may not be asso-

ciated with the reductions in infant positive affect and dyadic mutuality observed among infants with later ASD in free-play interactions (Wan et al., 2013), a testable hypothesis (Naber et al., 2008). More generally, it is likely that Strange Situation displays of resistance and a temperament-based propensity toward negative affect in infants with later ASD are associated (Garon et al., 2009; Macari et al., 2017), and reflect a more general association between temperament-based negative affect and resistant attachment (Groh et al., 2017).

Martin et al.'s results—approximately one half of infants with later ASD were classified as insecure—may help reveal the developmental origin of similar rates of insecurity among older children with ASD (Rutgers et al., 2004; Teague et al., 2017). They are of practical import because the emotion dysregulation characteristic of infants with resistant attachment predicts parent stress among the parents of children with ASD (Davis & Carter, 2008). Thus—and here we are in complete agreement with Green and Wan—they underline the importance of interventions focused on dyadic social communication for children at elevated risk for ASD (Pickles et al., 2016).

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## CONFLICT OF INTEREST

No authors declare a conflict of interest for the work contained in this manuscript.

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