

COMT, Extraversion, and Partisan Attachment
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A burgeoning literature focuses on the relationship between individual differences in personality traits and political behaviors (Mondak et al. 2010, Gerber et al. 2010, Gerber et al. 2009, Gerber et al. 2008, Mondak and Halperin 2008, Denny and Doyle 2008). Two recent papers found that Extraversion is a strong predictor of whether an individual affiliates with a major political party as well as the strength of the affiliation (Gerber et al. 2008, Gerber et al. 2009). Extraversion (Bouchard and Loehlin 2001) and partisan attachment (Settle et al. 2009, Hatemi et al. 2009) have been shown to be heritable and both have been linked to the neurotransmitter dopamine (Dawes and Fowler 2009, Munafò et al. 2003, Carver and Miller 2006, Depue 1995). This paper tests the hypothesis that extraversion mediates a relationship between COMT and partisan attachment. COMT is a gene that regulates dopamine levels in the brain and that has previously been found to be associated with extraversion (Stein et al. 2005, Reuter and Hennig 2005). We find that individuals with a less efficient version of a well-studied variant of the COMT gene are significantly less likely to identify themselves as partisans than those with the more efficient allele. Further, extraversion partially mediates this association. This is the first such formal test of a pathway between genes, personality, and political behavior and suggests an empirical framework for future research.