This research examines the effect of anxiety and negative affect on functions of aggression and how hostile attribution bias (HAB) and gender mediate this relationship. Past research shows an association between anxiety and aggression (Crick et al., 2006) but has not examined underlying functions of aggression (e.g., proactive; for instrumental gain, reactive; response to threat or frustration, and both types combined). Reactive aggression has been linked with various types of negative emotionality and affect (Card & Little, 2006), so it is predicted that negative affect will be associated with reactive aggression. Research proposes that the association between anxiety and aggression may exist because anxious and aggressive children often have social-cognitive biases that lead them to perceive benign social situations as threatening (Marsee et al., 2008). Reactively aggressive youth show HABs at a higher level than proactively aggressive youth (Hubbard et al., 2001). Additionally, anxious children make such cognitive errors in social situations (Weems et al, 2001). Thus, cognitive biases may serve as a mechanism through which aggressive children become anxious or vice versa (Marsee et al., 2008). It is hypothesized that regression analysis will show that HAB mediates the association between anxiety and aggression and that this relationship will be moderated by gender. such that it is stronger in delinquent adolescent girls, compared with boys. It is expected that high levels of anxiety and an HAB will be most prevalent in youth who exhibit combined aggression, and secondly in those who exhibit primarily reactive aggression. Negative affect will also be examined as a predictor. This research is important because the functions underlying the association between anxiety, affect, and aggression are understudied in highly aggressive, adjudicated samples. This research can identify underlying mechanisms of predictors of aggression and inform interventions and future research.