Depression and anxiety are characterized by their persistence, recurrence, and as leading causes of morbidity and disability worldwide (Hoertel et al., 2017; World Health Organization, 2017). Given the economic and societal costs of these disorders, more research is needed to identify their predictors and maintaining mechanisms. Interpersonal models of emotional disorders are particularly well-supported and posit that dysphoric persons’ maladaptive social behaviors are both a causal and prolonging factor in the depressogenic and anxious cycle (Joiner & Metalsky, 1995; Starr & Davila, 2008). While there is preliminary support for interpersonal models, studies often rely on self-report and lack naturalistic observation. Further, interpersonal models fail to explain the mechanisms underlying the overuse of maladaptive social behaviors. Interpersonal emotion regulation (IER) is one viable mechanism. IER models incorporate emotional and behavioral factors among the distressed person and their use of social supports to improve their mood (Hofmann, 2014). The parasympathetic nervous system (PNS), which regulates organs necessary for social communication, may also operate as a socio-biological mechanism in emotional disorders (Porges, 2007). A growing literature implicates adaptive PNS activity in prosocial behavior and social connectedness (Beauchaine et al., 2013; Geisler et al., 2013), whereas atypical PNS activity predicts maladaptive emotion regulation (Yaroslavsky et al., 2016). To date, no research that has directly examined and linked PNS activity in the context of interpersonal models or with IER strategies. To address these gaps, this study will utilize an innovative and comprehensive assessment with both laboratory (e.g., self-report and psychophysiological measures) and prospective measurements (e.g., ecological momentary assessment; EMA) of IER processes in the daily lives of 80 individuals with and without elevated mood and anxiety symptoms. EMA will assess IER use, contexts, and outcomes daily over a 1-week period among participants. The first two primary aims of this study are to identify specific IER deficits and the potential role of biomarkers (e.g., PNS activity) in dysphoric (vs. non-dysphoric) individuals. We hypothesize that individuals with clinically significant depressive and anxiety symptoms will display more IER problems as evidenced by self-report and psychophysiological measurement than asymptomatic individuals. Our final primary aim is to determine the degree and contexts by which potential IER deficits and baseline measures of PNS activity predict mood symptoms over time. We hypothesize that dysphoric individuals will use less adaptive IER strategies to cope with distress in daily life. Further, we expect that dysphoric individuals will experience reduced interpersonal closeness and increased interpersonal stress from social supports that will in turn worsen and prolong mood symptoms. Such knowledge of potential biological markers of interpersonal processes may identify and target flexible systems for intervention in individuals with depression and anxiety.

**Keywords**: Depression, anxiety, emotion regulation, psychophysiology, ecological momentary assessment