

Research Statement

My research focuses on (1) understanding and improving couples' adaptation to stressors within and outside their relationship, and (2) understanding how efficacious interventions are implemented in real-world community and healthcare settings, and how close relationships may facilitate these translations.

Most couples face several chronic and acute stressors over the course of their relationships. My work is rooted in the idea that the way a given couple adapts to the stressors that arise is influenced by the nature of the stressor (e.g., chronic, acute), vulnerability factors that partners bring to the relationship (e.g., personality characteristics or family history), and the overall quality of their relationship (Karney & Bradbury, 1995). Over time, their relationship quality will also be affected by how they adapt. Thus, distressed couples (i.e., those with clinically low levels of relationship quality) are less likely to adapt effectively to challenges and, thus, are more likely to experience additional stress; likewise, couples who do not effectively adapt to challenges are more likely to experience additional stressors and to have low levels of relationship quality.

My research as a graduate student focused on understanding the relationship processes common in distressed couples, as well as how these processes can be changed through couple therapy in the hopes of improving relationship quality. The theory underlying behavioral couple therapy suggests that helping distressed couples communicate more effectively leads to parallel improvements in relationship functioning. In my dissertation I examined trajectories of change in couples' observed communication during couple therapy through two years after treatment termination. I found that couples generally improved their communication from pre- to post-therapy and maintained those improvements through the 2-year follow-up (Baucom et al., 2011, 2015). Furthermore, changes in some aspects of communication were related to treatment outcomes (improvements in relationship satisfaction and relationship maintenance).

My recent work has sought to understand and improve couples' adaptation to stressors outside their relationship, such as the birth of a child. Much of my research in this area has focused on evaluating primary prevention programs for couples experiencing the stress of pregnancy and a newborn, *along with* the chronic stress of low-income status. Across small pilot trials in Los Angeles (Baucom et al., 2018) and New York, and large uncontrolled (Heyman et al., 2020) and randomized (Heyman, Slep, Lorber, Mitnick, Baucom, et al., 2019) trials in New York, my colleagues and I did not find support for the efficacy or effectiveness of the American version of Couple CARE for Parents (Heyman, Baucom, et al., 2019). These results were likely impacted by significant challenges with recruitment and retention, highlighting the need to better understand program implementation and methods for improving enrollment and engagement. This influenced my current interest in implementation and community engagement.

Poor physical health of one or both partners functions as a stressor for many couples and is linked to worse relationship quality through a series of interrelated biopsychosocial processes (Robles et al., 2014). If one partner has (or is at risk for) a chronic disease, there are several lifestyle factors that, if changed, may improve the long-term outcomes for the individual. Yet, individual partners' adaptation occurs in the context of their relationship – one partner making changes to their physical activity or eating habits is likely to influence the other partner and vice

versa. Due at least in part to this mutual influence, partners tend to be similar in a wide range of aspects of health, including lifestyle factors and risk for chronic disease. Although there are many couple- and family-based psychosocial interventions for adults who *have developed* chronic diseases (Martire & Helgeson, 2017), few programs that aim to *prevent* chronic diseases systematically include close others. Given the prevalence and costs associated with chronic diseases in the United States, this is a crucial area for future work.

My current NIDDK-funded work focuses on type 2 diabetes in a relationship context. Colleagues and I examined outcomes among individuals who signed up for the CDC's National Diabetes Prevention Program (NDPP) together with another household member compared with those who signed up alone. The DPP was efficacious in a large randomized controlled trial (The Diabetes Prevention Program Research Group, 2002), but results in the community demonstrate room for significant improvement in outcomes as well as in recruitment and engagement of those at highest risk (Ely et al., 2017). We found those who signed up for the program together with another household member were more likely to enroll and complete the program, and stayed in the program longer, relative to those who signed up for the program individually (Ritchie, Baucom, & Sauder, 2020). Further, men who signed up with another household member, compared with men who signed up individually, were more likely to meet the CDC goal of at least 5% body weight loss (Ritchie, Baucom, & Sauder, 2020). These results suggested that including close others may increase enrollment, engagement, and possibly even outcomes, of primary prevention programs. However, there were no systematically collected data on the frequency with which individuals enroll in the NDPP together with close others, and how Lifestyle Coaches delivering the NDPP view a dyadic approach. To examine *current* implementation of the NDPP, I received two internal pilot grants to survey Lifestyle Coaches from across the U.S. ($n = 305$). Most Lifestyle Coaches (83%) had delivered the NDPP to dyads; I conducted a qualitative description of the benefits, as well as the challenges, they described with a dyadic approach (Baucom, Bauman, Nemirovsky, et al., under review).

Future Research Plans

I plan to continue both basic and translational research focused on couple adaptation and intervention implementation. My team will soon begin a mixed-methods pilot feasibility trial to determine the acceptability and preliminary outcomes of a couple-based adaptation of the NDPP, *Prevent T2 Together*. The adaptation was guided by qualitative data I collected, as well as feedback from 12 members of a Community Advisory Board (CAB; Newman et al., 2011) my team carried out in 2019-2020 to ensure the adaptation of the NDPP will be broadly applicable to couples across racial and ethnic groups. Guided by feedback from CAB members, we delayed the start of this study until we can deliver the intervention in person safely in light of COVID-19.

We are also in the process of collecting and analyzing additional data collected in the Lifestyle Coach study (e.g., Aguirre et al., in preparation; Baucom, Bauman, Gutierrez Chavez, et al., under review; Whitaker et al., in preparation). In the coming month, we will begin data collection from a subsample of 30 Lifestyle Coaches who work with Hispanic/Latinx participants. In a partnership with local community organizations, these data will be used in a grant application focused on a dyadic approach to the NDPP in the local Hispanic community.

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