

Research Statement: Feea R. Leifker

My research program focuses on the bidirectional association between psychopathology and intimate relationship functioning (e.g., social support, intimacy) and dysfunction (e.g., aggression). I work to answer fundamental questions about the association between relationship processes and psychopathology, with the goal of informing treatment, intervention, and prevention strategies. Specifically, my research focuses on 1) exploring relationship and psychological factors that contribute to the development, persistence, or desistance of mental health problems (primarily posttraumatic stress disorder (PTSD) and, more recently, suicide), 2) understanding how these associations can be used to inform intervention adaptation or development 3) utilizing advanced statistical and methodological methods to evaluate these questions.

One line of my research program has focused on understanding the complex association between PTSD, intimate partner violence (IPV), and positive relationship behaviors. For example, my colleagues and I found that the association between one's PTSD severity and IPV perpetration depended on the degree to which men and women expressed the negative emotions they were experiencing during interactions with their partners (Sullivan, Leifker, & Marshall, 2018). The implications of these findings suggest that helping individuals with PTSD appropriately express their emotions, rather than under- or over-express emotions, may reduce IPV perpetration. I also found that more aggressive couples tend to make more negative causal attributions for their partners' behaviors than nonaggressive couples (Leifker et al., *in preparation*). These same particular types of negative cognitions also impair the ability of individuals with PTSD to benefit from social support provided by their partners (Leifker & Marshall, 2019). Thus, while challenging inaccurate and biased cognitions regarding trauma-related events is a central aspect of PTSD interventions, my research suggests that if one also wants to improve the relationship or reduce aggression, treatments would be enhanced by addressing these specific cognitions about their partners and supporting appropriate emotional expression.

Conversely, when thinking about positive relationship behaviors, traditional models of couple therapy would prescribe increasing conventionally positive behaviors (e.g., support, intimacy, expressing emotions) in order to reduce negative behaviors (e.g., conflict, violence). However, my research suggests that among those with PTSD, the assumption that these behaviors are "positive" is more nuanced. I found that the receipt of objectively observed intimacy from one's partner was associated with increased negative emotions (e.g., fear, guilt, anger) among individuals with elevated PTSD symptoms, suggesting that receiving intimacy is a negative experience for individuals with PTSD (Leifker et al., 2015), though there may be gender differences in this association (Hanley, Leifker et al., 2013). As such, without fully understanding the context of the relationship and how factors such as psychopathology interact with components of an intervention, well-meaning suggestions such as increasing support or intimacy, may have iatrogenic consequences.

In addition to conducting research which could inform intervention and prevention strategies, I am interested in how relationship processes are impacted during and following existing treatments for PTSD. While at the National Center for Veteran Studies, I conducted treatment outcome research funded by the Bob Woodruff Foundation (Co-principal investigator) and Boeing Corporation (Co-Investigator) with military personnel and veterans, primarily providing cognitive processing therapy (CPT; Bryan, Leifker, et al., 2018). I became curious about whether individual treatment would affect relationship processes or if a couple-based

treatment was necessary. I submitted a grant to the National Institutes of Justice as a site Principal Investigator for a study which would directly compare Cognitive-Behavioral Conjoint Therapy (CBCT), a couple-based PTSD treatment, with CPT on outcomes related to PTSD and relationship functioning. While this was not funded, I obtained pilot seed grant funding through the Consortium for Families and Health Research in 2021 to test the efficacy of CBCT in reducing PTSD symptoms among a small sample of Law Enforcement Officers (LEOs) and their partners. I will use this data to support an application for an eventual head-to-head comparison of the two treatments and running this current project also provides me with independent experience leading a treatment outcome study.

Given the high rates of suicidal thoughts and/or behaviors following trauma exposure (Roberge, Leifker et al., 2020), that suicide is often conceptualized as self-directed aggression, and the high rates of suicide attempts among those exposed to family violence, I have recently begun a line of research focused on understanding the nature of suicide and relationship processes (e.g., Baucom, Georgiou, Bryan, Garland, Leifker et al., 2017). While generally thought of as a within individual problem, there is growing awareness of the interpersonal nature of suicide and that there is added value in considering the dyadic nature of suicide, both conceptually and statistically (Leifker et al., 2020). Intimate relationships may be particularly important as romantic partners are the most frequent person individuals who have made a suicide attempt disclose to and conflict in an interpersonal relationship is one of the most common triggers for suicidal behavior (Leifker, Khalifian, Morland, & Bryan, *in preparation*). Conversely, we have also found that while partners can accurately identify their partner's depression symptom severity or risk for suicidal ideation, they're also highly inaccurate at identifying their partner's perceived risk of making a suicide attempt in the future (May, Crenshaw, Leifker et al., 2019). This line of research suggests that there is a strong relationship component to suicide, which has, to date, not been extensively studied and is an area I plan to continue pursuing.

Similar to my research with PTSD, in addition to understanding basic processes in the link between intimate relationships and suicide, I am working to extend this line of research to treatment or intervention work. Also similar to PTSD, while it is clear that intimate partners could be used to support treatment efforts, relationship conflict, a common antecedent to suicidal thoughts or behaviors, may impede these efforts. Thus, it might be imperative to also improve relationships among suicidal individuals to help reduce negative consequences associated with relationship conflict and enhance social support. This led me to collaborate with colleagues at the San Diego Veterans Affairs Medical Center to begin exploring couple-based interventions for suicide. To gauge tentative interest in a couples-based suicide intervention, we surveyed a group of treatment seeking veterans and found that there was substantial interest in a couples-based intervention for suicide (Khalifian, Chalker, Leifker et al., 2021). Consequently, my colleague and I have begun to develop a couple-based intervention for suicide. This 10-12 session intervention uniquely targets both relationship functioning and suicidal thoughts and behaviors (Khalifian, Leifker et al., 2020). We have delivered the treatment to 8 couples, to date, and found reductions in intent to die and negative communication behaviors as well as improvements in relationship satisfaction and positive communication behaviors (Khalifian, Leifker et al., 2021). Such an intervention has exciting implications for improving perceived interpersonal cognitions (e.g., thwarted belonging, perceived burdensomeness), factors which have been closely linked with suicide (e.g., Van Orden, 2005), to potentially reduce suicide risk, increase resiliency, and improve relationships. My colleague has received VA funding to conduct additional pilot testing

and a subsequent randomized controlled trial among veterans at the San Diego VA. I am preparing an R34 application for the February 5, 2022 deadline in response to this recently released RFA (RFA-MH-22-125), Enhanced Interpersonal Focused Strategies for Suicide Prevention Interventions (R34 Clinical Trial Required), that proposes to adapt this treatment for community couples. I will be PI on this grant submission.

Overall, I plan to continue to pursue a research program focused on understanding and treating psychopathology, particularly PTSD and suicide, from a relationship science perspective using multiple methodologies. My larger goal is to improve both the mental health and relationship functioning of individuals experiencing these challenges as well as that of their partner.

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