Toward a peer-support model in reducing loneliness among older adults: Unpacking the mechanism and dyadic process of volunteering using a dual randomized controlled trial

Globally, three major trends have emerged: 1)rapid population aging; 2)a growing loneliness epidemic, impacting mental and cognitive health of older adults; and 3)despite these challenges, today's older adults are better educated and possess greater socioemotional resources than previous generations, positioning them as potential active contributors to society. Integrating these trends, an empirically supported strategy to combat loneliness among older adults is to develop a peer-support model through volunteering, whereby older adults deliver non-specialist psychosocial interventions to lonely peers. In a completed project, our team successfully conducted a dual randomized controlled trial (RCT), in which we trained 185(vs.190 active controls) older volunteers feeling lonely to deliver psychosocial interventions to 1,151 vulnerable peers feeling lonely. We found significant mutual benefits: 1)volunteers experienced reduced loneliness and improved mental health at 6- and 12-month follow-ups against active controls; and 2)recipients reported loneliness reduction and mental health improvement at 3-month, 6-month, and 12-month follow-ups against their active controls. However, key questions remain:1)Are the effects of this peer-support model reciprocal at the dyad (volunteer-recipient pair) level? 2)What mechanisms drive these benefits at the individual and interpersonal levels? 3)What dyadic relationship factors predict the effects for both? Theoretically and methodologically, research predominantly focused on either volunteers or recipients, largely overlooking the reciprocal effects and interpersonal dynamics, despite empirical evidence supporting their importance for intervention outcomes. To address these gaps, our proposed dual RCT comprises two interconnected trials. In the Volunteer RCT, 384 lonely older adults will be randomized to either lay counselor volunteer groups to deliver psychosocial interventions or active control groups. In the Recipient RCT, a separate sample of 192 lonely older recipients will be randomly assigned to one of two psychosocial interventions delivered by volunteers. Volunteers and recipients will be randomly matched in a one-to-one dyadic structure. We will examine: 1)the effects of the peer-support model on both volunteers and recipients at individual and dyadic levels; 2)underlying mechanisms; and 3)whether and how interpersonal perception and exchange during intervention delivery predict outcomes. Data will be collected at baseline, during intervention delivery, and at 3- and 6-month follow-ups. The primary outcome is loneliness; secondary outcomes include psychological well-being, perceived stress, depression, anxiety, and cognitive function. Our project will 1)address significant theoretical and methodological gaps; 2)provide comprehensive understanding on why, how, and for whom models reduce loneliness by combining a dual RCT with daily dyadic assessments; and 3)inform development of peer-support models to promote mental health.