OF IMPACT: Websites and mobile apps appear to be feasible modes to deliver health interventions to CGs. Researchers should consider including features of apps most frequently used by CGs, such as the weather, ways to connect with others, and music/entertainment, when delivering mHealth interventions to CGs.

**4135**

### Digital Mental Health Interventions for PTSD & Resilience: A Systematic Review

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OBJECTIVES/GOALS: 1) In this literature review we want to explore the literature on DMHI (Interventions delivered via digital technologies, such as smartphones, websites, or text messaging), specifically designed to treat Posttraumatic Stress Disorder (PTSD), and/or to promote positive change & resilience after trauma. 2) We also want to evaluate the literature in terms of the theoretical model used in each DMHI, engagement, effectiveness, & potential harms/challenges. METHODS/STUDY POPULATION: We will review the literature that describes DMHI for PTSD, resilience, & positive change in persons exposed to psychological trauma (Exposure to actual or threatened death, serious injury, or sexual violence, as defined by the fifth edition of the Diagnostic & Statistical Manual of Mental Disorders). We will review the following databases: PsychINFO, EBSCOhost, PubMed, & PsychiatryOnline. The following inclusion criteria will be used: 1) Interventions delivered by computer, smartphones, or online, 2) studies published between 1999-2019. Exclusion criteria will include reviews, opinion, or discussion articles, & unpublished works. RESULTS/ANTICIPATED RESULTS: We expect to find that the most popular therapeutic model for DMHI is cognitive behavioral therapy. We also expect to find a higher number of web-based interventions, as opposed to phone-based interventions, or other types of DMHI. We also expect to find variable drop-out rates, low engagement, & small to moderate effect sizes. DISCUSSION/SIGNIFICANCE OF IMPACT: We expect our contribution to center on evaluating available DMHI for psychological trauma. This systematic literature review is expected to provide scientific justification for the development (or validation), & implementation of a DMHI that takes into account the results of previous studies. This contribution is expected to be significant because it will help in choosing, or developing an effective future intervention with DMHI. CONFLICT OF INTEREST DESCRIPTION: There is no conflict of interest in this study.

**4178**

### The feasibility/acceptability of using smartphone technology to assess mental health symptoms among Spanish-speaking outpatients

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OBJECTIVES/GOALS: Geographic and linguistic isolation is associated with negative mental health outcomes, including increased risk for suicide, among ethnic/racial minorities. This study explores the feasibility of using smartphone technology with active and passive sensing to assess mental health symptoms and social behavior among at risk Spanish-speakers. METHODS/STUDY POPULATION: Participants were 13 Spanish-speaking adult outpatients who reported hopelessness/suicide ideation in the last month. Participants completed a baseline interview, 2-weeks of remote ecological momentary assessments (EMA; 4xday) using a smartphone with optional passive sensing (GPS, ambient sound recording), and a final interview. All participants identified as Hispanic (84.6% female, M age = 42.24 years). 53.8% identified as White, with 46.2% reporting race as Other (e.g., Indio, Trigueña). On average, participants had lived in the USA for 6.56 years ($SD = 12.63$ years). A majority (69.2%) met for Major Depressive Episode Current. At baseline, 53.8% reported passive and 23.1% reported active suicide ideation in the last month. 46.2% of participants reported a previous suicide attempt. RESULTS/ANTICIPATED RESULTS: A majority (84.6%) of participants consented to all passive data collection (GPS tracking and ambient sound recording). One participant dropped out after baseline and did not complete the EMA study portion. Participants completed on average 76.93% EMA survey instances ($SD = 18.01\%$). Baseline depression/anxiety severity were significantly positively associated with symptom severity at 2-week follow-up ($p < .01$); however, baseline suicide ideation was not associated with ideation at follow-up. Participants did not report significant changes in mood or ideation from baseline to 2-week follow-up. Symptom severity at baseline was not associated with EMA instances completed. Percent of EMA instances completed were also not associated with symptom severity at follow-up, controlling for baseline severity. DISCUSSION/SIGNIFICANCE OF IMPACT: Results support the feasibility of smartphones to assess mental health symptoms and behaviors in real time, real world settings with Spanish-speakers. A majority of patients consented to active and passive remote assessments. Adherence to remote EMA was good and study attrition was minimal. Implications and future directions will be discussed.

## Education/Mentoring/Professional and Career Development

**4195**

### "Learning Shots" are an Innovative, Versatile Educational Tool for Clinical and Translational Science

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OBJECTIVES/GOALS: To demonstrate how brief online audiovisual presentations, "learning shots", informed by evaluation, can be used to quickly and effectively provide essential just-in-time research-related education in the complex and evolving world of clinical and translational science. METHODS/STUDY POPULATION: "Learning shots" are an educational tool, originally developed by the University of Virginia IRB for Health Sciences Research, that cover a broad spectrum of methodological, regulatory, and ethical topics in research. They are designed to be responsive to adult learners, a rapidly changing research environment, and the need for flexible offerings. Learning shots target different groups involved in research including clinical research coordinators, investigators, and trainees. A survey was used to assess the role of learning shots in meeting learning needs. Moving forward, continuous evaluation will occur through the addition of tracking and a short evaluation survey to each learning shot. RESULTS/ANTICIPATED RESULTS: The University of Virginia has an online library of over 30 learning shots. Learning shots are used to cover foundational topics