

# the Behavior Therapist

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special issue

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### Introduction to the Special Issue

Lily A. Brown, University of Pennsylvania

Richard T. LeBeau, UCLA

In 2018, the Centers for Disease Control and Prevention (CDC) reported that death by suicide occurred in 14.8 per 100,000 people across all age groups in the United States, up from 11.8 per 100,000 people in 2008. In 2018, there were also over 1.4 million suicide attempts in the U.S. The impact of suicide is strongly felt across our research and clinical community at the Association for Behavioral and Cognitive Therapies (ABCT), as improving the ability to predict and prevent suicide is a major focus of the work of many in our field. Accordingly, this special issue of the Behavior Therapist is focused on current issues related to suicide prevention. The issue features contributions from numerous esteemed clinicians and researchers who offer a variety of high-quality, informative pieces covering a number of pressing issues in the field of suicide prevention through original data, literature reviews, theoretical overviews, and commentaries.

We believe that the membership of ABCT is in a unique position to address the staggering rates of suicide globally, given their expertise in research methodology, assessment tools, policy development, clinical training and supervision, and intervention development, delivery, and dissemination. It is our hope that the articles included in this special issue inform readers about the latest developments in the field of suicide prevention, stimulate discussion about

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Published by the Association for Behavioral and Cognitive Therapies 305 Seventh Avenue - 16th Floor New York, NY 10001 | www.abct.org (212) 647-1890 | Fax: (212) 647-1865

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Subscription information: tBT is published in 8 issues per year. It is provided free to ABCT members. Nonmember subscriptions are available at \$40.00 per year (+\$32.00 airmail postage outside North America). Change of address: 6 to 8 weeks are required for address changes. Send both old and new addresses to the ABCT office.

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### **INSTRUCTIONS** for AUTHORS

The Association for Behavioral and Cognitive Therapies publishes *the Behavior Therapist* as a service to its membership. Eight issues are published annually. The purpose is to provide a vehicle for the rapid dissemination of news, recent advances, and innovative applications in behavior therapy.

• Feature articles that are approximately 16 double-spaced manuscript pages may be submitted.

• Brief articles, approximately 6 to 12 double-spaced manuscript pages, are preferred.

• Feature articles and brief articles should be accompanied by a 75- to 100-word abstract.

• Letters to the Editor may be used to respond to articles published in *the Behavior Therapist* or to voice a professional opinion. Letters should be limited to approximately 3 double-spaced manuscript pages. Submissions must be accompanied by a Copyright Transfer Form (which can be downloaded on our website: http://www. abct.org/Journals/?m=mJournal&fa=TB T): submissions will not be reviewed without a copyright transfer form. Prior to publication authors will be asked to submit a final electronic version of their manuscript. Authors submitting materials to *tBT* do so with the understanding that the copyright of the published materials shall be assigned exclusively to ABCT. Electronic submissions are preferred and should be directed to the editor, Richard LeBeau, Ph.D., at rlebeau@ucla.edu. Please include the phrase tBT submission and the author's last name (e.g., tBT Submission - Smith et al.) in the subject line of your e-mail. Include the corresponding author's email address on the cover page of the manuscript attachment. Please also include, as an attachment, the completed copyright transfer document.

"best practices" for suicide prevention, and inspire action to lower the suicide rates.

Before we describe the specific topics and themes of the articles included in this special issue, we think it is important to address the complex topic of COVID-19 and suicide. There has been much discussion recently of the impact of COVID-19 on suicide rates, including concerns that suicide rates have increased as a result of the pandemic. The pandemic has clearly had a significant negative impact on mental health, with a three- to fourfold increase in anxiety and depression in the spring of 2020 compared to 2019 (Twenge & Joiner, 2020). Despite the negative impact on mental health and some evidence for increases in suicidal ideation (Czeisler et al., 2020), to our knowledge, there is no evidence that rates of suicide have been increasing in the United States during the pandemic. In fact, one recent study demonstrated that physical distancing during the pandemic was not related to increased risk for suicide attempts (Bryan et al., 2020). Thus, we want to be clear that the timing of this special issue is not meant to communicate that suicide rates are on the rise during the pandemic, though this will be important to evaluate in the future. In fact, most of these articles were initially submitted before the pandemic hit us full force. Suicide risk was a significant public health concern prior to the pandemic, and we continue to have much to learn about suicide prevention.

You will find that several notable themes emerged in the eight contributions to this special issue. One theme is the importance of social connection, or lack thereof, in suicide prevention. Dr. Alexis May (2020) describes a novel intervention that incorporates romantic partners into crisis response planning through the addition of a single structured couples session. Dr. Chandra Khalifan and colleagues (2020) present another novel intervention for couples, this one a multisession treatment aimed at simultaneously improving relationship functioning and reducing suicide risk. Dr. Lucas Zullo and colleagues (2020) report on results from a familybased intervention, called SAFETY, to reduce suicide risk in adolescents. To further explore the relationship between social connection and suicide risk, Julia Yarrington and colleagues (2020) examine risk for suicide among a novel and highly impaired sample of socially anxious individuals seeking community help with obtaining employment. Interpersonal connection plays a pivotal role in many theoretical

models on the development of suicidal ideation (Joiner, 2005; Klonsky & May, 2015), and these articles offer unique perspectives regarding this association and provide strategies to improve social connection to reduce risk for suicide.

Another theme throughout this issue is on improving suicide prevention among vulnerable populations. Suicide is the second leading cause of death among adolescents (Curtin & Heron, 2019), and Zullo et al.'s (2020) article offers a comprehensive intervention aimed at reducing suicide risk among vulnerable children and adolescents. Rocky Marks and colleagues' (2020) review of suicide prevention in correctional facilities (including in juvenile justice settings) highlights how suicide risk has escalated in prisons and jails in recent years, and discusses research that is under way to reduce suicide risk in these settings. Dr. Caroline Holman and colleagues (2020) describe suicide prevention programs for veterans, another group that is especially vulnerable to suicide risk, and discuss some of the cutting-edge strategies for suicide prevention within the Department of Veterans Affairs (VA).

A third theme in this special issue is on the use of technology to reduce suicide risk. Drs. Alexander Chapman and Philippa Hood (2020) discuss how clinicians have adapted to the needs of their patients during the COVID-19 pandemic by pivoting their clinical service delivery to a telehealth platform, as well as ethical and logistical issues in managing suicide risk remotely. Dr. Holman (2020) also describes how technology is being leveraged with the VA to implement machine learning algorithms through the REACH VET program to identify veterans who may be at risk for suicide.

The final contribution focuses on a topic of high importance from the perspective of public health strategies for suicide prevention-lethal means restriction. Dr. Meredith Sears and colleagues (2020) discuss lethal means restriction primarily within the context of dialectical behavior therapy (DBT), with a discussion of how it can and should be applied within other modalities. This is an important topic given that some methods for suicide, such as firearms, have significantly greater risk of lethality than others. This piece argues that all clinicians, regardless of the specific treatment modality they are working in, should directly and proactively assess, educate, and set collaborative goals with patients aimed at reducing access to lethal

means so that when patients are in a crisis lethal means are less readily available.

The collection ends with a commentary by an esteemed leader in the field of suicide research, Dr. David Klonsky of the University of British Columbia. In the commentary, Klonsky (2020) synthesizes the themes and expounds upon the implications of the included articles. Dr. Klonsky critiques the popular notion that increasing our ability to predict suicide is our top priority, suggesting instead that understanding suicide risk will lead to more fruitful options for intervention. He concludes by providing direction for the future of suicide prevention efforts.

We are grateful to the contributors to this special issue for offering their thoughtprovoking pieces and the many peer reviewers who provided feedback on them. This special issue calls upon our community of clinicians and researchers to foster feelings of social connection in our patients; attend to the unique needs of vulnerable populations; harness technological developments to improve surveillance, assessment, and intervention; and to help our patients reduce access to lethal means. Such actions should help us reduce psychological pain and suicidal thoughts and behaviors among our patients so that they have the opportunity to create a life worth living.

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### ABCT

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### AT ABCT

### From Your Executive Director: What Your Leadership and Staff Are Working on to Serve You Better

### Mary Jane Eimer, *Executive Director*



THIS IS ONE of the busiest times of the year for ABCT and its staff. We are beginning a new membership year, our election of officers is under way, and, as of this writing, our Annual first virtual conven-

Convention—our first virtual convention—is days away. The Board of Directors meet, as do many of the committees in our governance. Lots of emails, phone calls, Zoom meetings, and details to address.

There are many new developments in the works at ABCT. The Self-Help Book Recommendations just reviewed over 20 books to add to our website. Many of the titles may be useful to your patients. We are offering another new award in 2021: The Michael J. Kozak Critical Inquiry and Analytic Thinking Award will be awarded in alternative years. "Clarity of writing reflects clarity of thinking." This statement reflects the overarching goal that Michael J. Kozak sought to achieve himself and that he vigorously encouraged others to reach as well. For a description of this award and all of our awards, please visit our awards page at https://www.abct.org/Awards/.

Please consider donating to one of our awards. Giving Tuesday is December 1. All of the funds we receive go directly to the named award. There are no administrative fees deducted. You can also help ABCT by naming us as your Amazon Smile charity so Amazon can contribute .5% of your purchases to ABCT. To sign up go to https://smile.amazon.com/gp/chpf/homepage?orig=%2F. I alone earned \$7 for ABCT and am confident many of you could beat that amount easily. ABCT also earns donations from Facebook.

We also formed a new committee this year, the Dissemination, Implementation, and Stakeholder Engagement. The Committee will coordinate issues and activities relevant to the dissemination and implementation component of the ABCT Mission and Strategic Intent. Their responsibilities include promoting activities that (a) foster an inclusive environment for stakeholders from diverse communities, industries, and professional backgrounds to collaborate in the service of ABCT's mission, and (b) foster members' collective expertise in dissemination and implementation, scaling, technology, global health, public health, or other topics relevant to the social impact of cognitive behavioral science. Expect to hear more about this committee over the coming months.

We have been adding a lot of resources to our website. Our Student Committee has put together a series of materials for students considering applying to clinical psychology in either a Psy.D. or a Ph.D. program in addition to professional- development-focused webisodes. Several of our fact sheets now appear on our You Tube channel (Assertiveness Training and Sexual Assault). We are working on translating more of our fact sheets into Spanish. If you are interested in helping with this project, kindly contact David Teisler, ABCT's Director of Communications (teisler@abct.org).

Members, please continue to be active in ABCT by renewing your membership. Participate in our list serve or in one of our Special Interest Groups. The 2021 Call for Award Nominations is now on our website—please nominate your colleagues! The 2021 Call for Ticketed Sessions, immediately followed by the Call for Papers, will be up shortly (and appears in this issue of *tBT*). Check our website for updates.

You are always welcome to contact me directly at mjeimer@abct.org Thank you.

Stay safe and positive, everyone. Until next time!

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### CLINICAL PRACTICE FORUM

### **Telehealth and Suicide Risk Management**

Alexander L. Chapman and Philippa Hood, Simon Fraser University

SINCE THE ADVENT of COVID-19, most outpatient mental health services transitioned from mainly in-person (with perhaps occasional or limited use of telehealth) to predominantly telehealth services, delivered through various communication technologies (phone, smartphones, Internet, apps, and so forth; Fisk et al., 2020). In the spring of 2020, many clinicians around the world scrambled to develop telehealth services for the first time, ensuring that they were up to speed on relevant ethical, logistical, and technical issues, and learning how to use various Internet-based platforms to provide essential mental health services. At our center (The DBT Centre of Vancouver), on Monday, March 16, 2020, we began our transition to telehealth services, watched webinars and read literature on telehealth practices and ethics, developed new informed consents and other forms, met as a group to delineate new procedures, signed up for a secure healthcare version of Zoom, and contacted all of our clients to let them know of the switch to telehealth services. It was an exhausting transition, to say the least!

Even though we powered through the bulk of the work in those early days, developing and maintaining a telehealth program requires consistent work, as well as ongoing awareness of the literature and evolving ethical and professional guidelines and issues with technology. Along the way, for example, we discovered that we needed a more secure email system with the ability to send encrypted, fillable forms, before our clinicians lost their minds trying to get clients to sign paperwork. We also discovered many clinical issues to navigate, such as what to do when clients turn off their video during group sessions, refuse to use Zoom, lose their Internet connection, use the chat function inappropriately, and so forth. Fortunately, most of these problems are manageable and do not have lifeor-death implications.

Helping suicidal clients, however, can be a life-or-death proposition, and helping suicidal clients we do not even get to see in person can be worrisome. Some clinicians may be reluctant to take new, high-risk clients while offering exclusively telehealth or limited in-person services. We have found that several questions and worries are quite common: What new procedures would need to be in place to adequately manage suicide risk remotely? How can we adequately assess and manage risk with the more limited access to clients' nonverbal communication that comes with telephone services or videoconferencing? What will happen if a client needs more intensive

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care, but this needs to be arranged from a distance? What if a suicidal client misinterprets what a clinician says over the phone, video chat, or through text or email and becomes distraught? How can we use validated measures of suicide-related factors remotely? What would it be like to meet with a highly suicidal client from one's home office and return to family life 5 minutes later? Discussing all of these questions would go beyond the scope and limits of this commentary, but we do aim to emphasize that telehealth with suicidal clients can be effective, safe, and manageable. Moreover, the use of telehealth for suicide risk management is not unique to the era of COVID-19. Crisis lines, outreach programs to reduce suicide risk, and systematic telehealth-based interventions for suicidal clients have been around for decades. We begin by discussing suicide and telehealth more broadly, review some of the research on suicide risk management via telehealth, and conclude with a section on some key considerations for clinicians and researchers using telehealth methods to assess and treat patients experiencing suicidality.

### The Problem of Suicide

Suicide is a serious, global, public health problem. According to a report by the World Health Organization, approximately 800,000 individuals die by suicide every year, with many more attempting (1,400,000 adults in the United States in 2017) or contemplating (10,600,000 adults in the United States in 2017) suicide (Bose et al., 2018; World Health Organization, 2019). Furthermore, despite efforts to address this problem, suicide rates do not appear to be declining. In the United States, for example, suicide is the 10th leading cause of death (48,344 dead in 2018; Drapeau & McIntosh, 2018), with rates showing a sharp increase over the last 20 years (Jobes et al., 2020).

Although there has been considerable progress in the development of risk assessment methods, standards of care, and effective treatments for people struggling with suicidal thoughts and behaviors, we still have a long way to go. Despite limited evidence for their efficacy, for example, hospitalization and medication management remain common and often central elements of the care of suicidal clients. In contrast, evidence-based suicide risk management approaches (e.g., dialectical behavior therapy [DBT; Linehan, 1993; 2015], cognitive therapy for suicide prevention, and the collaborative assessment and management of suicidality [CAMS]) remain comparatively under-adopted (Jobes, 2017; Jobes et al., 2020; Jobes & Chalker, 2019) and are often unavailable to the clients who need them. Indeed, concerns remain about whether clinicians are staying abreast of developments in the field as well as the lack of resources to implement comprehensive treatment (Bongar & Sullivan, 2013; Jobes, 2017). DBT, for example (despite being developed over 30 years ago) remains difficult to access in many areas. In our region, waitlists can exceed 12 months, and health care systems often lack the resources to implement and sustain such a comprehensive treatment (Carmel et al., 2013). Further, we have found that clinicians often struggle to

develop and sustain DBT services in rural locations, places in which clients and clinicians are separated geographically, the availability of mental health services is limited, or when there are transportation limitations (e.g., clients lack the means for transportation, or a public transit system is unavailable). Although it certainly would not solve all of these problems, the use of telehealth might begin to improve the accessibility of treatment for suicidal individuals.

### Psychological Treatment Delivered by Telehealth

Over the past several years, the use of telehealth to reduce barriers to health care services (e.g., for those in underserved or rural areas) has increased substantially (American Psychological Association, 2014). Several years before the COVID-19 pandemic, telehealth-delivered mental health treatment was among the most active and growing areas of telehealth provision (Turvey et al., 2013). Further, a substantial body of evidence suggested that telehealth-delivered mental health treatment has comparable effectiveness to inperson treatment for a range of psychological difficulties across different client ages and contexts, including depression (Fortney et al., 2007; Fortney et al., 2013; Richardson et al., 2009; Ruskin et al., 2004), posttraumatic stress disorder (Acierno et al., 2017; Frueh et al., 2007; Olden et al., 2017), anger management (Morland et al., 2010), substance use (Frueh et al., 2005), and developmental disabilities (Szeftel et al., 2012). There is also evidence for the

Table 1. Snapshot of Research on Telehealth-Delivered Treatment for Suicidal Clients

- There is support for the use of telehealth treatment for suicidal clients.
- Findings are mixed regarding the reduction of suicidal ideation or behavior.
- Face-to-face provision of CBT appears to have consistent, small-to-medium effect sizes.
- There have been few studies of telehealth CBT for suicidal clients.
- Telehealth-delivered treatment does not appear to be iatrogenic or to increase suicide risk.

Table 2. Snapshot of Clinician and Client Perceptions of Telehealth

- A minority of clinicians appear to have positive views of telehealth for suicidal clients.
- Common concerns include the lack of access to behavioral observations, limited control over clients when they are suicidal, and difficulty triaging or prioritizing clients.
- Clinicians may believe telehealth has advantages for clients not at high risk for suicide.
- Clinicians may be cautious in using telehealth to manage high-risk clients in acute crises.
- Clients may find e-health programs addressing suicidality to be acceptable but are attentive to their confidentiality risks and the wording and content of assessment questions.

cost-effectiveness of these services (Egede et al., 2017; Jong, 2004; Modai et al., 2006; Pyne et al., 2010). Research on the use of telehealth to manage suicide risk, however, is much less developed, possibly because suicidal ideation and behaviors constitute exclusion criteria for many telemental health studies (Rojas et al., 2020).

### Research on Suicide Risk Management Delivered Through Telehealth

For this commentary, we reviewed research in this area using PsycINFO, Psyc-Articles, and PubMed databases between 2010 and 2020 (search terms: "telehealth and suicide risk"; "telepsychology and suicide"; and "telehealth and suicide"). Of 336 articles, 43 described research either directly examining the effectiveness of telehealth-based interventions through clinical trials or case studies or examining electronic programs to monitor suicidality (e.g., Kaskcow et al., 2015) and apps to reduce suicide attempts and self-injury (e.g., Franklin et al., 2016). Additionally, since the outbreak of COVID-19, articles have addressed telehealth guidelines for suicide risk and prevention (Gunnell et al., 2020) as well as relevant ethical issues and the adaptation of established treatment programs for use via telehealth (e.g., CAMS; Jobes et al., 2020). Given space limitations, our review below is by no means comprehensive, but we hope it provides a helpful sample of the existing literature.

Findings from a range of studies varying in methods and quality have shown that the management of suicide risk via telehealth is feasible, safe, and likely effective. A couple of earlier case studies in this area emphasized the importance of a coordinated, team-based approach when using telehealth for suicidal clients. One study, for example, described positive effects of telehealth services for a military veteran with PTSD, involving a team-based approach, liaising with community resources, and using telehealth technology to remain in touch with the client and monitor ongoing risky behavior (Gros et al., 2011). Another study described positive effects of a similar approach to reduce selfharm and suicidal ideation with another military veteran (Lu et al., 2014).

A few clinical trials have examined the effectiveness of telehealth-based ancillary interventions added to treatment-as-usual (TAU) or other interventions for suicidal clients. In one nonrandomized multisite trial, 1,376 patients presenting to the hospital emergency department with a suicide

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attempt or suicidal ideation occurring during the week before their visit were provided with a sequence of interventions. During an initial phase, patients received TAU in the emergency department of each site, followed by a screening phase involving suicide risk screening. Subsequently, in an intervention phase, patients were screened again for suicide risk and a safety plan was developed, and patients received a series of phone calls, using an established suicide risk protocol (Coping Long Term with Active Suicide Program, or CLASP; Miller et al., 2016). The calls occurred over the course of a year following discharge, and among the 502 patients in the intervention phase, the majority (60.8%) competed at least one call, and among those, the median number of calls was six. Patients in the intervention phase were less likely to attempt suicide and engaged in fewer suicide attempts than those in the TAU phase. Given (a) the absence of a control group or random assignment, (b) the possible effects of differential study attrition for higher versus lower-risk individuals, and (c) the multicomponent nature of the program, the specific effects of the telehealth outreach component of this research are unclear. This study's findings are consistent with those of some other outreach programs (e.g., Motto & Bostrom, 2001), although findings in this area are generally mixed (Milner et al., 2015; Noh et al., 2015).

Kasckow and colleagues compared the effectiveness of TAU to TAU combined with a telehealth monitoring intervention called the Health Buddy among veterans with schizophrenia (N = 25; Kasckow et al., 2015). The Health Buddy program involves clients taking home a device that prompts them with questions about symptoms of depression and suicidality. Clinical hospital staff monitor client responses periodically and intervene appropriately to reduce risk. Findings indicated good adherence to the Health Buddy intervention over 3 months, and participants in the Health Buddy condition demonstrated significantly greater improvements in suicidal ideation, compared with those in the TAU condition, although there were not significant differences in improvements in depression or alcohol use disorder severity. More recently, Gabilondo et al. (2020) examined the effectiveness of a 6-month telehealth-delivered program + TAU for 123 patients discharged from hospital after a suicide attempt, to a TAU control group of 463 patients. Participants in the telehealth condition took significantly longer

to re-attempt suicide and were more likely to adhere to their outpatient follow-up plan, compared with those in the TAU condition. The conditions did not differ significantly, however, in the proportion of clients attempting suicide or the number of suicide attempts per client. Another RCT examined the use of a telehealth intervention to augment intensive case monitoring (ICM) for suicidal clients (N=51) diagnosed with schizophrenia or schizoaffective disorder. Participants in the telehealth condition had a larger decrease in the number of hospitalizations compared to ICM alone.

Despite these promising findings on the use of telehealth as an ancillary intervention, it is less clear whether wholesale adoption of telehealth treatment for suicidal patients is comparable to in-person services. In a recent review and meta-analysis, Leavey and Hawkins (2017) reviewed 22 studies examining in-person and 4 studies examining e-health delivered cognitive behavioral therapy (CBT) for suicidal clients. The interventions tended to be brief (approximately 12 sessions for in-person and 6 sessions for telehealth CBT). There were small-to-medium effects for inperson CBT on suicidal ideation and behavior, but there were too few studies to conduct a meta-analysis on telehealth CBT. Some of the telehealth studies, however, reported promising findings (Leavey & Hawkins, 2017).

### **Provider and Client Perspectives**

Some research has examined provider and patient perspectives on the acceptability and effectiveness of telehealth interventions for suicide risk. For one study, mental health clinicians completed an online survey of perceived risks of using telehealth services for patients at risk of suicide (Gilmore & Ward-Ciesielski, 2017). Of 52 participants, 11 (21.1%) supported the use of telehealth for suicidal individuals, and the three most commonly reported concerns were that key behavioral observations would be missing from assessments, clinicians would have less control over their patients, and that clinicians might have difficulty triaging patients (Gilmore & Ward-Ciesielski, 2017). Clinicians with more positive attitudes, who were younger, and who had more experience were more likely to indicate that they would use telehealth in their provision of services to highrisk individuals (Gilmore & Ward-Ciesielski, 2017).

Also using an online survey of experts in suicide treatment, DBT, or telehealth, another study examined perceived benefits of telehealth for clients with varying levels of suicide risk (no risk, low risk, high risk; Ward-Ciesielski et al., 2018). Data were analyzed qualitatively and quantitatively. Mental health clinicians reported benefits of telehealth in reducing barriers and increasing access to services for patients categorized as "no risk" but not those categorized as "high risk" (Ward-Ciesielski et al., 2018). The potential benefits reported for high-risk patients included immediate crisis intervention and increased contact. These findings suggest that health care providers may be cautious about implementing telehealth-based suicide risk management interventions for high-risk clients, except in the acute management of suicidal crises (Ward-Ciesielski et al., 2018).

We came across one study examining client perspectives regarding telehealth for suicide risk management. Specifically, Kasckow et al. (2014) examined client reviews of and satisfaction with the Health Buddy intervention described earlier. Although the intervention was generally considered acceptable, client concerns centered on potential confidentiality risks, the wording and lack of specificity of questions, and the distressing nature of some of the content and questions.

Taken together, the findings are mixed regarding the acceptability of telehealth for suicide risk management from both provider and client perspectives. Clinicians appear to have mixed views of telehealth interventions for suicide risk and some concerns about the use of telehealth with high-risk clients. Clients may find telehealth acceptable, with some improvements needed. Overall, telehealth appears to be a safe and potentially effective way to deliver mental health services to suicidal clients. Of note, however, the research base is extremely limited and these conclusions should be considered tentative.

### Effective Suicide Risk Management via Telehealth

Although ostensibly daunting and worrisome, effective suicide risk management and treatment via telehealth is probably not substantially different from what many clinicians do in routine in-person evidence-based practice with suicidal clients. During a recent conference, we were discussing some of the worries clinicians might have about managing suicide risk via telehealth, and one of my (ALC) wise col-

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leagues exclaimed that DBT therapists have been doing telehealth with suicidal clients for over 30 years. She was, of course, referring to the use of phone coaching in DBT (Chapman, 2018; Linehan, 1993). During phone coaching, the DBT therapist is available to clients (often complex, suicidal clients with borderline personality disorder) by phone or other means between sessions. The primary aim is to help clients generalize skills learned in therapy to their everyday lives, but calls sometimes address imminent risk of suicide or self-injury. Moreover, crisis lines and services have been helping suicidal clients on the phone for decades. Telehealth for suicidal clients clearly is not new clinical territory.

There are, however, some important practical and clinical considerations associated with suicide risk management via telehealth. The most obvious and important difference between in-person and telehealth sessions is that the client and therapist are not in the same place, so it can be harder to have access to nonverbal communication or to arrange for more inten-

sive care when appropriate. Our offices, for example, are located right down the street from a hospital. Although, being a DBToriented center, we consider hospitalization judiciously, it is reassuring to be able to walk a client across the street to the hospital. Clinicians practicing telehealth should always know where the client is located (including address, alternative phone numbers or contact information, workplace, and so forth) and be aware of available mental health and health care services in the client's area. A strong crisis plan should include addresses and contact information for these resources as well as for support persons who can be contacted in an emergency.

The clinician also should help the client understand the implications of telehealthspecific adaptations to their care. The therapist, for example, should orient the client to the various logistical and technological aspects of their care, including the telehealth platform in use, the potential risks and benefits of this platform, how to ensure their own confidentiality (and how the

Table 3. Key Suicide Imminent Risk Management Strategies

- Assess events precipitating the suicide crisis.
- Assess and validate the client's emotional reactions to these events.
- Help the client reduce, modify, or avoid high risk situations.
- Help the client remove or make lethal means inaccessible.
- Help the client move to a safer environment or access other supports, if applicable.
- Intervene directly in the client's environment to reduce risk if necessary.
- Attend to the client's immediate emotional experience.
- Help the client regulate or tolerate their emotions until longer-term help is possible.
- Use an evidence-based risk assessment, protocol, or instrument.
- Remain in communication with the client, and reassess risk as needed.
- Seek a commitment from the client to implement an effective crisis plan.
- Troubleshoot barriers to the implementation of the crisis plan.
- Document appropriately.
- Consult as needed.
- Engage in self-care and effectively manage clinician emotional reactions and worries.

### Table 4. Core Competencies for the Management of Suicide Risk

- An awareness of the literature on suicide and suicide risk.
- Training and experience in suicide risk assessment.
- Understanding of and ability to use empirically based models of suicide risk to guide case formulation.
- Foundational knowledge, training, and experience in core behavioral and cognitive intervention approaches.
- Training and experience in evidence-based treatment, including suicide-specific protocols.
- The ability to establish and maintain an effective working therapy alliance.
- Flexibility in therapy style allowing for directiveness (e.g., emphatically instructing the client to take steps to reduce risk) and non-directiveness (e.g., assessing and enhancing motivation to change) as appropriate.

therapist will do so), the plan for when (not if!) the technology fails or the therapist is unavailable, and so forth. There should be a plan for how to reconnect with an imminently suicidal client when a call or videoconferencing session is dropped. Therapists should also discuss the client's thoughts and feelings about telehealth therapy, including any concerns about not seeing the therapist face-to-face.

Therapist and clients also should collaboratively devise an effective crisis plan. This plan should include the identification of high-risk situations, specific steps the client can take and coping skills they can use in these situations, sources of support or emergency care, and the removal or reduction of access to lethal means, among other considerations. The therapist and client should also collaboratively determine a plan for what to do if the client is adamantly suicidal and refuses help. Troubleshooting this situation in advance can help prevent the therapist from having a crisis themselves and scrambling to ensure appropriate care.

In addition to these general strategies and adaptations, there are several steps a clinician can take to effectively manage imminent suicidal crises over the phone or via other telehealth modalities. We have summarized many of these steps in Table 3. Interested readers might review the following for a more extensive discussion of these and other recommendations for the acute management of suicide risk: Bongar & Sullivan (2013); Chapman (2018); Linehan (1993); Jobes, 2017). We also highly recommend a review of the extremely helpful fact sheet developed by Dr. Barbara Stanley, found at the following link: https://practiceinnovations.org/I-want-tolearn-about/Suicide-Prevention.

### Conclusions

The use of telehealth to provide psychological treatment and manage suicide risk will likely become increasingly common in the months and years to come. Limited research has examined the efficacy of telehealth interventions to manage suicide risk, but the existing evidence suggests that telehealth is likely safe and effective for suicidal clients. Although clinicians' worries are understandable, suicide risk management via telehealth is not dramatically different from in-person services, nor is it new. Assuming clinicians have a solid foundation of skill, knowledge, and experience in suicide risk management (see Table 4), telehealth involves a few adjustments

but can be safe and effective. Clinicians should also remember that the professional and ethical issues regarding telehealth broadly, as well as the telehealth management of suicide risk specifically, will likely continue to evolve; thus, it is important to continue to seek training and remain up to date on developments in this area. We hope that the recent surge of telehealth services portends an increase in the accessibility of evidence-based care for suicidal clients.

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No conflicts of interest or funding to disclose.

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### Suicide Prevention in Dialectical Behavior Therapy: Integrating Firearm Lethal Means Safety Counseling Into Practice

Meredith S. Sears, *San Francisco Veterans Affairs Healthcare System* Lauren Lovato Jackson, *Tibor Rubin Veterans Affairs Medical Center* Lizbeth Gaona, *California Baptist University* 

DIALECTICAL BEHAVIOR THERAPY (DBT) utilizes a person-centered approach to addressing suicide risk, which identifies and treats the specific emotional patterns, behaviors, and environmental factors that impact a particular client's risk (Linehan, 1993). This approach has led DBT to become one of our most effective interventions for individuals at elevated risk for suicide. This is particularly evident in the population for which DBT was originally developed (borderline personality disorder [BPD], which is characterized by a chronically elevated risk of suicide, nonsuicidal self-injury, and impulsive, risky behavior; Panos et al., 2014). As DBT's popularity and research base has grown, however, it has been shown to have broad applicability with a range of symptoms also known to be associated with elevated suicide risk, such as depressed mood and substance use (Overholser et al., 2012; Ritschel et al., 2015).

Since DBT's inception, suicide prevention researchers have identified critical new risk factors and intervention strategies that have yet to be systematically integrated into formal DBT training and materials. One environmental factor that has risen to the fore is ready access to items that can cause severe bodily harm, such as medications that can be fatal in overdose, firearms, and sharps. Known as "lethal means," easy access to these items is now recognized as a primary predictor of suicidal behavior and outcomes (Jin et al., 2016). The importance of addressing access to potentially lethal medications when a client is in acute crisis was presaged in the original DBT text (Linehan, 1993). Reducing access to lethal means, however, is increasingly recognized as an effective method to reduce not only acute but also chronic risk, or the likeli-

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hood of future suicidal crises (Britton et al., 2016; R. I. Simon, 2007).

More recently, the suicide prevention literature has specifically identified access to firearms as playing a role in suicide rates well above and beyond access to other lethal means (Anestis & Houtsma, 2018; Daigle, 2005). Community-level solutions to the association between firearm access and suicide remain hotly debated, especially in the United States. However, health care providers are in a unique position to fold collaborative discussions with clients about access to firearms into routine conversations about suicide risk, with the potential to significantly impact suicide rates in our most vulnerable populations. Discussions about firearm access can occur in any health care setting where suicide risk has been identified, whether in the aftermath of a crisis, in anticipation of a future crisis, or simply in the context of routine work with a client with elevated suicide risk at baseline (R. I. Simon, 2007).

DBT practitioners are especially wellpositioned to systematically integrate firearm lethal means safety counseling into their day-to-day DBT practice. This is true first because DBT providers often work with populations that are especially vulnerable to suicidal behavior (e.g., individuals with BPD, 10% of whom will be expected to die by suicide and three quarters of whom make a suicide attempt; Black et al., 2004) and, as such, have a greater need to apply the highest-impact suicide interventions. Given the direct relationship between firearm access and suicide, goldstandard suicide interventions must target firearms to be maximally effective (Jin et al., 2016). Second, the person-centered and dialectical approach already espoused by DBT can help therapists navigate the often a complex narrative around firearm ownership rights and options for reducing access.

The following article will describe the relevant research on lethal means safety and provide recommendations about how to seamlessly integrate counseling on firearm access into standard DBT using familiar DBT strategies. Further, the DBT strategies discussed below were originally derived from a wide range of treatment modalities, such as cognitive-behavioral and mindfulness-based models. As such, non-DBT clinicians can integrate many of the following recommendations into their sessions without impacting adherence to their chosen modality. The DBT terms used throughout this article have been defined for a general clinical audience and

more details on all of the DBT concepts referenced here can be found in the seminal DBT text (Linehan, 1993).

### The Rationale for Lethal Means Safety Counseling

### The Myth of Means Substitution

One common objection to focusing on reducing access to lethal means is that the client will inevitably seek alternative means during a crisis. However, numerous community "experiments" have shown that increasing barriers to accessing preferred means of suicide significantly decreases suicide rates. In 2006, the Israeli Defense Force implemented a policy requiring active-duty soldiers to leave their service weapons on base during their weekend leave. Weekday firearm suicide rates and weekend nonfirearm suicide rates did not change substantially-but the subsequent precipitous drop in weekend firearm suicide rates resulted in an overall 40% decrease in suicides (Lubin et al., 2010). In the U.S., state laws regulating handgun access are associated with decreased suicide rates, even after accounting for state-level differences in race/ethnicity, age, socioeconomic status, education, and population density (Anestis & Anestis, 2015). Similar effects have been observed with other methods of reducing population-level access to lethal means, such as banning high-toxicity pesticides in regions where pesticide poisoning is a common suicide method, and detoxification of the domestic gas used in household ovens (Daigle, 2005; Gunnell et al., 2007; Kreitman, 1976). These policy changes have shown minimal evidence of means substitution: Rates of alternative suicide methods have not risen to offset the reduction of access to the targeted means (Daigle, 2005; Lubin et al., 2010). Fortunately, the lack of support for means substitution suggests that health care providers' ability to assist suicidal clients with reducing their access to preferred means of suicide may very well impact the likelihood of clients' survival.

### Why Focus on Firearms?

Lethal means safety counseling can target any number of potential means of suicide: Prescribers can limit access to large quantities of lethal medications, family members can lock up kitchen knives, and at-risk clients can be counseled on reducing access to (or destroying) "talismanic" objects (e.g., a particular scarf or cord that has been the subject of suicide planning). It is recommended, however, that all lethal means safety counseling discussions address access to firearms, regardless of the extent to which firearms play an explicit role in the client's suicidal thoughts or plans. Indeed, even among clients who are adamant that they would never use their firearm in a suicide attempt, the authors recommend taking a "yes, and" approach, and continue to pursue a discussion about firearm access to whatever extent possible.

One obvious reason for this precaution is the relative lethality of firearms. According to death certificate data, 85-90% of suicide attempts made by firearms result in death; all other suicide methods combined (including poisoning and cutting) have a 5% fatality rate (Centers for Disease Control, 2016). Unlike most other lethal means, which offer a refractory period between suicidal behavior and outcome (e.g., medications, once ingested, must then be absorbed into the bloodstream, and the impact on bodily functions may take time to take effect), the consequences of a gunshot wound are usually immediate. There is no opportunity for a change of heart, an interruption, or a rescue.

The ready availability of firearms in many U.S. households also increases the risk of a suicide attempt over and above many other confounding variables. The Pew Research Center released a poll indicating that one-third of Americans report owning at least one firearm, and more reside in a household with guns (Parker et al., 2017). Suicide is five times more common among gun-owning households than non-gun owning households (R. I. Simon, 2007), a finding not attributable to elevated rates of mental health conditions, suicidal ideation, or history of suicide attempts among gun owners, or other key demographic and cultural variables (Anestis & Houtsma, 2018; Miller et al., 2009). With respect to storage practices, over half of gun owners in a representative U.S. sample reported storing at least one gun unsecured (i.e., without a lock; Crifasi et al., 2018). Storing weapons unlocked and loaded is associated with elevated selfreported likelihood of engaging in a future suicide attempt (Khazem et al., 2015), whereas safer storage methods such as locking weapons or storing them unloaded have been associated with reduced suicide rates (Shenassa et al., 2004).

One possible contributing factor to the heightened suicide rates in gun-owning households—aside from firearm lethality—is that suicidal crises are often very brief. The extra minutes to hours required to travel to a particular location or prepare a relatively less accessible suicide method may mean the difference between surviving and not surviving an emotional crisis. One study found that 24% of near-lethal suicide attempts occurred less than 5 minutes after the decision had been made to act on suicidal thoughts (T. R. Simon et al., 2001); another study found that 74% of attempt survivors decided to act on a suicidal urge 10 minutes or less before the attempt-with 48% reporting that even their first thought of suicide had occurred under 10 minutes before the attempt (Deisenhammer et al., 2008). It is worth noting here that some of the flagship symptoms of borderline personality disorder (BPD) are emotional reactivity, impulsivity, and chronic suicidality. As such, targeting suicide risk factors (like easy access to firearms) that elevate the lethality of shortterm emotional crises and impulsive action is especially likely to benefit the population for which DBT was developed.

It is notable too that approximately 93% of survivors of suicide attempts do not go on to later die by suicide (Owens et al., 2002): Surviving a suicidal crisis—which may be incredibly brief—is very likely to prevent death by suicide, even in the long term.

### Lethal Means Safety Counseling in Health Care

There is a clear potential role of the health care community to facilitate improved storage practices among clients at risk of suicide. For one, most firearm owners do not believe that storage practices are related to suicide, at least in part because they believe in the myth of means substitution (Anestis et al., 2018). Mental health providers are well positioned to be able to not only target clients' current firearm storage behaviors, but also provide information about the link between firearms and suicide so that clients can make educated storage decisions long after therapy has concluded.

The Consortium for Risk-Based Firearm Policy states that "Any patient at an elevated risk for suicide should receive [lethal means safety] counseling, especially if they have disclosed suicidal ideation or attempt, even if the individual does not have access to a firearm at the time of the clinical interaction" (Allchin & Chaplin, 2017, p. 1). Because of the nature of the intervention, DBT clients will often fit into this elevated chronic risk category (Yen et al., 2004). However, lethal means safety conversations can take place in any clinical setting—from therapy intake, to cognitive behavioral therapy session, to neuropsychological exam. The following segment outlines specific DBT strategies that can be implemented during lethal means safety counseling to improve the likelihood of a successful outcome, but these strategies may be of great utility both in and out of DBT.

It is worth noting that many health care providers may feel uncomfortable bringing up the topic of firearms, especially without an explicit opening provided by the client. Fortunately, DBT reminds us that we are as governed by the same behavioral principles that govern our clients: Exposure and practice will, over time, reduce anxiety and improve clinicians' skill at addressing this sometimes-contentious topic. This is an opportunity to lean on our own distress tolerance and emotion regulation skills (opposite-to-emotion action!) so that our worries don't keep us from tackling this potentially life-saving conversation as often as is needed.

### Lethal Means Safety Counseling in DBT

The existing DBT literature provides recommendations on how to address access to lethal means in a crisis situation (e.g., Linehan, 1993, pp. 470–471, 481– 483). However, routine assessment of firearm access and storage methods, and specific instructions on counseling DBT clients to reduce firearm access to reduce chronically elevated suicide risk, are not currently integrated into adherent standard DBT. The purpose of the present article is to provide concrete recommendations about systematic ways to integrate lethal means safety counseling into therapy.

### When to Implement Lethal Means Safety Counseling in DBT

Pretreatment. The initial commitment and orientation phase of DBT is an ideal time to provide psychoeducation about the association between firearm access and suicide risk. Linehan (1993) recommends using this phase to do a thorough assessment of the client's suicide risk history, including a chain analysis of their most recent and/or most severe suicide attempt(s), as well as developing a safety plan for future crises. We recommend that clinicians add a brief initial assessment of firearm access and storage practices into their pretreatment routine as a matter of course. Clinicians using non-DBT treatment modalities that do not have a pretreatment phase may want to consider implementing additional psychoeducation, assessment, and intervention on firearms access during their intake process.

One possible goal of lethal means safety counseling is for the client to learn to monitor their own early-warning signs of elevating suicide risk so that they can tighten up their firearm storage practices on a short-term basis. Education about the phenomenon of mood dependence, or behavior that is mood- versus values-dependent, as well as assessment of client-specific warning signs, offer potential opportunities for deeper discussion about a flexible approach to firearm storage that is responsive to changes in acute risk. Pretreatment commitment and motivational strategies outlined by Linehan (1993), such as footin-the-door (following a smaller, more acceptable request with a larger one) and door-in-the-face (following a large, unacceptable request with a more modest one), are useful tools to work with client ambivalence around reducing suicide risk through the implementation of additional steps required to access firearms.

• *Individual therapy*. Assessment of firearm access and storage, and lethal means safety counseling, can and should be exercised on a regular basis throughout individual therapy. Once the initial assessment about firearm access and storage has occurred (e.g., during pretreatment), clients may very well acquire new weapons or change their storage procedures without spontaneously updating the therapist.

Signs of elevated acute risk offer one opportunity to bring up lethal means safety. If the therapist identifies a lifethreatening ("Level 1") target behavior during diary card review (e.g., elevated suicidal ideation or planning, self-directed violence, and/or a recent experience of suicidal intent), standard DBT already calls for a behavioral chain analysis. These tools can easily identify and intervene on vulnerability factors such as access to firearms and other lethal means. The key, of course, is to remember to assess firearm access every time this scenario arises. As with any chain analysis, a follow-up solution analysis will identify "links in the chain" that, if removed, might eliminate the occurrence of the target behavior. If it is framed as a vulnerability factor for a highly lethal suicide behavior, access to firearms is both high-impact and changeable, making it a particularly powerful target for removal from the chain.

Therapists can also implement routine assessment of lethal means access at set time points throughout the course of therapy, unrelated to fluctuations in suicide risk. For example, firearm storage can be added to the diary card as a target behavior to track any changes. An advantage of this strategy is that the therapist does not rely upon spontaneous patient report or acute crises for updates. Additionally, some clients may more easily make a "Wise Mind" decision to mitigate future risk if they are not actively in crisis. A potential disadvantage is the client may have less investment in the discussion if it does not seem as immediately relevant.

The authors have developed DBT-consistent handouts and worksheets, as well as teaching notes, to assist therapists with firearm lethal means safety counseling. These materials may offer a useful rubric to address ambivalence and cognitive distortions, and to practice coping ahead thoughtfully in a "Wise Mind" fashion. (Please see the "Correspondence" note at the end for information on how to request copies of these publicly available materials.)

• Skills training groups. For several reasons, we recommend that lethal means safety counseling take place in one-on-one settings rather than being integrated into skills groups. First and most important, explicit references to suicide are necessary when conducting effective lethal means safety counseling. The skills group expectations as laid out in the DBT manual very clearly eschew even the use of the word "suicide": This limits the risk of contagion, and decreases the likelihood that group members will get engaged in a discussion that is highly emotionally activating for some (Linehan, 2015a, p.131). In contrast, deep examination of the details of suicide risk and a range of interventional strategies is expected in individual therapy. Second, the content would not necessarily be relevant to all members of the skills group (e.g., some proportion of clients will not have current or future access to firearms). Third, the supplemental handouts and worksheets developed by the authors are not intended to replace or abbreviate any existing DBT content, so the length of existing modules might have to be extended, which some programs may not be able to accommodate. While group lethal means safety counseling could in theory streamline assessment, information sharing, and brainstorming of solutions, individual

therapy is still the preferred modality for lethal means safety counseling.

### Goals of Lethal Means Safety Counseling

All firearm storage practices are not created equal. As is done in Motivational Interviewing, an effective lethal means safety counseling session requires the therapist to have a clear destination in mind even if that destination is not ultimately the one endorsed by the client.

Eliminating access to the weapon altogether, either on a permanent or temporary basis, comes closest to fully eliminating firearm suicide risk. This can be accomplished by selling the weapon, surrendering it or temporarily providing it to the police (many police stations will accept lawfully owned firearms), or loaning the weapon to a trusted friend or family member until suicide risk has resolved. (It should be noted that state laws vary on the legality of thirdparty transfers; for example, at the time of this writing, in California a firearm may be loaned on a short-term, 30-day basis only to specific family members who have a firearm safety certificate, and transfers must be conducted through a licensed dealer; in Arkansas, firearms can be transferred without a background check to any adult eligible to own firearms; Means Matter, 2019).

The next safest option would be to render the weapon inoperable. This may include either locking the firearm, removing all ammunition from the storage site, or removing access to a key component of the firearm (e.g., the firing pin). The client can surrender the lock key, code to the safe, ammunition, or weapon component (e.g., provide it to a collateral); these options maximally improve safety while allowing the client to maintain possession of the weapon. If a collateral is involved, it is important that the client participate in a discussion as to how that individual would gauge the safety of returning the item to the client; the therapist may be directly involved or may coach the client on interpersonal effectiveness skills so that they can conduct such a conversation skillfully. For example, a carefully planned out "DEAR MAN" (the central DBT assertiveness skill) would give the client the opportunity to consider how to frame the problem most effectively (without disclosing more or less than necessary), and a clear request for the collateral (e.g., "Please return the weapon to me under X circumstances, and not under Y circumstances"). Clinicians can

also help the client think through additional important factors that may impact their request, such as whether this person actually has the capability to help with this (e.g., would it be legal for them to accept a temporary firearm transfer?) and whether this is a good time for them to ask this person (e.g., are they in a strong emotional place to tolerate a conversation about suicide risk?; Linehan, 2015b, p. 132-133).

If the client is not willing to fully eliminate access to their weapon(s) or render them inoperable, any barrier that can be introduced between a suicidal impulse and a loaded weapon in the client's hand may reduce risk. This means that locking the weapon and maintaining access to the key but storing it on the other side of the house, for example, would be preferable to storing the key on the client's person or next to the weapon-and simply locking the firearm at all is still preferable to maintaining an unlocked, loaded firearm. We never recommend hiding weapons: Clients often find them and do not disclose their awareness of the location to family members, and the risk of a child or other family member stumbling upon them unexpectedly increases as well. The authors' aforementioned handouts and worksheets offer more detailed descriptions of a variety of storage strategies, as well as pros and cons associated with each option.

### DBT Strategies to Address Common Challenges in Lethal Means Safety Counseling

In the U.S., firearm owners are beginning to be more aware of the link between firearm access and suicide. In fact, over the last several years, many of the authors' gunowning clients at elevated acute risk of suicide-most of whom are military veterans coming to the VA for treatment-have either already taken steps to store their weapons more safely in an effort to mitigate risk, or are at least increasingly willing to engage in a conversation about lethal means safety with their therapists. Regardless of whether they have already taken action steps towards reduced access, however, gun-owning clients are far more likely to come up with creative and workable solutions to reduce their access to their own firearms than are their therapists. They are, after all, more familiar with their weapons, storage options, and community supports. This highlights the importance of joining with clients in the problem-solving process and reinforcing their role as agents responsible for their safety and the safety of those around them.

In some cases, however, gun owners will balk at the idea of reducing access to their firearms or even discussing the topic with their healthcare providers. Below we have identified several common barriers to lethal means safety and safety counseling, along with DBT strategies that can be used to address these clients' concerns.

"I have the right to own a gun, and you have no right to take it from me." In the U.S., the Second Amendment right to bear arms has dominated the topic of firearm access for decades. As such, it is not uncommon for firearm owners to take a principled stance against a health care provider's attempts to address firearm access. For example, in their description of the use of Motivational Interviewing for suicide prevention, Britton et al. state, "When individuals feel their freedom is being threatened, they often defend it despite potentially serious consequences. Thus, telling an ambivalent patient that they should restrict their access to firearms may inspire them to defend their right to maintain access" (2016, p. 53).

DBT therapists will be familiar with the idea that setting oneself on the opposite side of a dialectic typically increases the client's resistance to taking the therapist's point of view. The dialectic at work in this case is that the provider must ethically reduce suicide risk whenever possible, and the client also has the power to decide not to take the steps necessary to reduce that risk. Validation of the client's rights can loosen the stranglehold of opposing stances on firearm access, and pave the way for a dialectical synthesis: The client has the right to maintain access to their firearm, and the provider may also have information that could impact the client's decision. Investing sufficient time understanding and validating the client's perceptions about their rights and reasons for owning firearms, especially at higher levels of validation, may ease the transition into intervention.

The DBT concept of consultation to the patient (vs. direct environmental intervention by the therapist) is exceptionally important in addressing this barrier to reducing access to a firearm. Ultimately, with the exception of rare cases (e.g., Extreme Risk Protection Orders, or "red flag" laws; legal limitations to firearm ownership following involuntary psychiatric holds), the client—not the clinician—does indeed have the power to make the final decision about whether or not to reduce their access to their firearms.

It is also possible to shift the conversation by re-orienting towards goals and life worth living. When the topic of Second Amendment rights arises, the therapist can balance validation of the client's rights with validation of the client's own concerns for their safety and their desire to achieve a life worth living. We recommend ending such a reflective statement with the latter concern, similar to a double-sided reflection in Motivational Interviewing (Resnicow et al., 2015), so that subsequent conversation is gently directed towards safety. For example, a therapist might say, "You are absolutely right that I can't take your gun, nor do I want to. I also know you came in here today saying you're worried you aren't going to make it through the week-and I know how incredibly invested you are in getting a job helping other veterans. Let's talk about what you might be willing to do to achieve that dream." In this way, an argument about rights can be sidestepped and the conversation refocused on suicide prevention and the life worth living. The above strategy, of course, requires that the therapist have a very clear understanding of the client's life worth living before access to lethal means is addressed.

"My main social activities involve firearms. They're an integral part of my life, and my culture." Firearms may play a starring role in many clients' daily activities, engagement with their communities, and culture. These factors are important to understand prior to entering into a lethal means safety conversation. For example, one of the authors' clients identified organized shooting events as a primary source of behavioral activation and social connection. Many individuals also have long family histories of firearm ownership and use, rendering firearms an integral part of family tradition and a sense of belonging. While eliminating or reducing access to their firearms might reduce acute suicide risk, doing so also might compromise protective factors that decrease chronic suicide risk in the long run. Asking clients about their relationships with their firearms before launching into a conversation about access can often provide the validation necessary to prevent a tense exchange and help the therapist make more informed recommendations about action steps.

It may be helpful to emphasize that reductions in access can be used selectively and temporarily when acute risk is elevated, especially if the client is able to anticipate periods of heightened distress (e.g., trauma anniversaries, particular holidays). In this way, the therapist and client (and potentially client's support network) can collaboratively join around the goal of helping the client stay alive while also developing flexible safe storage plans that account for client's desire to maintain access to weapons. This option can be a major incentive for a client to practice selfmonitoring, such as through a diary card or repeated chain analyses: When they are able to effectively self-identify increased acute risk in early stages, they can more safely utilize a wider variety of flexible, riskresponsive safety measures. Conversely, if the client is less skilled at self-monitoring and more likely to engage in mood-dependent action, less flexible and more secure long-term approaches to safe firearm storage may be needed.

Additional practice problem-solving is also a useful way to address concerns about reducing social connection through reducing access to firearms. For example, the client may be able to develop new or less frequently used hobbies (e.g., fishing, mountain biking) to either replace or temporarily supplant activities that require guns.

"A locked firearm won't protect my family." Another hurdle in lethal means safety counseling can be clients' attachment to fast, easy access to loaded firearms for personal safety. BPD and PTSD are estimated to co-occur at rates of around 50% in clinical samples (Harned et al., 2010; Zanarini et al., 1998). Clients' fears about harm from others may far outweigh their fears about harm from themselves—even if statistically, and realistically, the risk of suicide is far greater.

Easy access to firearms for purposes of personal safety often serves the function of reducing anxiety about harm from others. This is not unlike attachment to any safety signal or avoidance strategy that has been negatively reinforced by distress reduction. Shaping and graduated exposure can easily be integrated into a behavioral treatment like DBT (e.g., slowly decreasing access to firearms in a stepwise fashion and testing out hypotheses related to anxiety or safety). According to behavioral principles, exposure to increased distance from a loaded weapon should decrease anxiety over time: Clients may be amenable to integrating their firearm(s) into an existing exposure practice if anxiety reduction has already been established as a goal of treatment. For example, a client who typically sleeps with a

loaded firearm under his pillow might first place the weapon on his nightstand, then in the nightstand drawer, then in the dresser across the room, then separate the ammunition and weapon into separate drawers, and so on.

Self-monitoring is a useful tool here as well. Diary card records of mood and suicidal ideation can be used to test clients' often mood-dependent beliefs about their relative risk of harm (either from themselves or others). In the light of the day, talking with a therapist who cares for them, clients may feel more connected to their desire to live and skeptical of their risk of suicide. The possibility of a future crisis or suicidal impulse may feel too low to motivate behavior change. Reviewing past diary cards can help remind them of historical day-to-day (even moment-to-moment) fluctuations in risk. Similarly, tracking fear of harm from others may reveal experiences that tend to increase fear that are unrelated to actual increases in danger from the environment (e.g., poor sleep, watching a violent movie, waking up from a nightmare, and so on). These precipitating events and vulnerability factors can be addressed with DBT emotion regulation and distress tolerance skills, and thus be separated from decisions about access to firearms.

Irreverent communication can also be a useful tool in responding to a client's concerns about harm from others. For example, a therapist might say, "I'm so glad to hear you're so worried about your safety! I am too!" An unexpected alignment of goals may, again, sidestep a power struggle, and pave the way for the therapist to then highlight the divergence in their worries about safety (i.e., safety from whom) and either provide psychoeducation about access to firearms and suicide risk as is described in the first half of this article, or employ some of the other tactics described above.

#### A Final Note on Clinician Language

Research has shown that use of the term "means restriction" tends to decrease client motivation and willingness to engage in a counseling session on the topic of firearm access (Stanley et al., 2017). Preferred terms include "means safety" or "means reduction." Additionally, among gun owners, the term "firearm safety" applies to basic best practices when handling weapons, which are generally taught prior to handling one's first firearm (e.g., never put your finger on the trigger until you are ready to shoot; never point a gun at another person, even if you are positive it is unloaded). Use of the term "firearm safety" in a suicide prevention context may be cause for confusion and consternation ("I learned firearm safety when I was twelve years old, why is my doctor lecturing me about this?"). In a suicide prevention context, we encourage use of terms such as "lethal means safety," "firearm access," or "firearm safe storage" instead of "firearm safety." (Readers may have noticed the authors' use of the term "lethal means safety" throughout this article, despite the content being limited to firearms).

#### Summary of Recommendations

1. Introduce the concept of lethal means safety to all clients early in therapy (e.g., in DBT pretreatment), and continue to address access to lethal means throughout individual therapy. Assess firearm access and storage practices with all clients, regardless of whether clients are acutely suicidal at the time or if they identify firearms as a means of suicide that they have considered.

2. Use a dialectical stance to address firearm storage options. Validate your client's attachment to their weapons, concerns about changing their storage practices, and their right to make their own choices about firearm access (remember: consultation to the patient!). At the same time, express concern for their safety and provide psychoeducation about research that clearly shows that increased access to firearms corresponds with increased risk of suicide.

3. Utilize DBT tools to improve the efficacy of clients' storage practices. Self-monitoring through use of diary cards and chain analyses can improve client buy-in by highlighting patterns of impulsivity and mood-dependent behavior. Problem-solving can help the client identify alternative storage practices and alternatives to activities that center around firearms. Shaping and other exposure procedures can mitigate fears for personal safety that make clients reluctant to reduce access to firearms even during suicidal crises. Validation, commitment strategies and irreverent communication can help maintain a focus on safety when other variables (e.g., legal rights to own firearms) distract the conversation away from the therapist's primary concern, which is suicide risk.

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The authors would like to thank the Harvard University School of Public Health Means Matter program, with particular appreciation for the "Counseling on Access to Lethal Means" (CALM) program, from which many of the lethal means safety counseling recommendations were drawn.

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**Correspondence**, including requests for the "Firearms and Suicide: Lethal Means Safety Counseling in Dialectical Behavior Therapy Skills Training Manual and Teaching Notes" as well as associated handouts and worksheets, should be directed to Dr. Lovato Jackson: lauren.lovatojackson@va.gov.

### Enhancing Safety: Acute and Short-Term Treatment Strategies for Youths Presenting With Suicidality and Self-Harm

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GLOBALLY AND WITHIN the United States, suicide is the second leading cause of death among youth and young adults (Centers for Disease Control and Prevention [CDC], 2019). In contrast to other leading causes of death, youth suicide rates in the United States increased by 56% from 2007 to 2017 (from 6.8 per 100,000 to 10.6 per 100,000; Curtin & Heron, 2019). Prior selfharm, including suicide attempts and nonsuicidal self-injury (NSSI), is the most reliable predictor of later fatal and nonfatal suicide attempts, and NSSI ranks among the strongest predictors of future suicide attempts (Ribeiro et al., 2016). This underscores the importance of attending to the treatment needs of youths who present with both suicidal and nonsuicidal selfharm.

This paper describes our approach to youth suicide prevention care. We emphasize two related interventions: (a) our emergency/acute care intervention for youths presenting with suicidal and/or selfharm episodes, SAFETY-Acute (A) also called the Family Intervention for Suicide Prevention (FISP); and (b) the SAFE Alternatives for Teens and Youth (SAFETY) intervention, a 12-week cognitive-behavioral family intervention informed by dialectical behavior therapy (DBT). We briefly review the interventions, followed by presentation of the data supporting efficacy and effectiveness. These interventions have been implemented across diverse settings and populations, and are being disseminated through our Center for Trauma-Informed Adolescent Suicide, Self-Harm & Substance Abuse Treatment and Prevention (www.asapnctsn.org), which is part of the National Child Traumatic Stress Network funded by the U.S. Substance Abuse and Mental Health Services Administration.

### SAFETY-Acute (A), Also Known as the Family Intervention for Suicide Prevention (FISP)

SAFETY-A/FISP (hereafter referred to as SAFETY-A)<sup>1</sup> is a brief evidence-based intervention for suicidal youths originally designed for use in the Emergency Department (ED) (Asarnow et al., 2009). It provides a brief youth and family-centered therapeutic assessment that aims to treat the emergency/presenting problem, strengthen youth safety, and increase linkage to follow-up care and continuity of care-objective 8.4 of the National Strategy for Suicide Prevention (United States Department of Health and Human Services, 2012).

<sup>1</sup>In the literature we previously used the name "Family Intervention for Suicide Prevention (FISP)" for the intervention, but called the intervention SAFETY with patients to convey our focus on maximizing safety. We prefer the name SAFETY-Acute (A) and have used this here for the following reasons: (a) The intervention is an acute care/emergency intervention focused on safety, making the SAFETY-Acute (A) name more informative; (b) SAFETY-A/FISP is the first session of our more intensive 12-session SAFETY intervention described later in this article; (c) some children live with nonfamily caregivers (e.g., children presenting from residential treatment centers), making the title Family Intervention for Suicide Prevention (FISP) inaccurate in some cases where family members are unavailable and other adults participate in the intervention.

These treatment goals are achieved through presenting a series of tasks to the youth and family and working to elicit or "drag out" behaviors that are incompatible with suicidal/self-harm behavior: (a) identify three strengths in the youth and family/environment; (b) consider emotional reactions using an emotional thermometer; (c) engage in safety planning in which the youth identifies skills/strategies that can be used instead of self-harm; (d) identify at least three individuals that the youth can go to for help staying safe; and (e) commit to using the safety plan instead of self-harm behavior. A strength of the SAFETY-A approach is that knowledge of youths' personal and family strengths and emotional reactions flows directly into developmentally informed safety planning.

Due to the importance of engaging parents/caregivers (hereafter referred to as parents) in the treatment of suicidal youth, SAFETY-A also includes the following caregiver-specific tasks: (1) recognize three strengths in the youth and family/environment; (2) commit to restricting access to dangerous self-harm methods (e.g., firearms, medicines, and poisons) and increasing supportive monitoring and protective supervision as it is not possible to completely eliminate access to all deadly self-harm methods; and (3) improve their ability to support the youth in safety plan use. There are times, however, when the nature of the parent-youth relationship makes it advisable to include other protective adults. For instance, when there is a question of abuse or neglect and a supportive grandparent is available to provide protective support, including the grandparent in the intervention may be indicated. If parents or other protective adults are not at the service setting, with appropriate consent, therapists may reach out to ask them to come in and, if not feasible, can include these individuals through telehealth. The SAFETY-A intervention can be completed in full within 60-90 minutes and can be streamlined further to flexibly adapt to different settings and specific cases, varying the amount of time spent on each task (see Asarnow et al., 2020, for more detail).

A randomized controlled trial comparing SAFETY-A/FISP and Usual ED-Care enhanced by provider education was conducted in two Los Angeles EDs (Asarnow, Baraff, et al., 2011). Participants were youths presenting to the ED for suicide attempts and/or ideation (N = 181; aged 10–18). The primary study outcome was whether youths linked to outpatient mental health treatment after ED discharge. Follow-up data, collected approximately 2 months after discharge, indicated that compared to youths receiving Usual ED-Care, youths receiving SAFETY-A were significantly more likely to attend outpatient treatment (92% vs 76%; OR = 6.2; 95% CI = 1.8-21.3, p = .004); receive psychotherapy (76% vs 49%; OR = 4.0; 95% CI = 1.9-8.5, p = .001); receive combined psychotherapy and medication (58% vs 37%; OR = 3.3; 95% CI = 1.5-7.0, p = .003); and had more psychotherapy visits (mean 5.3 vs 3.1; p = .003).

When clinical outcomes were assessed at roughly 2 months after ED-discharge, no benefits of SAFETY-A with usual community follow-up care were detected. However, it is possible that this follow-up interval was too short to detect intervention effects on clinical outcomes. Indeed, early post-intervention delivery effects were found in an earlier study by a different research team (Rotheram-Borus et al., 1996) evaluating a "first generation" version of SAFETY-A, called the Specialized Emergency Room Intervention (Rotheram-Borus et al., 1996). Results of this earlier study (Rotheram-Borus et al., 1996) indicated significantly lower levels of suicidal ideation and depression in youths receiving the specialized ED intervention at an assessment conducted at discharge, compared to similar youths who had received usual ED care during an earlier time period.

To further assess whether the SAFETY-A intervention would have early effects on clinical outcomes, we evaluated post-intervention effects in an open trial of SAFETY-A in an outpatient clinic serving youths presenting with suicidal ideation and/or behavior (N = 43, aged 12-17). Consistent with the earlier Rotheram-Borus et al. (1996) results, and shown in Table 1, our results indicate that there were statistically significant improvements in youths' confidence that they could keep themselves safe, t(42) = 3.88, p < .01 (Cohen's d = .65), and in parents' confidence that they could keep their children safe, t(40) = 3.35, p = .002(Cohen's d = .48). Moreover, significant reductions were seen from pre- to postintervention in youths' urges to self-harm, t(42) = -3.69, p = .001 (Cohen's d = .59), intent to end their lives by suicide, t(42) =3.93, p < .001 (Cohen's d = .58), level of misery/unhappiness, t(42) = -4.91, p < .001(Cohen's d = .70), and parents reported somewhat greater overall hope/optimism about the future, t(40) = 2.01, p = .051; Cohen's d = .22 (see Table 1).

Additional data for the value of SAFETY-A comes from previously reported results indicating that when combined with guaranteed access to evidenceinformed outpatient treatments for suicide prevention, clinical outcomes improved. In the previously noted trial evaluating a firstgeneration version of SAFETY-A



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(Rotheram-Borus et al., 1996; Rotheram-Borus et al., 2000), 18-month follow-up data indicated that compared to youths receiving usual ED care during an earlier time period, intervention youths showed significantly better continuity of care and participation in a 6-session evidenceinformed outpatient family treatment (focusing on enhancing family support, communication, and problem-solving), and improved depression and symptom measures over 18 months of follow-up. Participation was measured as the number of sessions attended by family members and was reported by clinicians and monitored by a computerized tracking program. Suicide attempt rates were relatively low, with no significant differences between the groups. Second, as described below, SAFETY-A was included as the first session of our 12-week DBT-informed cognitivebehavioral family intervention, Safe Alternatives for Teens and Youths (SAFETY), which demonstrated treatment results supporting benefits for reducing suicide attempts and improving clinical and functioning outcomes. Although these studies suggest that SAFETY-A and the first-generation Specialized ER intervention contributed to intervention efficacy, a dismantling study would be needed to specifically clarify the relative impact of the SAFETY-A/Specialized ER intervention components vs the longer term treatments.

### SAFE Alternatives for Teens and Youths (SAFETY)-12 Week Program

SAFETY was developed as a 12-week outpatient treatment designed initially for youths following a suicide attempt. Given the higher frequency of NSSI compared to suicide attempts (Brown & Plener, 2017), clinician survey data indicating that NSSI is a more common problem in clinical settings than are suicide attempts (Asarnow, Hughes, et al., 2020), and accumulating data indicating that NSSI is a strong predictor of subsequent suicide attempts (Asarnow, Porta, et al., 2011; Wilkinson & Goodyer, 2011), SAFETY was extended to youths with repetitive self-harm (including NSSI and suicide attempts) as the primary clinical problem. SAFETY is a DBTinformed cognitive-behavioral family intervention designed to increase safety and reduce suicide attempts. A two-therapist model is used, with one therapist

working primarily with the youth while the other therapist works primarily with the parent/family, and all coming together at the end of each session to strengthen protective processes within the family. The approach is guided by a case conceptualization, referred to as a cognitive-behavioral fit analysis, which targets risk and protective processes for each youth. This case conceptualization guides selection of treatment modules to promote a safe environment, healthy/protective social interactions, safe behaviors and activities, helpful thought patterns, and strengthen healthy stress reactions (Asarnow et al., 2015; Asarnow et al., 2017).

The first session of SAFETY consists of SAFETY-A, with the fit analysis being conducted during the second and third sessions. The fit analysis includes a collaborative discussion among the therapist, youth, and parents where treatment targets are identified after a detailed chain analysis. The family is an active part of creating the ensuing treatment plan, which draws upon both caregiver and youth perspectives while being continuously refined throughout treatment. Treatment modules are selected during this stage and can be imple-

Table 1. SAFETY-A: Youth Outcomes

Youth Report Item	Pre-SAFETY-A		Post-SAFETY-A		Change (N=43)			Effect Size
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	t	sig	d
Ability to Keep Self Safe1**	4.02 (1.12)	2-5	4.60 (0.67)	3-5	4.58 (.98)	3.88	<.001	.65
Urge to Harm Self <sup>2*</sup>	1.86 (0.94)	1-5	1.40 (0.76)	1-4	47 (.83)	-3.69	.001	.59
Intent to Kill Self <sup>3*</sup>	1.56 (0.85)	1-4	1.16 (0.43)	1-3	40 (.66)	-3.93	<.001	.58
Unhappiness <sup>4**</sup>	2.79 (1.12)	1-5	2.14 (0.94)	1-4	65 (.87)	-4.91	<.001	.70
Hopefulness <sup>5**</sup>	2.88 (1.45)	1-5	3.37 (1.34)	1-5	.49 (.67)	4.79	<.001	.39
Caregiver Report	Pre-SAFETY-A		Post-SAFETY-A		Change (N=41)			Effect Size
Item	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	t	sig	d
Ability to Keep Child Safe <sup>6**</sup>	3.66 (1.11)	1-5	4.10 (0.86)	2-5	0.44 (.84)	3.35	.002	.48
Hopeful/Optimistic <sup>7**</sup>	4.12 (0.95)	2-5	4.30 (0.90)	2-5	0.17 (.54)	2.01	.051	.22
Ability to Find Help <sup>8**</sup>	4.05 (0.77)	3-5	4.18 (0.83)	2-5	0.13 (.80)	1.07	.289	.19

\* 1 (Low) to 5 (High). \*\* 1 (Not at All) to 5 (Very Much)

<sup>1</sup>On a scale of 1 to 5, how confident are you that you can keep yourself safe or tell someone if you feel unsafe (i.e., like you are going to attempt suicide or harm yourself)? <sup>2</sup>On a scale of 1 to 5, what is your urge to harm yourself right now? <sup>3</sup>On a scale of 1 to 5, what is your intent to kill yourself right now? <sup>4</sup>On a scale of 1 to 5, how miserable/unhappy are you right now? <sup>5</sup>On a scale of 1 to 5, how hopeful and optimistic are you about the future? <sup>6</sup>On a scale of 1 to 5, how confident are you that you can keep your child safe if he/she feels like hurting or killing her/himself? <sup>7</sup>On a scale of 1 to 5, how hopeful and optimistic are you about the future? <sup>8</sup>On a scale of 1 to 5, how confident are you about the future? <sup>8</sup>On a scale from 1 to 5, how confident are you that you can keep your child safe if he/she feels like hurting or killing her/himself? <sup>7</sup>On a scale of 1 to 5, how hopeful and optimistic are you about the future? <sup>8</sup>On a scale from 1 to 5, how confident are you that you can find help for your child's emotional and/or behavioral problem(s)?

the Behavior Therapist

mented in a flexible manner as the treatment plan is revised over time to best suit the needs of the youth and family.

Treatment is organized around the concept of a SAFETY pyramid, with modules broadly targeting different levels of the pyramid. Safe Settings form the base of the pyramid with interventions focusing on increasing patient safety by restricting access to dangerous methods of suicide and locations associated with increased risk (e.g., inadequate supervision, risky behavior). The next level of the pyramid is SAFE People, with interventions focusing on strengthening supportive and protective relationships through enhancing communication skills, associations with protective individuals, and building/maintaining a healthy social support system. The third level of the pyramid is SAFE Activities and Actions with modules focusing on increasing time engaging in pleasant and safe activities and learning problem-solving skills. SAFE Thoughts are emphasized in the fourth level of the pyramid with a focus on increasing hopeful thoughts associated with reasons for living. Finally, the upper level of the pyramid addresses SAFE Stress Reactions and modules focus on emotion regulation and distress tolerance. Based on the cognitive-behavioral fit analysis, a treatment plan is developed involving the selection and sequencing of treatment modules for the youth and parent. For example, while the emphasis with youth might begin with safe stress reactions and enhancing emotion regulation, parent sessions might begin with strengthening connections with safe people by working to enhance parent active listening and validation skills. Family sessions might emphasize the youth sharing the emotion regulation strategies included in his/her safety plan and how parents can support them in using these skills, while parents practice actively listening to the youth and validating the youth's efforts to better regulate his/her emotions.

SAFETY has been evaluated in two settings: a Phase 1 open trial (Asarnow et al., 2015) and a Phase 2 randomized controlled trial (RCT; Asarnow et al., 2017) that com-

pared youths receiving SAFETY to youths receiving community treatment as usual enhanced by parent education and support accessing community treatment (E-TAU). In both studies, youth were assessed at baseline and 3- and 6-month follow-ups. Study eligibility criteria were the same (a suicide attempt (SA) within 3 months of presentation; exclusion for factors that would interfere with participation, e.g. plan for out of home placement, psychosis), with the exception that in the RCT we expanded inclusion criteria to youths with NSSI as the primary problem,  $\geq 3$  NSSI episodes, one of which occurred within 3 months of presentation, and follow-up assessment windows were extended to 12 months. Results are summarized below. For more detail see Asarnow et al. (2015: 2017) and Babeva et al. (2019).

The Phase 1 open trial was designed to allow comparisons between youths receiving SAFETY and a comparator group of youths receiving community treatment as usual, drawn from our prior study of youths presenting to the ED with suicide attempts and/or ideation (Asarnow, Baraff, et al., 2011). To maintain comparability with the SAFETY Phase 1 youths, we included only youths with suicide attempts at ED presentation (N=96) in the comparator group.

### **SAFETY Phase 1**

At the 3-month posttreatment assessment, 1/30 (3.33%) youths receiving SAFETY made a suicide attempt, compared to 10/96 (10.42%) youths from our comparator sample receiving community TAU. By 6 months, another SAFETY youth made a suicide attempt (2/30, 6.67%) versus 19/96 (19.79%) TAU youths. Based on survival analytic, techniques, the estimated cumulative probability of a suicide attempt among TAU youth was 0.14 by 3 months and 0.23 by 6 months.

SAFETY youths also showed a significant decline from baseline to posttreatment/3 months on the suicide attempt scale (p = .027) and active suicidal ideation and behavior (ASB) scales (p = .028) of the Harkavy-Asnis Suicide Survey (HASS;

scores for SAFETY youths on measures of youth active suicidal ideation and behavior, depression, and appeared lower at the 3-month posttreatment assessment (Time 2 on Figure 1), compared to TAU youths (Time 2 on Figure 1). **SAFETY Phase 2** In the RCT comparing youths randomized to SAFETY (n = 20) versus E-TAU (n= 22), SA rates were lower among SAFETY youths relative to E-TAU youths: 3months (91 days), SAFETY n = 0; E-TAU, n = 4; 6-12-months (365 days) SAFETY, n

= 1, E-TAU N = 4. Using survival analytic techniques, the cumulative probability of a suicide attempt by three months among SAFETY youths was 0, whereas the estimated cumulative probability of a suicide attempt among E-TAU youths was 0.33 (SE 0.14), a significant between-group difference (z = 2.45; p = .01, NNT = 3.0). Comparison of survival curves over the full 12 months also showed a significant advantage for the SAFETY treatment (Wilcoxon  $X^2 = 5.81$ , p = .02). By 12-months, the estimated cumulative probability of a suicide attempt among SAFETY youths was 0.08 (SE 0.08), compared to 0.33 (SE 0.14) among E-TAU youths. At follow-up, SAFETY youths showed statistically significant improvements on self-report measures of suicidal behavior, suicidal ideation, depression, hopelessness, youth social adjustment, and parent depression and hopelessness. Effect sizes were large for all youth measures (Cohen's d = 0.92-1.55) and large for parent depression (Cohen's d = 0.96, Babeva et al., 2019).

Friedman & Asnis, 1989), and on youth (p

< .001) and parent depression (p < .001) on

the Center for Epidemiological Studies-

Depression Scale (CES-D; Radloff, 1991).

Effect sizes were medium to large, Cohen's

d = 0.57-1.24 (see Babeva et al., 2019 for

more detail). As shown in Figure 1, com-

parisons with the TAU sample need to be

considered cautiously due to differences in

assessment timing and measures,<sup>2</sup> the lack

of a randomized controlled trial design,

and the possibility that other factors (e.g.,

time/cohort differences) contributed to

observed differences. With those caveats,

parent depression

#### Conclusion

Our work illustrates interventions designed for both acute and more extended care. Across three diverse EDs, SAFETY-A and the earlier related Specialized ER Intervention (Rotheram-Borus et al., 1996,

<sup>&</sup>lt;sup>2</sup> Baseline/Time 1 assessments of parent and youth depression were conducted at the time of emergency visit in the TAU sample, and roughly 15-16 days after the index suicide attempt in the SAFETY sample, leading to more severe baseline scores for TAU youths. Time 2 assessments were conducted at roughly two months post-baseline for TAU youths versus three months postbaseline for SAFETY youths. The HASS measures of suicidal ideation and behavior were administered only at Times 2 and 3 for the TAU sample, and at all assessments for the SAFETY sample. The Time 3 assessment for TAU youth were completed at roughly seven months after ED/hospital discharge.



**Figure 1.** Comparison of SAFETY Outcomes to TAU Note. Baseline/Time 1 assessments of parent and youth depression were conducted at the time of emergency visit in the TAU sample, and roughly 15-16 days after the index suicide attempt in the SAFETY sample, leading to more severe baseline scores in the TAU group. Time 2 follow-up assessments were conducted at roughly two months postbaseline for TAU youths versus three months post-baseline for SAFETY youths. The HASS measures of suicidal ideation and behavior were administered only at Times 2 and 3 for the TAU sample, and at all assessments for the SAFETY sample. The Time 3 assessments for TAU youth were completed at roughly 7 months after ED/hospital discharge. © Joan R. Asarnow, Ph.D.

2000) demonstrated efficacy for linking vouths to follow-up mental health care and enhancing continuity of care, objective 8.4 of the U.S. National Strategy for Suicide Prevention (2012). Evidence also supports improved youth mood and decreased suicidal thoughts and behavior, both from the immediate post-discharge evaluation in the Rotheram-Borus et al. report (2000) and in our open trial crisis clinic data. Moreover, when combined with guaranteed access to evidence-informed outpatient treatment, clinical outcomes including suicide attempts and behavior, suicidal ideation, and depression were improved (Asarnow et al., 2015, 2017; Babeva et al., 2019; Rotheram-Borus et al., 2000) and results of a small treatment development RCT indicate that the combination of SAFETY-A + the 12-week SAFETY intervention led to reduced risk of suicide attempts relative to treatment as usual enhanced by support linking to community treatment (Asarnow et al., 2017).

From a clinical perspective, SAFETY-A and the more extended 12-week SAFETY intervention provide promising approaches for improving youth outcomes. SAFETY-A addresses the need to improve connection to care, a critical first step for receiving effective treatment. Families describe feeling emotionally challenged

and distressed when their children present with suicidal episodes. Administering a brief intervention focusing on enhancing safety at this difficult time enables the clinician to enhance a family's confidence in their ability to protect and support their child in staying safe, as well as to receive further treatment as needed. Likewise, our results on the 12-week SAFETY intervention provides support for SAFETY as a promising evidence-based intervention for reducing suicide risk in the aftermath of a suicide attempt or other self-harm episodes.

Our current work emphasizes adaptation of these interventions across diverse service settings and populations. More specifically, while SAFETY-A was originally developed for ED settings and SAFETY was developed to be incorporated as part of emergency services following a suicide attempt or clinically significant self-harm episode, the increasing youth suicide rate and need for

evidence-based treatment has led to recognition of the importance of bringing evidence-based care strategies to the routine service settings where youths receive care. These include: primary care clinics; schools, crisis services, and other health and mental health settings. We have developed training programs and trainings are offered through our ASAP Center (asapnctsn.org). It is our hope that these efforts with continued evaluation will enhance our ability to prevent premature death, dysfunction, and suffering in youths and families.

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Work described in this article was funded by NIMH R34 MH078082, AFSP Distinguished

Investigator Grant, CDC CCR921708, and SAMHSA U79SM080041.

Dr. Asarnow reports: receiving support from NIMH, SAMHSA, American Psychological Foundation, the Society of Clinical Child and Adolescent Psychology, Association for Child and Adolescent Mental Health; serving on the Scientific Council of the American Foundation for Suicide Prevention and Scientific Advisory Board for the Klingenstein Third Generation Foundation; and consulting on quality improvement, treatment, and care strategies for depression and

### SCIENCE FORUM

### Suicide Prevention Within the Veterans Administration

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SUICIDE CONSTITUTES a national public health crisis. It is the 10th leading cause of death in the United States, claiming 48,000 lives in 2018 alone (Center for Disease Control and Prevention, 2020). Alarmingly, national suicide rates have risen by over 30% since 1999 (Hedegaard et al, 2018). Suicide also disproportionately impacts veterans of the U.S. military (Kang et al., 2014; McCarthy et al., 2009). Although veterans accounted for 7.9% of the U.S. adult population in 2017, they represented 13.5% of all deaths by suicide the same year (Department of Veterans Affairs, 2019a). Thus, the Veterans Administration (VA) has identified suicide as its top clinical priority (Department of Veter ans Affairs, 2019b) and is currently implementing numerous initiatives that mobilize mental health providers, clinical staff, and psychopathology researchers to work towards its eradication. This commentary aims to outline major suicide prevention efforts conducted by the VA and highlight specific advantages and opportunities for continued innovation and intervention within this unique health care system.

### Challenges in the Implementation and Evaluation of Suicide Prevention Initiatives

There are many challenges inherent to suicide prevention efforts. First, suicide is a

low base rate behavior. The evaluation of prevention initiatives thus requires large samples to have adequate power to detect significant changes in suicide incidence rates over time. Suicide is also complex and multidetermined. Recommendations for effective national suicide prevention approaches subsequently involve coordinated initiatives across sectors and settings (World Health Organization, 2014). However, as noted by others, the effectiveness of such initiatives is difficult to estimate as they risk being confounded by simultaneous fluctuations in psychosocial factors or exposure to interventions that impact suicide risk (Menon et al., 2018; Platt et al., 2019).

The evaluation of suicide prevention efforts also assumes that reliable data about suicide incidences and related outcomes are readily available. However, suicides are often subject to misclassification and underreporting (Katz et al., 2015; Phillips & Ruth, 1999), particularly in the case of opioid related deaths (Stone et al., 2017). Research has found that a combination of local hospital system records and government-collected mortality data is likely most useful for the evaluation of suicide prevention initiatives, so as to maximize not only the comprehensiveness, but also the availability, of data driving real-time quality improvement (Ahmedani et al., 2013). However, the infrastructure necessary for the internal collection of reliable and timely mortality data, as well as coordination with larger governmental institutions, may not be available in all healthcare settings.

### The VA's Public Health Approach to Suicide Prevention

The Veterans Health Administration (VHA) is the largest integrated health care system in the United States, serving 9 million veterans each year (Department of Veterans Affairs, 2018). The VHA is a

closed system of care, facilitating nationwide tracking of suicide risk levels and deaths, as well as widespread implementation of suicide intervention and prevention strategies. Aligning with recommendations from the World Health Organization (2014), the National Strategy for Preventing Veteran Suicide outlines universal population-based strategies, designed to reach all veterans and emphasizing education and raising awareness about suicide; selective strategies for gatekeeper training and outreach to vulnerable veteran subpopulations; and indicated strategies to provide crisis intervention and effective treatment for individual veterans identified as being at high-risk for suicide (Department of Veterans Affairs, 2018).

Since the VA's suicide prevention program launched in 2007, this multicomponential strategy has greatly expanded and evolved to incorporate systemwide policy changes and mandates that have shaped national VA health care procedures, the use of national surveillance systems to collect data about veteran suicide, as well as the development and implementation of community and hospital-based initiatives. An overview of these strategies reveals that the VHA is perhaps uniquely positioned for the development and implementation of initiatives geared towards the identification of high-risk individuals, risk monitoring and means reduction, as well as evaluating individual-level interventions. Notably, such efforts serve not only to advance the prevention of suicide among our nation's veterans, but may also lead to the development of novel theoretical and clinical approaches to be tested among the broader civilian population.

### Identifying Veterans at High Risk for Suicide

The VA has implemented several strategies to improve identification of high-risk veterans. The VA Suicide Prevention Coordinator (SPC) program, established in 2007, ensures that each medical center has a team tasked with overseeing national suicide prevention guidelines. Coordinators work with mental health and other providers to identify veterans at risk for suicide. These veterans then receive enhanced case management, safety planning, and safety monitoring through the SPC's office. As of 2008, veterans considered at risk can also receive a patient record flag visible to anyone accessing their electronic medical charts. These flags promote increased awareness and safety monitoring across services. The use of suicide risk flags in veterans with substance disorders is associated with the increased utilization of VA services, including a greater number of primary care, mental health, and substance use disorder related visits, as well as fewer emergency department visits (Berg et al., 2018). However, while generally noted to be helpful for identifying suicidal patients, there are also reports of "flag fatigue" associated with this alerting system, described as the perception of a large number of veterans having been flagged leading to difficulties with triage (Funderburk et al., 2020).

SPCs also coordinate care and followup for veterans referred through the National Veterans Crisis Line, established in 2007. Over the years, the Veterans Crisis Line has expanded to multiple centers and has added both chat and text functionality. According to the 2019 National Veteran Suicide Prevention Annual Report, the Veteran's Crisis Line has received over 650,000 calls per year since 2017 (Department of Veterans Affairs, 2019a). Among other outreach initiatives, the SPC's office manages gatekeeper training initiatives such as Operation S.A.V.E. (Signs of suicidal thinking, Ask the question, i.e., "are you thinking of killing yourself?", Validate the veteran's experience, and Encourage treatment and Expedite getting help), developed to educate the broader VA workforce and community about identifying and addressing suicide risk among veterans.

Additionally, the VA has prioritized the development of predictive analytics to promote earlier identification of high-risk veterans. Several novel risk identification and stratification tools have been widely implemented at the VA, including REACH VET (Recovery Engagement and Coordination for Health-Veterans Enhanced Treatment) in 2017 and the Stratification Tool for Opioid Risk Management (STORM) in 2016. These machine learning algorithms estimate risk by analyzing a broad array of mental and physical health, morbidity, and utilization factors. Such models have shown some promise for predicting veteran suicide (McCarthy et al., 2015; Oliva et al., 2017), but require further refinement. As a closed system of care, some of the challenges encountered when combining data collated from multiple electronic record systems is mitigated, making the VHA an ideal testing ground for such empirically driven initiatives. However, even if refined, integrating predictive modeling into broader clinical care remains challenging. Some identified hurdles for

the clinical implementation of REACH VET within the VA include appropriately staffing a coordinator to facilitate collaborative responses among providers, providing adequate REACH VET training for clinical staff, and determining appropriate interventions for veterans identified as high risk by the algorithm (Reger et al., 2019). While these challenges are significant, the closed nature of the VA health system may ultimately aid with the identification of implementation bottlenecks that result from the use of predictive modeling to identify suicide risk, and the development of potential solutions that could be applied in different healthcare systems.

### Expansion of Risk Assessment and Means Reduction Among Veterans

The VA/DoD Clinical Practice Guidelines for the Assessment and Management of Patients at Risk for Suicide (Department of Veterans Affairs, 2019c) specifically recommend the expansion of screening and safety planning among veterans using validated instruments. The Patient Health Questionnaire-9 item 9 is commonly used for screening. Item 9 scores have been shown to correlate with increased risk of subsequent death by suicide in VHA patients (Louzon et al., 2016). Other instruments such as the Columbia Suicide Severity Rating Scale (C-SSRS) have demonstrated utility for predicting subsequent suicidal behaviors (Matarazzo et al., 2019) and are used for further screening in veterans deemed at risk. The C-SSRS, along with standardized safety planning procedures and documentation, have also been incorporated into structured individual-level interventions, for example, the Suicide Assessment and Follow-up Engagement: Veteran Emergency Treatment (SAFE VET) program.

Among other efforts to monitor and mitigate suicide risk, the VA recognizes that implementing lethal means safety is essential for reducing veteran suicide. Means safety encompasses limiting access to firearms, medications and poisons, and other potential means for self-harm. Veterans have greater access to firearms (Cleveland et al., 2017), and both male and female veterans employ these more often during suicide than their civilian counterparts (Horwitz et al., 2019). Indeed, firearms accounted for 70.7% of male and 43.2% of female veteran suicides in 2017, compared to 53.3% and 31.3% of nonveteran male and female suicide deaths, respectively (Department of Veterans Affairs, 2019a). Considering such trends, means safety is an important component of the S.A.V.E. Gatekeeper Training program. Additionally, VA has partnered with the American Foundation for Suicide Prevention and the National Shooting Sports Foundation to produce the Safe Firearm Storage Toolkit. The goal of this initiative is to educate the broader community on safe handling and storage of firearms, emphasizing the importance of implementing safety procedures before family members are in crisis.

### Individual-Level Suicide Interventions

The VA has also invested significant resources into funding clinical research and rolling-out individual-level interventions to address veteran suicide. As previously mentioned, SAFE VET is one such initiative. This brief behavioral intervention for veterans identified as high-risk in emergency and urgent care settings is administered by a trained clinician and involves risk assessment using the CSSR-S, safety planning, and structured follow-up procedures. It has shown promise for improving treatment engagement among veterans coming into contact with VA emergency services (Stanley et al., 2015). Collaborative Assessment and Management of Suicidality (CAMS) and Brief Cognitive Behavioral Therapy (BCBT) are just a few examples of other prominent community-developed interventions that have been tested within VA, and have shown some efficacy for reducing suicidal ideation and suicide attempts among veteran populations (Bryan et al., 2018; Jobes et al., 2017). CBT interventions for depression and insomnia have also proven effective in reducing suicide ideation among veterans (Brown et al., 2016; Trockel et al., 2015). Following suit, Cognitive-Behavioral Therapy for Suicide Prevention (CBT-SP) is being rolled out among VA providers as a more specific approach to addressing suicide, although research examining this protocol among veterans is in its infancy.

The VA's infrastructure may also uniquely allow for the evaluation of technological modalities for delivering veteranlevel suicide prevention efforts. This is especially pertinent with the near immediate shift to telehealth with patients due to COVID-19 and social distancing recommendations. VA priorities already emphasize the use of telepsychotherapy, phonebased methods, and technology-based interventions (e.g., phone applications) to improve access and enhance quality of care

among veterans (Department of Veterans Affairs, 2019b). However, assessing and managing suicidal patients remotely can create pause for many providers. Some reported concerns are, for example, that emotional cues may be more difficult to detect via telehealth, and that remotely triaging and coordinating hospitalizations for patients is more challenging (Gilmore & Ward-Ciesielski, 2017). Encouragingly, some of the individual-level suicide interventions tested within VA, such as CAMS, have evidenced efficacy when delivered using telehealth (e.g., Waltman et al., 2020). Although other existing VA-developed technologically based approaches to suicide prevention have received some support (e.g., Virtual Hope Box; Bush et al., 2017), there is a need for additional research to justify expanding the utilization of such tools and interventions more broadly. Ultimately, the VA's preexisting infrastructure for telehealth and application-based interventions presents a distinct opportunity for measuring the effectiveness and feasibility of technological strategies for suicide prevention before they are more widely disseminated.

Overall, testing individual-level and suicide-specific interventions within the VA, relative to outside of the VA in community samples, is advantageous for a variety of reasons. The standardization of care and documentation within the VA allows greater ease for the determination of whether, and with what degree of fidelity, an intervention has been delivered. Furthermore, the evaluation of suicide prevention interventions within the VA is vital to the determination of their efficacy specifically among veterans, as this population presents with unique concerns and challenges that civilian samples do not. However, it is notable that the majority of veterans are not connected with VA services, and most veterans who die by suicide have not recently received any VA care (Department of Veterans Affairs, 2019a). Increased research on the utility of technology to extend the reach of services to veterans who would not typically otherwise be connected to the VA is thus particularly important in the context of suicide intervention and prevention.

### Advantages of Conducting Suicide Prevention Within the VA

The VA has been able to disseminate and implement a broad array of suicide intervention and prevention strategies nationwide over the past two decades in part because it is a closed system of care. The structure of the VA system and nationwide accessibility of VA health records enables coordination of care across national-level mental health services (e.g., Crisis Line), providers (e.g., psychiatrists, psychologists) across states, and case management. It also facilitates U.S.-wide rollout of suicide-related clinical training and standards of care. Furthermore, the VA system enables nationwide tracking of veteran suicides, which can foster evaluation and improvement of these efforts. Thus, the VA system is in some ways an exemplar for suicide-related dissemination and implementation strategies before potentially expanding appropriate initiatives to the broader population.

As suicide prevention is the top clinical priority of the VA, there is also substantial interest in supporting suicide prevention related research. This led to the establishment in 2007 of both the Mental Health Center of Excellence in Canandaigua, NY and the Rocky Mountain VA Mental Illness Research, Education, and Clinical Center for Suicide Prevention in Denver, CO, each respectively focused on suicide intervention development and on the identification of suicide risk factors among veterans. Other ongoing coordination efforts between operations, research, clinical, and administrative branches of the VA have helped to identify and begin to address research gaps in suicide prevention. Examples of such initiatives include, but are not limited to, the creation of Suicide Prevention Research Impact NeTwork (SPRINT; Department of Veterans Affairs, 2020), the Governor's challenge (Substance Abuse and Mental Health Services Administration, 2020), national meetings of VA suicide prevention researchers, and the availability of local VISN (i.e., regional) suicide prevention funding. Ultimately, the 2020 fiscal year includes 106 VA-funded research projects focused on suicide prevention, including many in areas identified as research gaps.

### Gaps in Knowledge for Suicide Prevention Within the VA

Despite a dramatic increase in the number of VA suicide prevention related studies and initiatives since 2007, it is notable that there continues to be a lack of adequate research supporting a consensus for the use of any particular risk assessment or intervention for suicide among veterans (Peterson et al., 2018). Research is needed to evaluate the relative efficacy and potential adverse impact of the expansive and multicomponential nature of the VA's existing suicide prevention approach. Larger studies testing individual and population-based interventions are needed, as the evidence to date for specific approaches among veterans is limited by small sample sizes that render the detection of changes in suicidal behavior unlikely (Peterson et al., 2018). Furthermore, disentangling which potentially redundant efforts are most effective would avoid the development and rollout of overly complex standardized guidelines for clinical procedures that may exceed the evidence supporting their implementation (Hoge, 2019). Indeed, it is possible that the additional clinical and administrative load of simultaneous suicide prevention efforts have unintended iatrogenic effects due to increased clinician burden and burnout (Warren & Smithkors, 2020).

Numerous knowledge gaps and opportunities for innovative intervention and research in veteran suicide prevention also remain, including, but not limited to, developing better suicide screening tools, determining the appropriateness of their frequency, and identifying novel and better ways of determining risk level and subsequent pathways to treatment for veterans (Department of Veteran Affairs, 2018). While VA efforts have led to an increase in both intervention research funding and clinical rollouts, improved targeted risk identification and interventions are needed, such as for veterans undergoing high-risk transitionary periods like separation from the military (Reger et al., 2015). An important concern is that most veterans who die by suicide have not recently received care through the VHA (Basham et al., 2011). While the VAs integrated electronic medical records system offers a unique opportunity to develop and test treatment efficacy, there is a need for technological innovations and outreach efforts to address the gap between those with established VA care and those veterans new to or outside of the system. In response to this shortcoming, the VA system is increasingly focused on developing infrastructure and partnerships at the local level for community outreach to provide better care to veterans who may not have otherwise engaged with the VHA.

#### Conclusion

In many ways, the VHA's expansive, closed system of care is uniquely well suited for the development and evaluation of suicide prevention efforts. The accessibility of

medical records, the systematic tracking of prevention efforts and suicide-related outcomes, and the support available for the development of novel interventions have clear ramifications for reducing suicide among veterans. The availability of large databases of integrated data also have the potential to improve our ability to predict and prevent veteran suicide. However, there is still room for improvement, particularly where the evaluation of the efficacy and utility of existing VHA suicide prevention initiatives is concerned. As this important work continues and VHA suicide prevention efforts are refined, it is our hope that the considerable amount of data gathered and interventions developed within this unique healthcare system might also provide the foundation for novel theories and approaches for suicide prevention to be tested among civilian populations.

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No conflicts of interest or funding to disclose.

JB received grant support from the VA CSR&D Career Development Award (IK2 CX001824) and a Brain Behavior Research Foundation Young Investigator grant.

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### Are Two Heads Better Than One? Including Partners in Suicide Prevention

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SUICIDE TOOK OVER 48,000 lives in the United States in 2018 (Centers for Disease Control [CDC], 2019). That same year over 1.4 million American adults attempted suicide and an additional 9.3 million adults seriously considered ending their lives (SAMHSA, 2019). In the United States, suicide death rates have been increasing consistently since the turn of the century (CDC, 2019). While they are not at the highest rate the country has ever seen, this consistent increase is in stark contrast to a concurrent increase in awareness, research, funding, and, importantly, intervention development.

Over the past few decades a number of suicide-specific interventions for adults (e.g., those that place suicidal thoughts and behaviors as a primary treatment target) have been developed and tested. These interventions range in their focus and duration: single session interventions like Crisis Response Planning (CRP; Bryan et al., 2017; Rudd et al., 2006) or Safety Planning Intervention (SPI; Stanley & Brown, 2012); brief interventions like the Attempted Suicide Short Intervention Program (e.g., ASSIP; Gysin-Maillart et al., 2016); adjunctive transdiagnostic frameworks like the Collaborative Assessment and Management of Suicidality (CAMS; Jobes et al., 1997); multisession treatments such as Brief Cognitive Behavioral Therapy (BCBT; Rudd et al., 2015) and Cognitive Therapy for Suicide Prevention (CT-SP; Brown et al., 2005); and longer term treatment packages like Dialectical Behavior Therapy (DBT; Linehan et al., 2006). While these interventions differ in a myriad of ways, they are united in that they all focus on the suicidal individual (whether they are administered in an individual or group format).

There are a few interventions that focus on family members of potentially suicidal individuals directly. These include Family Connections, which provides support and teaches skills to family members of individuals with borderline personality disorder (Hoffman et al., 2005), and Kognito, an online program that teaches family members of veterans about PTSD, stress, suicide ideation, and help-seeking (Albright et al., 2012). To our knowledge, none of our currently available suicide-specific interventions for adults explicitly involve partners or family members in treatment with the at-risk individual.

Partners play an important role in suicidality; they can function both as risk and protective factors. For example, married individuals are less likely to die by suicide than their unmarried counterparts (Griffith, 2012), but relationship problems are also one of the most frequently endorsed stressors occurring in the 24 hours prior to suicide attempts (Bryan & Rudd, 2012). This speaks to a well-known paradox of romantic relationships and suicide risk: on the one hand, romantic partners can be a powerful source of support during both acute and enduring periods of stress, and on the other hand, romantic relationships can be a significant source of emotional distress themselves.

Including both partners together in a single intervention would provide a supportive environment to discuss a stigmatized and sensitive topic. Having both partners present in the same interventions also allows each member of the dyad access to the knowledge and observations of the other, insights that may be missed when patients and partners are treated separately. Multiple practical and structural barriers may have contributed to our current focus on the suicidal individual alone, including the stigma of suicide (even within mental health care), confidentiality concerns, the relative youth of suicide-specific treatments compared to those for depression and anxiety, and a general tendency for psychological interventions to center on the individual.

This article seeks to examine this paradox, illustrate what might be learned from partner-involved interventions for other health conditions, explore what couples do on their own to communicate about suicide risk, and describe the rationale for and development of Couples Crisis Response Planning, a single session couples-based suicide prevention intervention currently being tested in a randomized controlled trial.

### The Complicated Relationship Between Romantic Relationships and Suicide Risk

Mortality and health outcomes (both physical and mental) are better among married individuals compared to unmarried individuals (Conejero et al., 2016; Rendall et al., 2011; Slatcher & Schoebi, 2017). The protective benefits of marriage are conveyed via economic advantages, social control (Umberson & Karas Montez, 2010), and emotional fulfillment (Slatcher & Schoebi, 2017), among other mechanisms, and seem to be stronger for men than for women (Bálint et al., 2016; Conejero et al., 2016; Tumin & Zheng, 2018). Bevond selection effects, most research finds that marital status alone is not robustly protective, the benefits observed are instead related to marital quality (Robles et al., 2015; Slatcher & Schoebi, 2017).

Consistent with the generally protective value of relationships, research has found that married individuals have significantly lower suicide death and attempt rates than individuals who have never married, are divorced, or are widowed (Bálint et al., 2016; Conejero et al., 2016; Moscicki, 2014; Woo et al., 2018). The protective effect of marriage is largely confined to married couples who are not separated from their spouses; those who are married but separated from their spouses have a similar suicide rate to unmarried individuals (Moscicki, 2014). Similarly, separation from one's spouse is a strong indicator of suicide risk (Evans et al., 2016; Kazan et al., 2016; Wyder et al., 2009), a finding that aligns with research supporting relationship discord as a risk factor for suicide.

For example, among a sample of soldiers, relationship problems were the most frequently endorsed stressors during the 24 hours immediately preceding suicide attempts (Bryan & Rudd, 2012). Suicidal individuals who experienced persistent relationship problems were more likely to have made multiple suicide attempts and to experience longer suicidal episodes (Bagge et al., 2013; Bryan et al., 2015). Epidemiological data from both civilian (Chen & Roberts, 2019) and military (Center for Health Promotion and Preventive Medicine, 2010; Department of Defense, 2016) populations and across age groups indicates that suicide deaths are typically associated with at least one significant proximal life stressor, of which the most common is relationship problems. This effect is particularly strong for men (Brown & Seals, 2019; Chen & Roberts, 2019; Evans et al., 2016; Lee et al., 2019). Though suicidal behavior is not caused by a single event, but rather by a constellation of factors, relationship breakdowns are consistently identified as proximal risk factors for suicidal thoughts, behaviors, and deaths (Bautista et al., 2017; Brown & Seals, 2019; Comiford et al., 2016; Kazan et al., 2016; LaCroix et al., 2018). Thus, romantic partners can both reduce risk as a stable source of social support and increase risk when relationship breakdowns occur.

### The Role of Romantic Partners in Health Interventions

The complexity of the link between relationships and well-being is not unique to suicide risk. However, many other fields are light years beyond suicide prevention in involving partners in care. The support and involvement of a relationship partner improves a wide array of health and behavioral outcomes, including cancer (Bevan & Pecchioni, 2008; Varner et al., 2019), smoking cessation (Coppotelli & Orleans, 1985; Mermelstein et al., 1986), problem gambling (Kourgiantakis et al., 2013, 2018), and drug (Higgins et al., 1994) and alcohol problems (Copello et al., 2005).

In light of these findings, mental health care that includes family members in treatment has become the gold standard for some disorders, such as psychosis (Mueser et al., 2013). Across over 50 RCTs, familyinvolved interventions have yielded better outcomes (e.g., improved symptoms, fewer relapses, reduced hospitalization) than patient-only interventions (Cohen et al., 2008; Fallon, 1984; Mueser et al., 2013; Pilling et al., 2002) and, thus, are codified in treatment guidelines offered by organizations such as NICE (National Institute for Health and Care Excellence, 2014) and the International Early Psychosis Association (Addington et al., 2005). Familyinvolved interventions for adults hold great promise for other conditions, such as substance abuse, though more evaluation is needed.

There are a number of mechanisms by which including family or partners in care might influence outcomes. By virtue of being involved in treatment, partners learn about the condition and the intervention. They may also actively learn or inadvertently pick up emotion regulation and

coping skills themselves. For example, couples interventions for chronic pain reduce pain intensity more effectively than individual behavioral interventions through the use of stress management, psychoeducation about pain, and cognitive behavior skills taught to both partners (Smith et al., 2019). Partner-involved treatment may also improve the underlying relationship. By working together on a common goal, couples may relieve feelings of isolation, helplessness, and hopelessness. Further, outside of what occurs during treatment, family involvement can also increase the chances of treatment initiation and completion (Jiménez-Murcia et al., 2017; Kourgiantakis et al., 2013, 2018).

However, barriers also exist. While many consumers feel that family involvement would help them with their mental illness and reduce their families' stress and concern, they also worry about burdening their families, loss of privacy, and express skepticism about how helpful their family would be (Cohen et al., 2013; Eassom et al., 2014; Murray-Swank et al., 2007). In one study, when veterans were asked if they wanted to participate in an individual or couples-based intervention for PTSD, only 26% reported a desire to include their romantic partner (Malaktaris et al., 2019). Extensive existing work on other health conditions both supports the benefits of involving partners in treatment and highlights some of the challenge. Clearly, when developing interventions to include partners in suicide prevention, it is critical to consider these findings, as well as characteristics unique to suicide risk.

### What Is Known About Involving Partners in Suicide Prevention

Despite considerable success in other areas of health intervention, empirically supported suicide prevention treatments involving both the patient and their partner or family do not yet exist for adults (Frey & Cerel, 2015). However, emerging evidence from the adolescent literature provides promising clues about the efficacy of such approaches. Recent reviews find that treatments involving the family were generally more effective in reducing adolescents' suicidal thoughts and behaviors (Brent et al., 2013; Diamond et al., 2014; Iyengar et al., 2018; Lear & Pepper, 2018; LeCloux et al., 2017). These interventions range from individual-focused treatments that include psychoeducation for the family to cognitive behavioral family treatment (Asarnow et al., 2017) to attachment-based family therapy that focuses on repairing ruptured or strained relationships (Hunt et al., 2017; Scott et al., 2016).

The absence of family-involved interventions for adults exists despite a clear desire from family members and partners of suicidal individuals to receive more information, to be more involved in treatment, and to receive instruction about how to best support and help their loved ones (Cerel & Currier, 2006). Preliminary evidence also suggests that suicidal individuals would prefer their significant other be involved in safety planning (DeBeer et al., 2019). A framework for involving family members in treatment planning (Grant et al., 2015) and an intensive family-centered therapy model (Anastasia et al., 2015) have been described, supporting the potential feasibility of including family in the direct care of suicidal individuals. However, neither of these approaches has been fully developed, nor has their impact on suicidal behavior yet been shown.

The development of strategies to include partners in care has been hampered by a lack of foundational knowledge about how suicide disclosure and communication naturally occur within relationships. A single article exploring this question in a dyadic sample found that, while most partners accurately identified their partner's history of suicide ideation, the minority were aware of past suicidal behavior. Of even greater concern, partners tended to underestimate the risk of future suicide attempts compared to their partner's own self-report of their future risk (May et al., 2019).

In addition to whether communication about suicide risk occurs, how it is received is also critical. Although suicidal individuals regularly identify their romantic partners as key sources of support, a common concern is uncertainty about how their partners might react when they are in crisis. These clinical observations align with empirical findings: approximately 60% of individuals choose to report their history of suicidality to their romantic partners but approximately 40% of them were met with stigma when doing so (Frey et al., 2016). While disclosure is typically associated with positive outcomes, when it is met with stigma (e.g., ambivalence, anger, hostility) it can have detrimental effects (Frey & Fulginiti, 2017). Perceived stigma from social networks is correlated with depression symptom severity, and individuals with past suicidal behavior are more likely to experience stigma from close family members than clinicians (Frey et al., 2016).

While recommendations to include the family or partner in treating and managing suicide risk have existed in clinical practice for years and many clinicians have long included partners informally in suicide prevention effort, no formal interventions exist. Therefore, empirical investigations have yet to explore how best to include partners. One approach to involving partners in suicide prevention interventions is to adapt existing evidence-based treatments to explicitly involve the partner and leverage the unique position they hold. This is the approach we take in a trial currently underway, testing the Couples Crisis Response Plan (CCRP).

### **Couples Crisis Response Planning**

The CCRP is based on the Crisis Response Plan (CRP). The individual CRP is a 30-minute intervention designed to reduce suicide attempts by targeting several deficits that increase the risk for suicidal behavior: deficits in self-monitoring, emotion regulation, and problem solving (Rudd et al., 2006; Bryan, 2010). It is comprised of a narrative assessment of the suicidal crisis followed by the development of a personalized plan to address a future crisis. During the narrative assessment the patient is invited to "tell the story" of their most recent crisis, in their own words. The therapist asks open-ended questions to help clarify the trajectory of emotions, thoughts, behaviors, and stressors leading up to the crisis. The narrative assessment is less directive than a traditional suicide risk assessment; in addition to gathering information, it serves to build rapport by demonstrating curiosity about the patient's experience. The information uncovered during the narrative assessment then becomes a starting point for the Crisis Response Plan. The plan consists of five key elements:

- identifying personal warning signs of an impending crisis;
- identifying self-management skills, such as distraction, relaxation, self-soothing;
- identifying personal reasons for living;

- identifying and reaching out to positive social supports;
- providing education about how to easily access professional and crisis resources.

A study of active-duty U.S. Army soldiers found that the CRP reduced suicide attempts over the 6-month follow-up period by 76% as compared to treatment as usual (Bryan et al., 2017). Receiving a CRP was associated with significantly faster reductions in suicide ideation, significantly larger reductions in suicide attempts, and significantly fewer days of inpatient psychiatric care. Indirect evidence supporting the CRP also comes from longer-term individual psychotherapies shown to be effective for reducing suicidal behavior such as dialectical behavior therapy (Linehan et al., 2006), cognitive therapy for suicide prevention (Brown et al., 2005), brief cognitive behavioral therapy (Rudd et al., 2015), and the attempted suicide short intervention protocol (Gysin-Maillart et al., 2016), all of which include the CRP or other similar procedures, like the Safety Planning Intervention (Stanley & Brown, 2012).

The CCRP adapts the individual CRP by jointly guiding each member of the couple through the creation of their own personalized crisis response plan and facilitating a conversation about suicide risk and safety. The CCRP is a single 50-minute session attended by both members of the couple and a therapist. The CCRP intervention consists of (1) introductions and rationale, (2) identification of the most recent crises for each member of the couple, (3) guiding each member of the couple in the development their own Crisis Response Plan (described above) in parallel and with input from each other, (4) practicing two brief communication exercises, (5) assessing the likelihood of each member of the couples' use of their own CRP, and (6) troubleshooting barriers. The patient's Crisis Response Plan is built around their most recent suicidal crisis. The partner's Crisis Response Plan is keyed to an event relevant to them, be it their own suicidal crisis or a recent experience of emotional overwhelm-regardless, it contains the same five key elements of a CRP described above. The CCRP intervention is designed to increase accurate and personalized knowledge about emotional or suicidal crises, identify adaptive responses, improve communication about the sensitive topic of suicide, and provide support to both members of the couple.

### Rationale

### Increasing Knowledge

Including partners in a suicide-focused session should increase knowledge across a number of domains. Participation could reduce general misconceptions about suicide (e.g., beliefs that asking about suicide increase suicide risk). These commonly held myths may prevent a partner from directly asking about suicide, impede early intervention, or foster unhelpful responses (Frey et al., 2016; Hjelmeland & Knizek, 2004).

Involving partners may also increase their couples-specific knowledge of warning signs and coping strategies. A romantic partner is in an ideal position to observe their mate's personal warning signs of impending suicidal crisis and to provide immediate aid. Partners have numerous advantages for identifying acute suicide risk, particularly the opportunity to observe changes across time and situations. Because suicidal individuals can experience rapid fluctuations in suicide risk, weekly or monthly visits with a mental health professional may be insufficient. Thus, partners may serve as a "safety net" for the suicidal individual, providing much more frequent monitoring of warning signs while also supporting the suicidal individual's selfmonitoring of their own risk. Furthermore, given that a minority of suicidal individuals enter or stay in treatment, partners who are aware of specific, memorable warning signs of elevated risk as well as empirically supported tools to intervene may be especially effective in helping to deescalate crises (Han et al., 2014; Kessler et al., 2005).

In the opposite direction, by creating their CRPs together, partners may reveal novel information about specific warning signs and coping skills that are unknown to the suicidal individual (e.g., noticing changes to sleep), or that the suicidal individual cannot access due to mood-dependent memory deficits (e.g., depressed individuals struggling to recall previously enjoyed activities). The CCRP therefore provides a novel source of information for the suicidal person—their partner's observations—that is not available in the individual CRP.

### Facilitating Communication

In addition to increasing knowledge about suicide more generally and partnerspecific factors more precisely, formally including partners in the intervention may open new avenues of communication and encourage disclosure that would not otherwise occur. This in turn may reduce the suicidal individual's shame and fear about negative reactions from their partner during future crises. Family members frequently express a desire to be more involved in their loved ones' care and often feel excluded from decision-making, whether due to confidentiality or limited time by health care providers (Mclaughlin et al., 2016). An intervention like the CCRP, which focuses on the needs of both the suicidal individual and their partner together, could help assuage these concerns and lead to increased satisfaction. At the same time, the design of a joint session speaks to both the issues of confidentiality (i.e., with both members in the room, information is controlled by the suicidal individual) and time (i.e., a single joint session is more feasible in our current healthcare system than multiple individual meetings).

The CCRP includes two specific communication exercises to foster dialogue. In the first exercise, the clinician invites the couple to identify the words they, as a couple, use to refer to suicidal and other crises. Developing a shared language that both parties accept is intended to improve the accuracy of communication about crisis states in the future. In the second exercise, the clinician leads a brief communication exercise in which each member of the couple practices using "I" statements to communicate about suicide risk (e.g., telling the other about a warning sign, asking about emotional distress, suggesting a strategy from the handwritten CCRP). This brief practice session is conducted in light of research that individuals rarely ask about suicidal thoughts, even when they are concerned (Jorm et al., 2005). Data also show that skills are more likely to be implemented when they are practiced (Ericsson, 2006). By allowing each partner to practice talking about observed risk indicators, asking for help, and/or suggesting a coping strategy, use of the CCRP components is enhanced and partners may feel more empowered to initiate these conversations in the future.

#### Providing Caregiver Support

Not surprisingly, family members are likely to experience fatigue, stress, and fear in the context of their partners' mental health crises. For example, partners of people with PTSD experience increased distress and depression (De Burgh et al., 2011; Renshaw & Campbell, 2011) and partners of individuals admitted for psychiatric care are at five times the risk of suicide death themselves (Agerbo, 2003). However, family members of suicidal individuals also commonly describe a lack of empathy or concern for their own wellbeing while interacting with health care professionals regarding their loved one (Angela et al., 2017; Mclaughlin et al., 2016).

A joint intervention for both members of the couple speaks to the needs of the nonsuicidal partner by identifying his or her emotional tipping points, reminding him or her of ways of coping with stress, and exposing him or her to crisis numbers that may also be of personal benefit. Interventions that provide support and relieve distress from the partners of suicidal individuals may bolster the partners' own wellbeing, as well as empowering them to be a resource and support to their loved ones.

Inviting the partner to create a plan to cope with their own emotional overwhelm not only helps to support self-care, but also provides a platform for the suicidal individual to better recognize the emotional state and needs of his or her partner, thereby enabling him or her to provide support in return. The CCRP session is intentionally structured to reduce the inherent patient/caregiver dynamic and to validate the universality of having a plan to cope with overwhelming emotions. The CCRP therefore encourages a "two-way street" of support whereby both partners receive assistance as well as provide assistance. The reciprocity of the CCRP intervention may serve to reduce feelings of burdensomeness, as well as the stigma that stifles communication about suicidal thoughts. In short, the CCRP invites both partners to be part of the suicide prevention solution while at the same time continuing to reinforce that ultimate responsibility for personal safety rests within each individual.

### **Current** Trial

In creating the CCRP intervention, we hope to capitalize on partners' unique knowledge of their loved ones' suicide warning signs, close proximity to their partners, and ability to directly support clinical interventions designed to increase safety. In addition, the intervention is designed to reduce patient/caregiver dynamics that may exist and to provide the romantic partner with their own personalized crisis response plan.

An initial randomized controlled trial of the CCRP, funded by the Military Suicide Research Consortium, is currently ongoing (ClinicalTrials.gov NCT04084756).

Seventy-eight suicidal individuals and their partners are recruited from multiple inpatient units in a single psychiatric hospital. Same and mixed sex couples are included. Patients must be active-duty military members (any branch or component) or post-9/11 veterans. Exclusion criteria include severe relationship dissatisfaction or past year interpersonal violence reported by either partner. After both members of the couple complete informed consent and participate in baseline assessments, the couple is randomized to either CCRP or a couples-based psychoeducational control condition. Interventions are delivered by master's-level social workers or counseling psychology graduate students. In both conditions, couples participate in a single joint session either in person or with the partner participating via telehealth as needed. At the close of the session, each member of the couple is provided with a copy of either their personal CRP written on an index card and laminated (CCRP condition) or a copy of the psychoeducation key points, also on a laminated index card (Psychoeducation condition). Patients and partners are then followed independently at discharge, 1, 3, and 6 months. Follow-up assessments include measures of each participant's suicidality as well as perceptions of their partner's suicidality, observations of warning signs, use of coping strategies, relationship quality, dyadic communication behavior, and disclosure of suicidality, among other things. The primary aims of the study are (a) to examine the effect of CCRP compared to couples psychoeducation on suicide ideation (measured with the Beck Scale for Suicide Ideation (Beck et al., 1979) during the follow up period and (b) to examine the mechanisms by which partner involvement impacts future suicidal crises, crisis management, and use of coping strategies.

### **Summary and Future Directions**

Romantic relationships play a key and complex role in suicide risk and prevention—they can serve as sources of support and as triggers of distress. Though the number of empirically supported suicide prevention interventions has grown extensively over the past few decades, there has so far been an absence of suicide-specific interventions that explicitly include the romantic partner. This is despite deep and wide-ranging evidence from other mental and physical health conditions that familyinvolved interventions can yield improved treatment outcomes. The limited available evidence suggests a desire for such interventions by individuals experiencing suicidal thoughts, as well as their partners. The CCRP is one potential model for a brief intervention to provide education, skills, and support to both members of the couple. There is a critical need for the development and assessment of other partner-involved interventions that might be effective across diverse populations and settings.

This review focused on the possibility of including romantic partners in the treatment of suicidal individuals. Longer term treatments targeting the sources of distress and miscommunication within a relationship (e.g., couples therapies) are a different pathway to suicide prevention. The CCRP is decidedly not a couples therapy intervention in that it is not meant to resolve underlying relationship distress or conflict; rather, it is an individual intervention expanded to include a significant other. Given that relationship conflict is strongly related to suicide risk, it is logical that couples therapy may also yield benefit. Though beyond the scope of this review, there is, of course, an entire field focused on couples therapy. A review of that literature and an exploration of how couples therapies may already work to reduce suicide risk or how they may be adapted to focus the work of the dvad on suicide prevention is much needed. Regardless, a partner-involved intervention such as CCRP will not be appropriate for all couples (e.g., those with severe relationship distress, interpersonal violence), and for some, a referral to couples therapy may be indicated.

Future work should also consider moderators that may make this intervention work differently for different couples. Factors such as culture, age, relationship length and partner mental health problems may impact how the CCRP works. For example, while all types of couples may face suicidal crises, culture may shape the meaning that an individual places on this experience, willingness to disclose, and comfort providing or receiving support. While the CCRP trial will be able to shed light on the effect of some moderators, such as relationship quality and communication style, much more work will be needed to detect other boundary conditions and identify adaptations or alternative approaches that may be beneficial.

Additionally, the CCRP is currently being tested in an inpatient setting; further research is needed to determine how it might function in other settings, such as during outpatient visits, in the context of behavioral health care providers embedded in primary care settings, or as an adjunctive treatment to couples therapy. In the context of outpatient therapy, if the patient's primary provider plans to administer the CCRP session, they will need to attend to any potential ethical issues (e.g., neutrality, dual relationships, referrals for the partner). The current trial is designed to accommodate partners unable to come to the hospital in person by conducting the CCRP via a telehealth session, thus will provide qualitative data on the feasibility and acceptability of CCRP telehealth sessions that may prove useful if future dissemination and implementation efforts are warranted.

Many elements of a romantic partner make them a good collaborator in suicide prevention goals. Partners often live together, allowing frequent observation of fluctuating mood and behaviors. The extensive time partners spend together provides many natural opportunities to suggest or support coping strategies. The intimacy frequently found in romantic relationships may allow for the sharing of suicidal thoughts and feelings, which are often of a personal and sensitive nature. At the same time, there are many other types of relationships that may be equally or even better suited to providing support. In future projects, we plan to test the CCRP intervention with other dyads-for example, a patient-nominated support person (e.g., sibling, parent, friend). These versions of treatment may be especially helpful for single patients or for patients for whom relationship difficulties make inclusion of the partner ineffective. Different consideration may arise when including suicide prevention partners with non-romantic relationships. Other dynamics may be more likely (e.g., infantilizing of adult children who select a parent as their partner or the reverse for adult children accompanying a parent). A friend who is selected may have less frequent contact with the individual or live remotely, reducing the impact their involvement might have. Work to understand the mechanisms by which the CCRP influences suicidal thoughts and behaviors will help inform the need (or not) for adaptations to the intervention for other types of dyads.

Another critical avenue for future work is understanding the risks and benefits to the partner (or other nominated individual) of being involved in a suicide intervention. One purposeful design consideration of the CCRP was including the partner in the session as an equal, rather than as a caretaker. This was important to reduce the caregiving burden and the sense of responsibility partners already often report. The CCRP is also designed to provide benefits for the partner (e.g., a first contact with mental health care, rapid provision of a personalized coping skill, education about suicide risk that may relieve misconceptions). The current CCRP trial will test whether these goals were met; however broader research is needed to better understand the experiences of the friends and families of individuals living with suicidal thoughts and behaviors. Should the CCRP be disseminated in the future, each setting will need to determine what resources are available for partners so that appropriate referrals can be made should they be indicated.

In sum, romantic partners are already inextricably linked with suicide risk and prevention. Interventions that explicitly invite them to the suicide prevention effort may leverage their power to help their loved one, while at the same time benefiting their wellbeing in the process.

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This work was in part supported by the Military Suicide Research Consortium (MSRC), an effort supported by the Office of the Assistant Secretary of Defense for Health Affairs under Award No. (W81XWH-16-2-0004). Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the MSRC or the Department of Defense.

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# Treatment for Relationships and Safety Together (TR&ST): A Novel Couples-Based Suicide-Specific Intervention

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#### Suicidality and Relationship Functioning

IN RECENT YEARS, more than 1 million Americans made a suicide attempt and over 45,000 Americans died by suicide each year (Centers for Disease Control and Prevention [CDCP], 2017). Veterans in particular have experienced steep increases in suicides, with 27.7 per 100,000 deathsapproximately two times higher than nonveteran adults (Department of Veteran Affairs Office of Mental Health and Suicide Prevention, 2019). Suicide is the second leading cause of death among U.S. military personnel (Weiner et al., 2011). Despite a rise in suicide prevention and intervention efforts, U.S. suicide rates have increased 25% over the past 10 years while other leading causes of death have declined (CDCP, 2017).

Unfortunately, the exact causes for the elevated rates of suicide remain unknown; however, suicide theories have consistently stressed, and scientific research has found, that interpersonal difficulties are a consistent precipitant of suicidal thoughts and behaviors (e.g., interpersonal theory of suicide [IPTS; Joiner, 2005], three-step theory [3ST; Klonsky et al., 2016], and the fluid vulnerability theory of suicide [Rudd, 2006]). Additionally, among veterans, greater exposure to potentially traumatic events such as combat (Pietrzak et al., 2011) and killing during combat in partic-

ular (Maguen et al., 2011), harassment (Lemaire & Graham, 2010), and military sexual trauma (Gradus et al., 2013) have been hypothesized to be related to their increased risk for suicide. Other risk factors among veterans include mental health and substance abuse problems, greater access and skill with firearms, high prevalence of traumatic brain injuries, chronic pain, economic disparities, and social isolation and relationship/adjustment difficulties following deployment (Department of Veterans Affairs, 2019). Taken together, it is clear that, particularly among veterans, suicidal thoughts and behaviors result from dynamic interactions with the environment-and particularly the relationships that individuals have with significant others. However, suicide-focused interventions typically have not provided an explicit avenue to involve significant others in psychotherapeutic treatments, despite research calling for a focus on addressing interpersonal skills among suicidal veterans to reduce suicide (Kaplan et al., 2012).

Social determinants of suicide have been a focus of interest for over a century. Durkheim's (1897) early explorations of suicide discussed the influence of social dynamics, including a sense of not belonging as a significant contributor to suicide (Durkheim, 1897). More recently, the IPTS (Joiner, 2005) is one of the leading models for understanding suicidal behavior (e.g., Anestis et al., 2009; Bryan & Cukrowicz, 2011; Bryan, Cukrowicz, et al., 2010; Bryan, Morrow, et al., 2010; Nademin et al., 2008; Short et al., 2019). According to this model, three factors interact to lead a person to die by suicide: perceived burdensomeness, thwarted belonging, and acquired capacity. Perceived burdensomeness is the belief that one does not contribute to and is a burden in their relationships. Thwarted belonging is the sense that one is not accepted by and is disconnected from others. The IPTS suggests that perceived burdensomeness and thwarted belonging lead to suicidal desire, and acquired capacity (i.e., exposure to painful or provocative events such as combat exposure, interpersonal trauma, child maltreatment, or nonsuicidal selfinjury) facilitates progression from suicidal ideation to attempt. This theory has been extremely influential because it distinguishes between the factors associated with suicide attempts and the factors associated with suicidal ideation alone, consistent with what has been called the "ideation-toaction" framework (Klonsky et al., 2016).

The 3ST (Klonsky et al., 2016) is the most recent and integrated ideation-toaction theory of suicide. The 3ST states that suicidal ideation stems from pain (usually psychological) and hopelessness. Ideation then escalates when pain and hopelessness exceed a person's feeling of connectedness. This theory suggests that connection is what makes life worth living. For example, if a person's connection to their partner is stronger than their pain and hopelessness, that connection will hinder progression from ideation to action. No current suicide-specific interventions directly target improvement in relationship satisfaction or connection with one's partner. The 3ST identifies three contributors to capacity: (a) dispositional contributors including high pain threshold and lower fear of death, (b) acquired contributors, namely exposure to painful events, such as those identified in the IPTS, and (c) practical contributors including knowledge, expertise, and access to lethal means.

Finally, FVT asserts that individuals have a stable baseline level ("set point") of suicide risk, which is affected by risk and protective factors (Rudd, 2006). The level of suicide risk can vary over time in response to environmental changes, but as individuals adapt to these changes, their suicide risk returns to their set point. These risk and protective factors are represented by five interactive components: triggers (e.g., relationship problems, financial stress), emotions (e.g., depression, guilt), behaviors (e.g., substance use, social withdrawal), physiology (e.g., insomnia, chronic pain), and cognitions (e.g., hopelessness, self-hatred). Individuals differ in their thresholds of activation of a suicidal crisis as well as their abilities to recover from these crises both intraindividually and between different people (Rudd, 2006).

According to these theories, the quality of the intimate relationship might serve to either exacerbate or mitigate suicidal desire, which often precedes suicide. Likewise, all theories assume that perceived burdensomeness, thwarted belonging, relationship conflict, and overall connection are malleable intervention targets. One's intimate relationship is typically the primary relationship of adulthood, and the above theories hypothesize that strengthening the connection and reducing conflict among suicidal individuals and their partners may reduce suicidal ideation and prevent suicidal actions.

Consistent with the theories presented, research suggests that dysfunctional relationship dynamics are associated with increased suicidal thoughts and behaviors. Relationship problems are consistently the most frequently endorsed stressor preceding suicide attempts (Bryan & Rudd, 2012; Skopp et al., 2019). Further, unremitting relationship problems are associated with longer suicidal episodes and repeated suicide attempts (Bryan et al., 2015). Of note, one study reported that, if relationship problems were resolved, a potential 23% decrease in suicide risk could be achieved based on a population attributable risk (PAR) estimate (Beautrais et al., 1997).

In particular, relationship conflict and anger are significant contributors to suicidality within intimate relationships (Runyan et al., 2003; Whisman & Uebelacker, 2006; Wilks et al., in press). Interpersonal conflict has been rated as the most common life event preceding a suicide attempt (94.1%), higher than the experience of loss and death (79.2%) and mental (77.2%) or physical abuse (65.3%; Osvath et al., 2003). Relationship conflict and the expression of anger may lead to increased feelings of thwarted belonging by pushing partners away from each other (Fischer & Manstead, 2016). Therefore, conflict and anger may directly impact interpersonal mechanisms identified by suicide theories. Anger expression and conflict reduction are targets of couples-based interventions: teaching couples how to recognize their own experience and how to express anger effectively.

Conversely, individuals with higher relationship satisfaction are less likely to experience suicidal ideation compared to people with lower relationship satisfaction (Till et al., 2017; Whisman & Uebelacker, 2006; Wilhelm & Perrez, 2004). In a randomized controlled trial (RCT) of a suicide-specific individual intervention (i.e., the Collaborative Assessment and Management of Suicide), married individuals had better improvement in global severity (i.e., mental health functioning, symptom distress, interpersonal problems, and social role functioning) compared to patients that were not married (Huh et al., 2018). Indeed, several studies have found that married individuals are less likely to die by suicide than unmarried individuals (Frev & Cerel, 2015; Griffith, 2012; Mościcki, 2014). And, positive interpersonal experiences, such as having socially supportive interactions, may be a protective factor for suicide (Kleiman & Liu, 2013).

Further, romantic partners are in a unique position to observe warning signs and communication prior to a suicidal crisis and to intervene. Prior to an attempt, spouses and friends were the two most common groups to whom individuals communicated their suicidal thoughts (T2 & DSPO, 2016; DoD, 2016). Further, as high as 50% disclose their past suicidal thoughts or behaviors to their romantic partner (Frey et al., 2016a, 2016b). Additionally, psychological autopsy studies examining communication prior to completed suicide have found that suicidal individuals most often attempt to or do communicate with romantic partners, more so than other family members, friends, or professionals (Martin et al., 2013; T2 & DSPO, 2016; DoD, 2016). If couples communicated about warning signs and suicidal thoughts prior to crisis, partners would be in an even more advantageous position to support the suicidal individual prior to a suicide attempt. Yet, even with partners being the most likely to receive suicidal communications or observe warning signs, the majority of people do not communicate their suicidal thoughts at all-only 31% of suicide deaths and 23% of suicide attempts were preceded by any interpersonal communication (May et al., 2019; T2 & DSPO, 2016; DoD, 2016). Although we have found that veterans would like to be able to talk about suicidal thoughts with their partners, and partners are willing to listen (Khalifian et al., 2020), couples may not have the skills to talk about suicidal thoughts, emotions, and behaviors. A couples-based suicide-specific

intervention would help couples identify and communicate their warning signs and learn necessary skills to talk about and process thoughts and emotions related to suicide in order to intervene early and avoid suicidal crises.

Couples-based interventions are designed to improve communication, emotional and physical intimacy, and overall connection (Gurman et al., 2015). Further, recent evidence provides compelling indication that direct suicide-specific interventions (i.e., those that target suicidal thoughts and behaviors) may be more effective in reducing suicide risk than are indirect interventions (e.g., those that target psychiatric diagnoses and symptoms; Calati & Courtet, 2016; Meerwijk et al., 2016). Therefore, a couples-based intervention that targets suicidal thoughts may be particularly effective at preventing suicide and may help fill a critical need for more efficacious interventions for suicidal individuals. Given the value of relationship partners, yet the complicated relation between interpersonal dysfunction and suicidality, our goal was to create an intervention designed to improve relationship functioning and reduce suicide risk, described next.

### Basis of Treatment for Relationships and Safety Together (TR&ST)

TR&ST was created by integrating Brief Cognitive Behavioral Therapy for Suicide Prevention (BCBT; Bryan & Rudd, 2018), an evidence-based suicide-specific individual therapy, and Cognitive Behavioral Couple Therapy skills (Epstein & Baucom, 2002). BCBT was selected for adaptation because cognitive behavioral therapies have garnered moderate evidence supporting significant reductions in suicidal behaviors as compared to other therapies (Brown et al., 2005; Davidson et al., 2006; Patsiokas & Clum, 1985; Rudd et al., 2015; Slee et al., 2008; Tyrer et al., 2003; Weinberg et al., 2006). Given the established efficacy of BCBT and its existing platform for including romantic partners in the treatment process, our team worked together to further modify BCBT to be more dyadically focused.

#### **BCBT for Suicide Prevention**

BCBT for Suicide Prevention is a 12session, suicide-focused individual therapy developed by Rudd and colleagues (Rudd et al., 2001; Bryan & Rudd, 2018). It is designed to reduce the probability of suicidal behavior by targeting two hypothesized mechanisms of action: cognitive flexibility and emotion regulation. The treatment consists of three sequential phases. During Phase 1 (approximately 5 sessions), clinicians conduct a narrative assessment of the most recent suicidal episode or suicide attempt, provide a cognitive-behavioral case conceptualization (i.e., suicidal mode), collaboratively develop an individualized crisis response plan (CRP), develop treatment goals, and begin emotion regulation skills training. During Phase 2 (approximately 5 sessions), clinicians target emotion regulation and cognitive flexibility skills training. They teach cognitive restructuring techniques to reduce suicidogenic beliefs and assumptions that maintain suicidal thoughts and increase the risk for suicidal behaviors (e.g., hopelessness, perceived burdensomeness, self-hatred). During Phase 3 (approximately 2 sessions), the clinician conducts relapse prevention exercises to reduce likelihood of future suicidal behavior.

#### Brief Cognitive Behavioral Therapy (BCBT) for Suicide: Phase 1- Emotion Regulation

- Crisis response plan
- Means restriction counseling
- Sleep stimulus control
- Relaxation skills training
- Mindfulness skills training
- Reasons for living list/survival kit

#### **BCBT: Phase 2- Cognitive Skills**

- ABC worksheet
- Challenging questions
- Problematic patterns of thinking
- Activity planning
- Coping cards

#### **BCBT: Phase 3- Relapse Prevention**

• Imaginal relapse prevention exercise for suicidal crises

In a recently completed RCT comparing BCBT with treatment as usual (TAU) among active-duty soldiers (n = 152) reporting current suicidal ideation with intent to die and/or a recent suicide attempt (Rudd et al., 2015), soldiers who received BCBT were 60% less likely to make a suicide attempt than soldiers who received treatment as usual (hazard ratio=0.40 [0.17, 0.94], p=.034). Significant between-group differences were seen as early as 3 months following the start of treatment, suggesting very rapid efficacy. Faster and larger magnitude reductions in suicide ideation and psychological symptoms were also seen among soldiers in BCBT. Furthermore, soldiers in BCBT were less likely than soldiers in TAU to be medically boarded out of the military during follow-up (26.8% vs. 41.8%; OR=0.51 [0.25, 1.04], p=.064), suggesting BCBT may also influence career outcomes and quality of life.

A unique feature of BCBT is the option for patients to invite a significant other to

attend one or two sessions during the first phase of the treatment. In most cases, this significant other is the patient's romantic partner. During this joint session, the BCBT clinician solicits the support and aid of the significant other, particularly with respect to means restriction and crisis response planning. Specifically, the BCBT clinician provides lethal means counseling and helps the patient and their significant other develop a plan for limiting the patient's access to potentially lethal methods for suicide (e.g., firearms, medications). The clinician then develops a crisis support plan that is designed to review and outline specific steps for the patient and significant other to follow during an acute crisis. Although BCBT has promising outcomes and provides an avenue for engaging romantic partners in treatment, the treatment is predominantly delivered in an individual therapy format. Adapting BCBT to incorporate explicit elements of cognitive-behavioral couple therapy, thereby providing more opportunities for a suicidal

#### Table 1. BCBT to TR&ST Modifications

#### Treatment for Relationships and Safety Together (TR&ST): Phase 1- Emotion Regulation

- Crisis response plan & crisis support plan
- Means restriction counseling (including how the partner can support the plan)
- Sleep stimulus control (including sleeping with partner)
- Relaxation skills training
- Conjoint time-outs
- Reasons for living list/survival kit (each partner offers meaningful additions to the other's kit)
- Conjoint activity planning (increasing positivity)

#### TR&ST: Phase 2- Self-awareness and Communication Skills

- Mindfulness skills training (including using mindfulness skills during interpersonal interactions)
- Speaker-listener
- Describing and expressing feelings related to suicide and relationship functioning
- Reflecting feelings

#### TR&ST: Phase 3- Cognitive Skills

- Identifying thoughts
- Sharing thoughts related to suicide and relationship functioning
- Conjoint thought challenging
- Coping cards
- Conjoint problem solving

#### TR&ST: Phase 4- Relapse Prevention

- Individual and conjoint imaginal relapse prevention exercises for suicidal crises and relationship distress related to suicidal crises
- Individual and conjoint values and life worth living

Note. Dyadic modifications are italicized above.

individual's romantic partner to be involved in the treatment process, may lead to enhanced outcomes.

Cognitive-behavioral couple therapy skills have been successfully integrated into several individual interventions, including treatments for posttraumatic stress disorder, depression, and anxiety to create couples-based interventions for these disorders (Baucom et al., 1998; Wittenborn et al., in press; Monson & Fredman, 2012), which are emerging as best practices.

#### **Development of TR&ST**

Couples therapies for relationship distress typically begin with therapists attempting to understand the relationship dynamic or pattern that underlies their conflicts. It is likely that the couple pattern interacts with both individuals' mental health functioning. Therefore, when considering suicide, treating individuals alone is unlikely to change the relational pattern that is so closely tied to suicidality.

TR&ST is built upon the same theoretical model as BCBT and retains theorized mechanisms of change (i.e., emotion regulation, cognitive reappraisal, and problem solving). Additionally, TR&ST integrates interpersonal theories of suicide in order to utilize the romantic relationship to enhance outcomes (see Figure 1). In TR&ST, a greater emphasis is placed on how the emotional experiences of both individuals in the relationship influence one another and may contribute to the couple getting caught in a dysfunctional pattern that exacerbates suicidal ideation. Figure 2 is an example couple pattern based on current TR&ST pilot cases and includes TR&ST skills, which are further exemplified in Table 1. The couple pattern can be triggered by either person and triggering relational events may be as insignificant as forgetting to pick up milk on the way home or as significant as lying about finances. Similar to the suicidal mode, couples typically have a consistent pattern of thoughts, emotions, and physiology regardless of the actual content of the disagreement. For example, forgetting to pick up milk or lying about finances would elicit different intensities of the same pattern. In Figure 2, for example, the suicidal individual experiences the thoughts "I'm a failure" and "I always mess up," the associated physical sensations are racing heart and headache, and the primary emotions are shame and sadness. Rather than sharing these more vulnerable thoughts and emotions with their partner, the suicidal individual

instead expresses anger and engages in a number of associated behaviors like drinking, avoidance, and self-injury. The suicidal individual's behaviors trigger the partner's thoughts "I can't trust my partner" and "I'm all alone," physical sensations including blurry vision and upset stomach, and associated emotions like fear and sadness. Rather than communicating that fear back to the suicidal individual, the partner also expresses anger and criticizes the suicidal individual. This reinforces the suicidal individual's thoughts of failure, thereby perpetuating the cycle. As one can infer from the description of this pattern, treating the suicidal individual alone is unlikely to shift this interactional pattern since it

involves both relationship partners. Rather, if couples learn couples-based emotion regulation strategies (e.g., time-outs), communication skills, conjoint cognitive reappraisal, and conjoint problem solving, then they can interrupt the dysfunctional cycle that sustains and/or exacerbates suicidal thoughts and behaviors.

#### TR&ST Session Content

As described in Table 1, TR&ST adapts BCBT skills to be dyadically focused and integrates cognitive-behavioral couple therapy skills. The current treatment model is ten 90-minute sessions and is designed to be delivered in four phases: (1) cognitive-behavioral conceptualization of





Figure 2

suicide and relationship distress, psychoeducation about their reciprocal influences, exercises to promote relationship positivity, emotion regulation, distress tolerance, and conflict management strategies; (2) skills to improve dyadic communication; (3) cognitive interventions designed to address maladaptive thinking patterns that maintain suicidality and relationship dysfunction; and (4) relapse prevention and conjoint construction of values and a life worth living. The phases build upon one another so that psychoeducation, emotion regulation/distress tolerance, and conflict management strategies are taught first, thereby ensuring physical and emotional safety prior to learning communication skills and cognitive restructuring.

#### Phase 1: Crisis Management and Emotion Regulation

Phase 1 focuses on case conceptualization, patients' buy-in, and stabilization, thereby setting the stage for the remainder of treatment. The therapist first meets with the couple to provide an overview of treatment and answer any questions before meeting with each person individually to conduct narrative assessments and construct cognitive behavioral conceptualizations of the factors (i.e., thoughts, emotions. behaviors, and physiology) influencing suicidal thoughts and behaviors and relationship distress. Special attention is given to risk factors that are unique to veterans (e.g., combat exposure, military sexual trauma, comorbid mental health problems, and relationship disruption due to deployment and reintegration) in order to create comprehensive conceptualizations. These conceptualizations are used throughout treatment to build awareness of maladaptive patterns and identify potential places to intervene. The first intervention is a crisis response plan (CRP), which is completed by both partners. The CRP is a step-by-step plan that includes (1) emotional, physiological, and cognitive warning signs of suicidality for the veteran or sadness, anger, anxiety, or other forms of emotional distress for the partner, (2) distress tolerance and emotion regulation skills that the individual has utilized successfully (i.e., going for a run, taking a shower, listening to music), (3) reasons for living/meaning in life, (4) supportive friends or family to contact, and (5) sources of professional help. The CRP is a central component of BCBT and has been found to significantly reduce suicidal thoughts and behaviors as a stand-alone intervention (Bryan et al., 2017). Further, the CRP is utilized during other conjoint skills, such as time-outs. Each individual also completes a crisis support plan for their partner, which includes warning signs of emotional distress that they notice in the partner, things they can say or do to support one another, and caring people they may suggest their partner call. The crisis response and support plans are updated in every session as the couple learns new skills for dealing with crises or to remove skills that were not helpful during crises. Means safety counseling is also discussed in Phase 1, particularly if the suicidal individual owns firearms or has access to their identified method of suicide. Additional interventions that are taught during Phase 1 to improve emotion regulation and increase positive experiences are individual and conjoint behavioral activation (e.g., date night or other pleasurable activities), relaxation, and time-outs in order to interrupt the couple pattern.

#### Phase 2: Self-Awareness and Communication Skills

In Phase 2, the couple learns skills to effectively communicate emotions and thoughts related to relational distress and suicide. The couple learns individual and conjoint mindfulness skills to first build awareness of their own thoughts and emotions and to then pay attention and stay present when listening to their partner. The couple then learns to identify and express typical thoughts and emotions from their couple pattern. Paraphrasing is taught as a way to slow communication and ensure understanding during conversations regarding relational hurt and suicidality. Thoughts and emotions connected to relational distress are often directly tied to suicidality. Without communicating those thoughts and emotions effectively, it is unlikely that partners will feel understood and validated and thus behavioral changes related to relationship functioning are unlikely to occur.

#### Phase 3: Cognitive Skills

In Phase 3, couples learn to identify and challenge maladaptive thinking together. Thoughts related to suicide are often negatively distorted, irrational, and viewed as truth; however, once those thoughts are shared out loud, couples can work together to challenge thoughts and increase cognitive flexibility. This phase of treatment is focused on undermining the suicidal belief system and cognitions that maintain relationship distress. Couples continue practicing emotion regulation strategies and use their communication skills during conjoint thought challenging. Therefore, at the beginning of each session, the therapist inquiries about use of crisis response, support, or time-out plans. If they have used one (or more) of the plans, the therapist will ask the individual (or couple) to describe the situation and strategies used. If they have not had to use the plans, the therapist will ask the couple how they effectively navigated emotional distress or couple conflict in order to reinforce their emotion regulation/communication skills and bolster self-efficacy. Cognitive-focused sessions in Phase 3 continue to build upon one another by first using sharing and reflecting skills to discuss thoughts related to suicidality and relational distress (i.e., "I feel suicidal after a fight when I have the thought that I am all alone and things will never get better") and then challenging thoughts and identifying alternatives as a couple. By the end of Phase 3, the couple has learned to discuss thoughts related to suicidality and relationship distress and has started to learn new ways to think about themselves and their relationship that reduces the likelihood of future suicidal mode and dysfunctional couple pattern activation.

#### Phase 4: Relapse Prevention and Building a Life Worth Living

In Phase 4, the primary objective is to solidify the couples' ability to use emotion regulation and cognitive skills in order to effectively manage emotional crises and relationship distress without making a suicide attempt or engaging in other maladaptive behaviors. The relapse prevention task is an imaginal exercise in which the suicidal individual and their partner visualize likely future crises and then successfully resolve them. The task is completed by the suicidal individual first to ensure their ability to navigate a suicidal crisis independently, and then repeated with the partner's involvement to interrupt the larger couple pattern. Finally, the couple identifies their individual and couple values and outlines how they can concretely incorporate those values into their lives in order to further develop a life-worth-living after treatment.

#### Pilot Study Design

TR&ST is currently being pilot tested with veterans via VA Video Connect (an online clinical video-teleconferencing program) through a southwest Veteran Affairs Hospital. The goals of this pilot are to determine preliminary feasibility, acceptconnected with emergent hospitalization

arrangements if necessary. Participants

who elect to withdraw from the study will

continue to receive suicide prevention ser-

vices per VA's protocol, and the therapist

will help facilitate referrals for individual

treatment either in the community or VA.

Veteran treatment referral and initiation at

the VA will be expedited given that the vet-

eran is on the VA suicide high-risk list. We

ability and effectiveness of TR&ST. Veterans and their partners have to be at least 18 years or older, in a committed relationship for at least 6 months, and willing to participate. They can be any gender and sexual orientation. The veteran has to report present suicidal ideation (i.e., active thoughts of killing oneself) in the past 1 month and/or a suicide attempt in the prior 3 months. Participants are only excluded if they have current intoxication requiring immediate detoxification or any perpetration of severe physical or sexual relationship aggression in the past year. We have kept our inclusion criteria minimal so as to represent the population of users of the Psychiatric Emergency Clinic and triage services (e.g., outpatient and Family Mental Health clinic), in general. TR&ST is delivered by a clinical psychologist in this pilot trial.

Qualitative interviews are delivered following each phase to assess helpfulness and relevance of intervention content. Attention is given to cultural factors that may impact treatment effectiveness or engagement including age/service era, race/ethnicity, socioeconomic status, religion, and sexual orientation. Quantitative variables of interest are assessed at pre-, mid-, and posttreatment and include suicidal ideation severity and suicidal behavior, relationship functioning (e.g., positive and negative communication, intimate partner violence, and couple bonding), relationship satisfaction, and perceived burdensomeness and thwarted belonging. Changes in PTSD and depression will also be tracked as secondary outcomes given their high comorbidity with suicide.

#### Potential Challenges: Monitoring Suicidality and Couple Violence

Participants referred to the study are evaluated by an independent triage clinician to ensure they do not meet the need for immediate psychiatric hospitalization. At each assessment timepoint, participants are administered a standard suicide assessment. Veterans are informed during consenting that all suicidal behavior is documented in Suicide Behavior Reports in the veteran's medical chart. All veterans are provided the contact information for the Veterans Crisis Line and all participants have already been connected with the VA's Suicide Prevention Team prior to enrollment. During TR&ST sessions, the study therapist will discuss use of the CRP embedded within TR&ST. If the veteran feels unsafe and unable to effectively use the plan, the veteran will be evaluated and

airing<br/>petra-<br/>attion-<br/>b havewill monitor these protocols during the<br/>course of the study and will make adjust-<br/>ments to the safety protocol in case of<br/>adverse events.a sto<br/>o as to<br/>of the<br/>triage<br/>amily<br/>amily<br/>amily<br/>attion thisIf couples endorse relationship violence<br/>that includes fear and intimidation during<br/>treatment, continuing couple therapy may<br/>not be not appropriate given concerns of<br/>coercive control. In these cases, we will take<br/>steps to promote safety by creating safety<br/>plans with veterans and partners (e.g.,<br/>identifying warning signs, safe places to go,<br/>amergancy phone numbere) and conpact

plans with veterans and partners (e.g., identifying warning signs, safe places to go, emergency phone numbers), and connecting partners with community resources and veterans with individual VA mental health treatment. If couples report instances of situational violence (i.e., unplanned violence that is not connected to a pattern of control), we will continue to monitor conflict throughout TR&ST because research has found that CBT skills, such as those taught in TR&ST (i.e., emotion regulation, communication, cognitive challenging), may be effective in reducing this form of conflict.

#### **Future Directions and Next Steps**

After pilot testing is complete, and the intervention seems promising in terms of accessibility and preliminary effectiveness, we plan to conduct a RCT of TR&ST compared to VA Standard Suicide Intervention, test the feasibility and acceptability of TR&ST among civilian couples, and adapt the intervention to include family members or close friends. Sometimes suicidal individuals do not have an intimate partner, and TR&ST is well suited for adaptation to involve a close friend or family member who would support them in treatment. The primary change would be to the "couple pattern" and conceptualization of suicide in the relationship. Intimate partner conflict is a significant contributor of suicidality (Runyan et al., 2003; Whisman & Uebelacker, 2006), and interrupting that pattern is a primary focus of TR&ST. The primary difference in doing TR&ST with a family member or friend would be in conceptualizing how that specific relationship impacts or is impacted by suicidality. It is likely that a friend or family member is more of a support rather than a support and a contributor, but it is an interesting question and one that warrants future research. Additionally, the friend or family member may not live with the suicidal individual so they would need to set up additional times to practice skills together. The primary skills domains taught in TR&ST (i.e., emotion regulation, crisis response and support plans, communication, conjoint cognitive restructuring, and relapse prevention) can all be done with a close friend or family member. This novel intervention comes at an urgent time as suicide rates continue to increase and research has found that the connection between suicidality and relationship functioning is critical. Inclusion of significant others has the potential to enhance suicidespecific intervention efforts and save lives.

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No conflicts of interest to disclose.

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## ORIGINAL RESEARCH

# Exploring Factors Related to Suicide Risk in a Unique Sample of Socially Anxious Job Seekers

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THE SUICIDE RATE has risen to the level of a public health crisis. Approximately 48,344 people die by suicide in the United States each year and nearly 10 times as many make suicide attempts (Centers for Disease Control [CDC], 2018; Shepard et al., 2016). Despite the devastating impact of suicide on individuals, their families, and society at large, our capacity to predict who may attempt suicide remains limited. Thus, research that elucidates the factors associated with engaging in suicide behavior is essential. Specifically, understanding potential correlates of suicide risk, including comorbid diagnoses that might confer greater suicide risk, may be particularly informative. Although some work has questioned the validity of examining predictors of suicide (e.g., Franklin et al., 2017), it is possible that clarifying comorbidities might have important clinical implications in guiding appropriate interventions. Furthermore, elucidating the role of comorbidities in suicide thoughts and behaviors could function to broaden the field's understanding of suicide as a phenomenon related to a variety of disorders, rather than principally mood disorders. Although the association between depression and suicide may be particularly robust (Naragon-Gainey & Watson, 2011), some evidence suggests that other clusters of disorders, such as anxiety disorders, may share a unique and potentially predictive role with suicide thoughts and behaviors.

#### Suicide and Anxiety

Prior work has shown that symptomology commonly associated with anxiety disorders may be linked to suicide. Namely, agitation, panic, and severe psychic anxiety have all been associated with suicide ideation (Norton et al., 2008). However, many of the studies linking anxiety symptoms to suicide thoughts and behaviors were inspired by the role of these symptoms in mood presentations due to the well-known and robust literature on mood disorders and suicide (e.g., Miret et al., 2013; Nierenberg et al., 2001). Given the comorbidity of mood and anxiety disorders, it is perhaps unsurprising that the relationship between mood disorders and suicide has led to questions about anxiety disorders and suicide. In turn, more recent work has examined whether an anxiety disorder diagnosis might be related to risk for suicide over and above a diagnosis of a mood disorder.

To date, there is mixed empirical support for a relationship between anxiety and suicide that exists either irrespective of mood disorder symptoms or controlling for such symptoms. For example, prior work demonstrated an association between panic disorder (PD) and social anxiety disorder (SAD) with suicide ideation over and above risks related to comorbid mood disorders (Norton et al., 2008). Other work has shown a significant association between posttraumatic stress disorder (PTSD) and suicide ideation and attempts when controlling for lifetime mood disorders, but not between other anxiety disorders and suicide thoughts and behaviors (Sareen et al., 2005). Interestingly, a metaanalysis, which included only studies that controlled for depressive symptomology in analyses, suggested that generalized anxiety disorder (GAD), SAD, PTSD, and PD were associated with suicide ideation while obsessive-compulsive disorder (OCD) was not (Kanwar et al., 2013). Others have replicated these results and demonstrated a link between suicide ideation and PTSD, GAD, specific phobia, and SAD (Bentley et al., 2016). Thus, it appears that the relationship between anxiety and suicide is complex. Specifically, some prior work demonstrated connections between many anxiety disorders (e.g., PD, SAD, PTSD) and suicide thoughts and behaviors while other studies provided conflicting evidence that only PTSD, but not other anxiety disorders, was significantly associated with suicide. Therefore, the extant literature on the topic is inconsistent.

Given mixed findings regarding the independent relationship between anxiety disorders and suicide thoughts and behaviors in epidemiological and clinical studies, it is important to also consider the relationship between anxiety and suicide from a

theoretical perspective. Specifically, potential shared mechanisms between anxiety and suicide might be important in explaining these relationships. One important shared predictor might be social support, or lack thereof. Social isolation is strongly associated with worse mental health outcomes (Hawton et al., 2011; Leigh-Hunt et al., 2017) and is well-documented among individuals who experience suicide thoughts or engage in suicide behaviors (Goldsmith et al., 2002; Trout, 1980). Furthermore, a seminal theory of suicide suggests that thwarted belongingness, the sense that a person is not accepted or connected socially, is one of the three most important predictors for suicide behavior (Van Orden et al., 2010). In light of these findings, it is reasonable to suspect that anxiety related to social experiences may be particularly relevant to suicide.

#### Suicide and Social Anxiety Disorder

SAD, characterized by a persistent fear of scrutiny in one or more social or performance situations, is a common psychological disorder with an estimated lifetime prevalence ranging from 5.0 to 12.1% (American Psychiatric Association, 2013; Schneier et al., 2010). SAD is associated with an array of negative psychosocial outcomes, including occupational impairment and the development of comorbid mood. anxiety, or substance use disorders (Beesdo et al., 2007; Moitra et al., 2011). Unsurprisingly, SAD also contributes to deficits in social relationships and can, in turn, lead to a pervasive sense of isolation among those who suffer with the disorder (Barrera & Norton, 2009; Teo et al., 2013). Due to the transdiagnostic relevance of social isolation, suicide and SAD may share isolationrelated etiological mechanisms or maintaining factors that complicate treatment and increase the risk that an individual might experience and act upon suicide thoughts or plans. Relatedly, it is possible that other features of SAD, such as avoidance (Moitra et al., 2008), misunderstanding of social cues (Hofmann, 2007), and occasionally, social skills deficits (Segrin, 1996), may culminate in rumination. Ruminative thoughts about perceived failures in the social realm may further compound feelings of isolation and worthlessness and contribute to thoughts of ending one's life. Therefore, a better understanding of the potential relationship between suicide and SAD may be helpful in tailoring appropriate psychological interventions.

Similar to the broader research on the relationship between anxiety disorders and suicide, the extant research regarding the link between suicide and SAD has been inconsistent. Some studies have demonstrated that the presence of SAD is associated with greater instances of suicide ideation and suicide attempts (Bentley et al., 2016; Cougle et al., 2009). This work has been replicated in two large epidemiological samples (Thibodeau et al., 2013). However, other studies have suggested that SAD is among the weaker predictors of suicide, and that different disorders, such as major depressive disorder or PTSD, may be more robust predictors of risk (Dalrymple & Zimmerman, 2007; Sareen et al., 2005).

Importantly, there have been several limitations to the prior work examining the relationship between social anxiety and suicide reviewed here. First, most samples were not primarily selected for social anxiety. A majority of studies examined inpatients and many others employed specific samples such as college students and military personnel that may not be generalizable to the broader population (e.g., Bentley et al., 2016; Norton et al., 2008). Second, although several studies examined social anxiety as a construct, not all studies included analyses of confirmed cases of social anxiety (e.g., Norton et al., 2008). The inclusion of subjects who did not meet diagnostic criteria for SAD may have obscured the relationship between social anxiety and suicide in prior samples. Third, several prior studies have examined the link between SAD and suicide in samples with very few incidences of social anxiety or suicide (e.g., Chan et al., 2014; Nordström et al., 1996). Fourth, although some studies reported comorbidity profiles (e.g., Dalrymple & Zimmerman, 2007), many did not report the co-occurrence of particular disorders within study samples (e.g., Thibodeau et al., 2013), rendering their results more difficulty to interpret. Fifth, some studies used only a single measure of suicide and many studies examined the construct as a binary outcome (e.g., Kanwar et al., 2013; Thibodeau et al.). Relatedly, studies often measured different aspects of suicide. For example, some have examined deaths by suicide, others have assessed suicide attempts, and many have studied suicide ideation or behaviors using different measures and different rating time frames, making it challenging to draw comparisons across samples. Sixth, a significant proportion of prior studies had majority White samples (e.g., Kanwar et al.). Additional demographic information

was not always presented. Given the tendency towards Western, Educated, Industrialized, Rich, and Democratic (WEIRD; Henrich et al., 2010) samples in the field, participants in majority white samples may not have been representative of the true population.

Although prior studies made significant strides in examining the relationship between SAD and suicide, the above limitations have restrained our ability to comprehensively understand the risk social anxiety may pose for suicide. Thus, there remains an immense need to examine the potential association between SAD and suicide in a sample of individuals with confirmed SAD diagnoses and a high prevalence of suicide thoughts and behaviors. This work has the potential to improve our understanding of suicide risk and guide more tailored interventions for those with SAD.

#### Present Study

The current study examines the relationship between social anxiety and suicide thoughts and behaviors in a large sample of individuals with SAD seeking employment services at a community agency. This study utilizes baseline data from an ongoing randomized controlled trial (Himle et al., 2019) and conducts exploratory analyses to understand the role of comorbidity in suicide. We examine suicide thoughts and behaviors first as it relates to SAD symptom severity, and then as it relates to other anxiety and mood symptomology in addition to SAD. In controlling for comorbidities, we will be able to more specifically understand the relationship between social anxiety and suicide. We also examine the relationship between various well-established measures of suicide thoughts and behaviors in an effort to better understand the possible role of heterogeneity among assessment methods in the inconsistent findings of prior research.

This study builds upon extant literature by addressing each of the aforementioned limitations of prior work. First, our study sample is community-based and highly diverse and, as such, is expected to be more generalizable than typical samples (e.g., psychiatric inpatients) used to understand the relationship between comorbid disorders and suicide. Second, the sample is comprised entirely of individuals who met diagnostic criteria for SAD. Third, suicide thoughts and behaviors were highly prevalent in this sample. Fourth, we examine and control for comorbidities in the sample. Fifth, we examine suicide both dichotomously and dimensionally through multiple assessment tools. Sixth, our data is over sampled for racial and ethnic minorities as well as individuals who are unemployed or of a lower socioeconomic status.

We hypothesize the following: (a) SAD symptom severity will be positively associated with suicide thoughts and behaviors; (b) SAD symptom severity will explain unique variance in suicide thoughts and behaviors over and above symptoms of depression; and (c) that suicide measures will demonstrate moderate convergence. To our knowledge, this would be the first study of suicide thoughts and behaviors among a sample of individuals with SAD alone and SAD with comorbidities.

#### Method

#### Participants

Data for the current project were collected as a part of Reaching Independence Through Successful Employment (RISE), a multi-site, longitudinal study examining the impact of social anxiety on employment. Adults (N = 295; ages 18 to 60, M =43.87, SD = 11.17) were recruited from Jewish Vocational Services (JVS) locations in Los Angeles and Detroit. JVS is a nonprofit organization that has multiple centers across the United States that provide job training, networking, and other skills essential for individuals looking to obtain employment or change career paths. The sample was primarily female (56.6%). Participants were highly racially and ethnically diverse (41.7% Black/African American; 33.2% White/Caucasian; 10.2% Multiracial). Few in the sample were married or partnered; the majority identified as single (58.3%), and others as separated (3.4%), divorced (10.8%), or widowed (1.4%). Most participants were of low socioeconomic (SES) status, with the majority (50.5%) having an annual income of less than \$10,000 per year. Slightly over half of participants (51.2%) reported currently being homelessness or having an unstable housing situation. Importantly, all individuals in this sample were currently unemployed or seeking employment services due to current unstable or unsatisfactory employment. Greater detail of demographic characteristics of the sample are presented in Table 1.

#### Measures

Participants underwent the Mini-International Neuropsychiatric Interview (MINI; Sheehan et al., 1998), a structured diagnostic interview that assessed for social anxiety, mood disorders, anxiety disorders, and other psychological disorders. In addition to the binary diagnostic classification for each disorder determined by the MINI (i.e. presence or absence of the disorder based on DSM-5 criteria), several measures were employed to examine symptom severity related to particular disorders.

Social anxiety symptom severity was measured using the Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987). The LSAS measures social anxiety symptomology during the past week. The LSAS includes ratings of both fear or anxiety and avoidance on a 4-point Likert scale, where 0 indicates no anxiety or avoidance and 3 indicates severe anxiety or avoidance. The LSAS yields performance anxiety and social anxiety subscales, as well as total severity scale, which includes fear and anxiety as well as avoidance (i.e., a sum of all items). The present study used the total severity scale in analyses.

Depressive symptomology was examined using the Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001). The PHQ-9 assesses frequency of symptoms of depression in the past two weeks on a scale from "not at all" (0) to "nearly every day" (3). A total score was derived for each participant by creating a sum of all items.

General anxiety symptoms (e.g., worry, autonomic arousal) were examined using the 6-item anxiety subscale of the Brief Symptom Inventory-18 (BSI-18; Derogatis, 2001). The BSI-18 is an 18-item self-report scale which measures past week distress associated with anxiety on 5-point scale ranging from with "not at all" to "extremely" distressing. The anxiety subscale is sum of scores on 6 items associated with anxiety (e.g., "feeling tense," "feeling fearful").

Suicide ideation and behaviors were assessed through several measures. As discussed above, measures differ in aspects of suicide assessed and timeframe within which questions are framed. For a comparison of suicide measures used, see Table 2. A primary measure of suicide thoughts and behaviors was an item from the clinicianadministered Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962). The suicide item assessed past month suicide risk, including thoughts, behaviors, plans, and attempts, on a 7-point Likert scale, with 1 indicating no suicide thoughts, behaviors, plans, or attempts and 7 indicating extremely severe suicide risk.1 Of note, individuals who endorsed a 6 or 7 (i.e., severe or extremely severe) were excluded

Prese	nt Suicide	Absent Suicide	Total Sample
Though	ts/Behaviors	Thoughts/Behaviors	(N=295)
Q	N=77)	(N=216) <sup>1</sup>	
Gender	Percent	Percent	Percent
Female	57.1	56.5	56.6
Male	40.3	42.6	42.0
Other Gender Identity	2.6	0.9	1.4
Age	Mean	Mean	Mean
	43.3	43.8	43.9
Race	Percent	Percent	Percent
Black or African American	36.4	43.5	41.7
White or Caucasian	37.7	31.9	33.2
Asian or Asian American	5.2	2.3	3.1
American Indian or Alaska			
Native	1.3	1.9	1.7
Multiracial	9.1	10.2	9.5
Other Racial Identification	9.1	9.7	10.2
Missing	1.3	0.5	0.7
ncome	Percent	Percent	Percent
Less than \$10,000	49.4	50.9	50.5
\$10,000-\$19,999	11.7	15.7	14.9
\$20,000-\$39,999	16.9	12.0	13.2
\$40,000-\$59,999	9.1	8.8	8.8
\$60,000-\$79,999	3.9	4.6	4.4
\$80,000 or More	1.3	1.4	1.4
Don't Know	0.0	0.5	0.3
Declined to Answer	2.6	1.4	1.7
Missing	5.2	4.6	4.7
Housing	Percent	Percent	Percent
Own House/Apartment	11.7	8.8	9.5
Rent House/Apartment	36.4	33.3	34.6
Hotel/Motel	1.3	0.9	1.0
Living with Friends/Family	24.7	16.2	18.3
Emergency/Domestic			
Violence Shelter	2.6	1.9	2.0
Parole Facility	0.0	1.9	1.4
Transitional Housing for			
Homeless	13.0	22.7	20.0

*Table 1.* Demographic and Diagnostic Information for the Sample (*N* = 295)

#### (Table 1 continued)

Substance Abuse Treatment						
Center	1.3		4.2		3.4	
Other	3.9		5.6		5.1	
Missing	5.2		4.6		4.7	
Relationship Status	Percent		Percent		Percent	
Married	9.6		11.7		10.5	
Live-in Partner	1.4		5.8		4.4	
Romantic Relationship	8.2		5.8		6.1	
Separated	2.7		3.9		3.4	
Divorced	13.7		10.7		10.8	
Widowed	2.7		1.0		1.4	
Single	61.6		60.7		58.3	
Missing or Unknown	0.0		0.5		5.0	
Employment	Percent		Percent		Percent	
	Yes	No	Yes	No	Yes	No
Worked in the Last Month <sup>2</sup>	28.6	67.5	34.7	62.5	32.9	64.1
Mental Health Diagnoses						
	Percent		Percent		Percent	
	Yes	No	Yes	No	Yes	No
Major Depressive Disorder	44.2	55.8	40.5	59.6	42.0	58.0
Persistent Depressive						
Disorder	32.8	67.2	24.6	75.5	26.8	73.2
Bipolar I Disorder	13.0	87.0	12.0	88.0	12.2	87.8
Bipolar II Disorder	1.3	98.7	1.4	98.6	1.4	98.6
Suicide Behavior Disorder	29.9	70.1	23.1	76.9	25.1	74.9
Social Anxiety Disorder	100.0	0.0	100.0	0.0	100.0	0.0
Generalized Anxiety Disorder	70.1	29.9	47.7	52.3	53.2	46.8
Panic Disorder	32.5	67.5	19.0	81.0	22.7	77.3
Agoraphobia	16.9	83.1	15.7	84.3	15.9	84.1
Obsessive-Compulsive						
Disorder	16.9	83.1	8.8	91.2	10.8	89.2
Post-Traumatic Stress						
Disorder	22.1	77.9	17.6	82.4	18.6	81.4
Taking Medication for						
Mental Health	37.7	62.3	32.5	67.5	33.7	66.3

*Note.* Presence or absence of suicide thoughts and behaviors was determined using the Brief Psychiatric Rating Scale (BPRS) suicide item given that this item was a primary outcome measure in regression analyses. Individuals with a rating of 1 on the BPRS suicide item were coded as absent in above demographic variables. Any rating greater than 1 was coded as present.

<sup>1</sup>Data missing for 2 participants for the BPRS suicide item, which was used to categorize the sample by present/absent suicide thoughts and behaviors in the above table, given that this was the primary outcome measure used in regression analyses. <sup>2</sup>23.9% of data missing among individuals with suicide thoughts and behaviors. 2.8% of data missing among those without suicide thoughts and behaviors. 3.0% of data missing from total sample.

Measure	Time Frame	<b>Binary or Continuous</b>	Aspects of Suicide	Interviewer-Rated or
		Measurement Scale	Assessed	Self-Report
BPRS Suicidality	Past Month	Continuous	"Suicidality," defined as	Interviewer-Rated
			passive or active ideation	
			and impulsive or pre-	
			meditated attempts	
MINI-Current	Past Month	Binary	Suicide thoughts,	Interviewer-Rated
Suicidality			behaviors, plans, and intent	
MINI-Suicide	Lifetime	Binary	Lifetime history of suicide	Interviewer-Rated
Behavior Disorder			behaviors and attempts	
PHQ-9 Past Two	Past Two	Continuous	Broad index of suicide-	Self-Report
	Weeks		relevant symptoms	
			including passive and	
			active suicide ideation and	
			thoughts of self-harm	

#### Table 2. Details on Measures of Suicide in the Present Study

Table 3. Summary of Hierarchical Regression Model

Step	Variable	ß	Standard Error	Significance
1	LSAS	.005	.002	.001
2	LSAS	.003	.002	.131
Z	BSI Anxiety	.025	.008	.002
3	LSAS	.002	.002	.194
	BSI Anxiety	001	010	.894
	PHQ-9	.035	.009	.000

Note. Criterion variable is the BPRS suicide item.

from the study due to safety concerns after completing baseline questionnaires. Thus, the scale used for the present study sample ranged from 1 (i.e., not present) to 5 (i.e., moderately severe suicide thoughts and behaviors). The second and third measures of suicide thoughts and behaviors in this study derived from the MINI (Sheehan et al., 1998). Current risk for suicide was assessed by questions regarding suicide ideation, behaviors, plan, and intent within the past month.<sup>2</sup> The MINI also assessed for suicide behavior disorder (SBD), which incorporates history of suicide behavior by asking about lifetime suicide attempts. Clinicians assessed the presence or absence

of suicide thoughts and behaviors as well as SBD with binary ratings (i.e., yes/no). Lastly, we used the suicide item from the PHQ-9 (Kroenke et al., 2001). Similar to depressive symptomology on the scale, suicide ideation and thoughts of self-harm in the past two weeks was rated on a scale from 0 ("not at all") to 3 ("nearly every day").

#### Procedure

The measures listed above were completed as part of a baseline session conducted at a JVS location. The MINI and BPRS were completed by a trained and reliability certified clinical interviewer in the mental health field. Self-report measures were completed by the participant on a laptop computer under the supervision of the clinical interviewer. Exclusion criteria were as follows: current psychotic symptoms and/or manic symptoms that would interfere with study participation; current anorexia nervosa; prior course of CBT for SAD (at least 8 sessions); concurrent CBT outside of the study; prominent suicide/homicidal ideation with imminent risk; and cognitive or communication difficulties that would interfere with an individual's ability to engage in the study. Potential participants found to be ineligible were provided a list of alternative mental health resources. Individuals excluded due to suicide severity were assisted in obtaining a more appropriate level of care by the clinical interviewer (and the licensed supervisor in the cases where the clinical interviewer was not a licensed clinician). All study procedures were approved by the Institutional Review Board of each academic site (UCLA and UM). For more details regarding the study design, please see Himle et al., 2019.

#### Analyses

One-way ANOVA and independent samples t-tests examined differences in severity of suicide thoughts and behaviors based upon demographic variables. All demographic analyses used the BPRS suicide item to assess differences in mean levels of suicide thoughts and behaviors between groups. Differences in suicide thoughts and behaviors between racial groups (i.e., Black or African American; White/Caucasian; Asian/Asian American; American Indian/Alaska Native; Native Hawaiian or Other Pacific Islander; Multiracial), SES classifications (i.e., <\$10,000; \$10,000-\$19,999; \$20,000-\$39,999; \$40,000-\$59,999; \$60,000-\$79,999; > \$80,000), and housing status (i.e., own home; rent home; living in hotel; living with friends/family; living in emergency/domestic violence shelter; parole facility; transitional housing; substance abuse treatment center) were assessed with one-way ANOVAs. Differences in suicide thoughts and behaviors across gender and employment status (i.e., worked for pay in past month; did not work for pay in past month) were assessed using independent samples t-tests.

Hierarchical linear regression modeling was used to assess the relationship between social anxiety (using the LSAS total scale) and suicide (using the dimensional BPRS suicide item). Regression analyses examined the effects of social anxiety alone (LSAS total), social anxiety and comorbid depression (LSAS total and PHQ-9), and social anxiety and comorbid anxiety disorders (LSAS total and BSI-Anxiety subscale), on suicide thoughts and behaviors (BPRS suicide item).

Lastly, comparisons of measures of suicide were employed to understand convergence and divergence of different assessments of suicide. Correlations assessed associations between different continuous measures of suicide thoughts and behaviors (i.e., BPRS item, PHQ-9 item). Next, independent samples t-tests were used to confirm that affirmative categorical measures of suicide (i.e., MINI current suicide risk and MINI suicide behavior disorder) were associated with higher scores on dimensional ratings of suicide.

#### Results

# Sample Demographics and Comorbidities

Given the unique nature of the present sample, we first examined diagnostic variables to better understand the proportion of the sample with particular comorbidity profiles. In addition to the presence of SAD, a significant proportion of the sample met diagnostic criteria for depressive disorders, other anxiety disorders (e.g., GAD, PD), or trauma and stress-related disorders. In fact, only 25 (8.3%) cases in this sample had SAD alone (i.e., without any comorbid mood or anxiety diagnoses). As far as anxiety comorbidities, 34.9% of the sample met criteria for one anxiety disorder in addition to SAD. Another 32.9% of the sample met criteria for two or more anxiety disorders in addition to SAD.

Due to the robust link between depression and suicide, we examined the prevalence of mood disorders both generally and based upon specific diagnoses in this sample. As far as mood symptomology, 10.2% of the sample met criteria for one mood disorder comorbid with SAD. 83.4% of the sample met criteria for a current mood disorder. An additional 73.2% of the sample had 2 or more current mood disorders, meaning that 83.4% of the sample had a current mood disorder. The vast majority of the sample met criteria for a current major depressive episode (80.7%). Nearly half of the sample met criteria for major depressive disorder (42.0%) and many others met diagnostic criteria for persistent depressive disorder (26.8%). Some participants also met diagnostic criteria for bipolar disorder I or II (13.6%). In addition to current mood symptomology, many participants met criteria for past major depressive disorder. Of note, nearly the entire sample (99.2%) endorsed at least one major depressive episode in their lifetime. For additional diagnostic information, see Table 1, which presents demographic information among individuals with and without suicide thoughts and behaviors.

#### Demographic Predictors of Suicide

We assessed the role of demographic factors in predicting suicide thoughts and behaviors due to well-documented trends based upon sex and race (e.g., Mościcki, 1997) and in the event that certain demographic variables might be important to include as covariates in other analyses. One-way ANOVAs assessed differences in suicide thoughts and behavior based upon race, SES, and housing status. Results were not significant for race (F[5, 285] = .321, p= .90), SES (F[5, 267] = .512, p = .77), or housing status (F[7, 256] = .869, p = .53). Independent samples *t*-tests were employed to examine the role of binary variables, sex and employment status, in predicting suicide thoughts and behaviors. Results were not significant for sex (t[287])= 1.236, p = .22) or employment status (t[282] = -1.509, p = .13). Thus, there were no group differences among demographic variables that predicted suicide thoughts and behaviors and as such, demographic variables were not included as covariates in regression analyses performed.

# *Prevalence of Suicide Thoughts and Behaviors*

Suicide thoughts and behaviors were frequently endorsed in the present sample. On the BPRS, 26.1% of the sample indicated past month suicide thoughts and behaviors (i.e., a score above 1; M = 1.37, SD = .70). On the PHQ-9 suicide item, 20.7% of the sample indicated suicide ideation in the past 2 weeks (i.e., a score above 0; M = 0.24, SD = 0.53). Based upon MINI criteria, just under half of the sample was at current risk for suicide, (43.4%), indicating factors such as current suicide thoughts and/or suicide behaviors. Of note, the MINI item assesses a wide range of suicide thoughts and behaviors, including ideation, intent, and plans, which likely

<sup>&</sup>lt;sup>1</sup>The BPRS uses the term suicidality in the measure to assess severity of symptoms. The scale anchors as written in the BPRS are 1 = no suicidality and 7 = extremely severe suicidality. For the sake of specificity in this manuscript, we refrain from using the term suicidality in text. Instead, when referring to this item, we often state "suicide thoughts and behaviors." In tables, we refer to the item as it is written in the BPRS.

<sup>&</sup>lt;sup>2</sup>The official term used in the MINI is "suicidality." As is the case with the MINI, we refrain from using the term suicidality in text and instead refer to this item as "current suicide risk." In tables, we refer to the item as it is written in the MINI.

accounts for the greater proportion of individuals endorsing suicide thoughts and behaviors on this item. Approximately one quarter of the sample (25.1%) were classified as having SBD, indicating a lifetime history of suicide behavior. Given the potential impact of the number of participants with a comorbid mood or anxiety disorders, we also examined the prevalence of suicide thoughts and behaviors among the subset of the sample with only SAD (i.e., no comorbid mood or other anxiety disorder). Among this subset of the sample with SAD alone (n = 25), several participants were at current suicide risk (16.0%) and met criteria for SBD (16.0%).

#### **Regression Analyses**

To examine dimensional predictors of suicide, we assessed the relationship between social anxiety symptoms, suicide, and comorbid depressive or anxiety symptomology using hierarchical linear regression. Social anxiety symptomology predicted suicide thoughts and behaviors significantly when entered alone ( $\beta = .005$ , p < .01), but when general anxiety or mood symptoms were entered in subsequent steps, the relationship between social anxiety and suicide was reduced to non-significance. The addition of depressive symptoms<sup>3</sup> in the third step resulted in the contribution of both social anxiety and general anxiety symptoms being reduced to nonsignificance. This suggests that a majority of the variance in severity of suicide thoughts and behaviors in the present sample is best accounted for by mood symptomology. See Table 3 for detailed results from the regression analyses.

#### **Convergence of Suicide Measures**

We examined the convergence and divergence of different measures of suicide. First, we examined the association between the BPRS and PHQ-9 suicide items.<sup>4</sup> A moderate correlation between these items was observed (r = .57, p < .001). Next, independent samples t-tests were used to predict severity of suicide thoughts and behaviors (i.e., BPRS and PHQ-9 suicide items) from categorical measures of suicide risk (MINI current suicide risk and SBD). In predicting the BPRS suicide item from MINI current suicide risk, there was a significant difference in severity of suicide thoughts and behaviors (i.e., BPRS item) between participants who endorsed suicide thoughts and behaviors on the MINI and those who did not. As expected, participants with current suicide risk on the MINI had higher severity ratings of suicide

thoughts and behaviors on the BPRS item than those who did not (t = 8.79, p < .001). The same was true when predicting suicide thoughts and behaviors on the PHQ-9 suicide item from MINI current suicide risk, although the effect was not as robust (t =2.16, p < .05). Interestingly, the prediction of severity of suicide thoughts and behaviors from MINI SBD was not significant for either the BPRS item (t = 1.22, p > .05) or the PHQ-9 item (t = 0.95, p > .05), suggesting less convergence between these measures of suicide.

#### Discussion

The present study examined the relationship between social anxiety and suicide in a community sample of adults seeking employment services. We expected that social anxiety symptom severity would be related to suicide thoughts and behaviors, and that this relationship would exist over and above that between depression and suicide thoughts and behaviors. Results did not support this hypothesis. When current depressive symptoms were added to the regression equation, the relationship between social anxiety symptom severity and suicide thoughts and behaviors was reduced to nonsignificance. This suggests that the high prevalence of suicide thoughts and behaviors observed in the sample were best accounted for by the current depressive symptoms that were highly comorbid with social anxiety. Although our hypotheses were not supported, this work suggests that community samples of adults presenting with social anxiety may in fact have highly complex clinical presentations that require continued safety monitoring and perhaps more robust treatment than providers might initially understand. Our work also suggests that pure SAD presentations in functionally impaired community samples may be extraordinarily rare.

This study was particularly notable for its highly unique sample, which differed from the samples typically used in this area of research in several ways. First, all participants in the study had a current diagnosis of social anxiety. Second, the sample was diverse both racially and ethnically, with a significant proportion of the sample identifying as a racial or ethnic minority, and socioeconomically, with many study participants reporting incomes below the poverty line. Third, the study sample was clinically severe. In addition to social anxiety disorder, nearly the entire sample had a current or past diagnosis of major depressive disorder. Many participants also met criteria for additional anxiety disorders. Thus, although participants were recruited primarily for the presence of social anxiety disorder, many people in the sample presented with complex comorbidities. Participants also demonstrated a high degree of functional impairment such as unstable employment, housing, and romantic relationships.

Within this sample, we also found that a large proportion of individuals with social anxiety presented with current suicide thoughts and behaviors and a history of suicide behaviors. Regression analyses revealed social anxiety to be a significant predictor of suicide thoughts and behaviors, although results from a hierarchical regression suggest that this relationship appeared to be driven primarily by comorbid depressive symptomology. These findings, which diverged from our hypotheses, point to the possibility that SAD without comorbidities is uncommon, at least in this community sample of job seekers. Interestingly, demographic variables that have been associated with levels of suicide risk in

<sup>4</sup>Full scales were not used in these analyses. Instead, we examined only suicide-specific items from the BPRS (item 4) and PHQ-9 (item 9).

<sup>&</sup>lt;sup>3</sup>The PHQ-9, used here as an index of depression symptoms, includes an item that assesses suicide ideation directly. This poses a concern for analyses predicting severity of suicide thoughts and behaviors from the PHQ-9 total scale. Given the widespread use of the PHQ-9, we conducted analyses with the full scale. However, due to concern about validity of analyses, we also conducted regression analyses using a modified PHQ-8 ( $\alpha = .90$ ), which excluded the suicide item. Results were nearly identical. In the third regression step, in which the PHQ-8 was added, the relationship between the LSAS and BPRS suicide item remained non-significant ( $\beta = .002$ , p = .183), as did that between the BSI and BPRS suicide item was highly significant ( $\beta = .033$ , p < .001) and almost identical to that found when assessing the relationship with the PHQ-9 ( $\beta = .035$ , p < .001). Due to the similarity of these analyses, and the widespread use of the PHQ-9 as is, we opted to present analyses with the PHQ-9 total score.

prior research (e.g., gender, race) were not significant predictors of suicide thoughts and behaviors within this sample. It may be that higher levels of clinical severity and functional impairment in this sample (i.e., SAD with comorbid mood and/or anxiety, unemployment) reduced the impact of particular demographic variables in predicting suicide thoughts and behaviors.

Our analyses regarding the convergence of our suicide measures yielded interesting results. As expected, the dimensional measures of current suicide thoughts and behaviors (e.g., BPRS and PHQ-9 items) used in this study were significantly and positively correlated. However, the correlation was moderate, suggesting that the two measures provided distinct information. With regard to the categorical assessments of suicide risk, although current suicide risk per the MINI was associated with significantly higher scores on dimensional measures of suicide as expected, the presence of a lifetime history of suicide behavior was not. Thus, in the present sample, the presence or absence of past suicide behavior of a participant was not meaningfully related to current severity of suicide thoughts and behaviors. These results highlight the importance of thoughtfully selecting measures of suicide thoughts and behaviors when engaging in clinical and research activities as even "gold standard" measures of suicide severity may provide disparate information due to differences in domains of suicide risk assessed, specific item wording, time frame assessed, and whether measures provide dimensional information about suicide severity as opposed to binary (i.e., yes/no) indices of risk, all of which may fail to comprehensively capture the dynamics of and nuances in suicide thoughts and behaviors.

Anecdotally, although a large proportion of participants in this study presented with suicide thoughts and behaviors and very few participants were excluded due to the severity of their suicide risk, there were very few adverse events or emergency situations related to suicide thoughts and behaviors in the present study. In the rare instances when a participant presented with imminent suicide risk at baseline or developed a marked worsening of suicide thoughts and behaviors during the course of the study, the IRB-approved suicide protocol in place was effective for handling the situation. This is especially notable given that the study was conducted in community settings with either minimal or no mental health staff on site. Therefore, results highlight the feasibility of collecting data on suicide thoughts and behaviors among community samples when appropriate safety measures are in place.

The present study had several strengths. In addition to the strengths related to the sample that were noted above, this study built upon prior work by delineating comorbidities, examining suicide thoughts and behaviors among individuals with confirmed diagnoses of SAD, and using multiple measures of suicide. The current study also employed a dimensional approach in assessing social anxiety symptom severity as it relates to severity of suicide thoughts and behaviors.

Our results should be considered in the context of several limitations. First, there were very few individuals with social anxiety alone (n = 25), which may have limited our capacity to look at the unique predictive power of social anxiety. However, the presence of so few cases may highlight important comorbidity patterns in diverse community samples. Specifically, it is unclear whether the small number of SAD cases without mood or additional anxiety comorbidities is a peculiarity of the present sample, or whether our sample suggests greater comorbidity than previously understood between SAD and mood symptoms. Our findings raise questions about how common it is to observe SAD without current or past comorbid mood symptoms in diverse samples seeking community services, which should be explored among future community samples in the future. Second, our analysis included only participants who met DSM diagnostic criteria for social anxiety disorder. It would be informative to study the role of suicide thoughts and behaviors among subclinical social anxiety cases in the future. Third, although the study included multiple measures of suicide thoughts and behaviors, none of the measures were entirely comprehensive and it is possible that a standardized and multi-item questionnaire measuring suicide risk could more accurately assess the presence, severity, and dynamic nature of suicide thoughts and behaviors. Fourth, despite the fact that this sample was community-based, participants were fairly clinically severe. As such, some findings may not generalize to lowerseverity groups. Fifth, and importantly, the study was cross-sectional in nature, preventing any causal inferences or ability to determine the stability of suicide-related symptoms over time.

Despite these limitations, our study has important clinical implications. Our analyses suggest that individuals with social anxiety who seek community services are highly likely to experience suicide thoughts and behaviors, perhaps even in the absence of comorbid mood disorders. Although many clinicians are accustomed to assessing suicide risk in the context of mood disorders, the practice may be less common if patients are presenting with anxiety symptomology. Our work suggests that individuals with social anxiety may be a high-risk group for suicide, particularly when they are presenting with notable functional impairment (e.g., difficulty obtaining or maintaining employment). It is therefore essential that clinicians accurately assess for and address suicide risk with this group.

Future research should replicate these findings in a large sample of individuals with social anxiety over time. It is also important to continue to clarify mechanisms driving this association. As such, examining potential mediators and moderators of the relationship between social anxiety and suicide is crucial. Doing so would not only enhance our understanding of these chronic conditions, but also inform novel interventions for subgroups that may be at particular risk.

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This research was supported by a two-site grant (R01-MH102274) from the National Institute of Mental Health (NIMH) to M. G. Craske and to J. Himle. The content is the responsibility of the authors and does not necessarily represent the official views of the NIMH.

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The authors of this submission have no real or potential conflicts of interest to disclose.

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# The History, Ethics and Current State of Suicide Policy in America's Correctional System

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IN THE UNITED STATES OF AMERICA, suicide is the leading cause of death in prisons and jails, with inmates of both types of facilities combined at nine times the risk for dying by suicide than the general population (Awenat et al., 2017; Bonner, 2000). The suicide rate within our correctional system has been rising in recent years; within prisons, the suicide rate has risen 30% in just one year from 2013 to 2014. Notably, American jails have reported the highest suicide rate since data recording began in 2001 (Noonan, 2016). The rate of correctional suicide tends to vary greatly based on the state; some facilities have reported a rate for jail suicides as high as 16 times that of the general population (Daniel, 2006). Furthermore, high rates of suicide attempts and suicide deaths have been consistently found in prison systems worldwide (Hayes & Blaauw, 1997). Investigating the history of suicide prevention in correctional settings reveals that as recently as the turn of the millennia, the rate of suicide within correctional institutions was close to that of the general population following a peak in the 1970s (Schimmel et al., 1989); this suggests that the surge in correctional suicide rates is a trend that has developed over the last two decades.

In this commentary, we will cover the status of American correctional suicide prevention in 2020. We will examine the history of suicide prevention in correctional settings and the pendulum effect of peak highs, once-effective prevention efforts, and the modern rise of suicide rates. Additionally, we will assess the state of suicide within the juvenile justice system, and consider the fundamental ethics of the clinician's role in reducing the risk of prisonerpatient suicide. Many behavioral health clinicians work within the U.S. correctional system and play a central and critical role in ensuring the safety of the prisonerpatient both in emotional and behavioral health issues and in incidents of suicide crisis. As such, examining these issues will allow clinicians to thoughtfully consider how best to ensure the safety and overall

health of this underserved and highly vulnerable population.

## Correctional Suicide Prevention in the Present Day

A worrying trend has emerged in the rise of deaths by suicide within American jails and prisons. Recent years have seen a return to peak highs, with the latest year for which data was reported (2014) at a rate of 26 deaths per 100,000 in prisons, and a rate of 50 per 100,000 persons in jails (Noonan, 2016). Though national data on suicide deaths in correctional facilities has yet to be published past 2014, statewide data suggests that the suicide rate within correctional settings continues to increase. For example, in the Pacific Northwest of the U.S., jail suicides increased 62% since 2008, resulting in an alarming rate of 200 deaths by suicide per 100,000 cases (Wilson et al., 2018) compared to 14.2 deaths per 100,000 in the general population (Hedegaard et al., 2020). Additionally, the restrictions imposed by COVID-19 likely represent an additional layer of risk for inmates, consistent with data from the general population (Czeisler et al., 2020). There are many arguments as to how this disproportionate suicide rate has resurfaced, including: overcrowding and cyclic recidivism (Fazel et al., 2017), systemic victimization of the prisoner-patient (Daniel, 2006), increased resource demand of suicidal prisonerpatients (Torrey et al., 2014), lack of comprehensive policy efforts (Awenat et al., 2017), deficient care by clinicians and gaps between policy implementation (Knoll, 2010) and a disproportionate rate of mental illness within the correctional system (Goss et al., 2002) all have been identified as contributory factors. Currently, within the United States, there are 10 times more individuals with significantly impairing mental illnesses in jails and state prisons than there are in state mental health hospitals (Felthous, 2011).

Within correctional facilities, the current model of suicide prevention has created a system wherein prisoner-patients are

disincentivized to seek out care because of the heavy cost of endorsing suicidal ideation; these costs include possession restriction, paraphernalia checks, and restriction of recreation time. Paradoxically, Huey and McNulty (2005) found that as suicide rates correlate strongly with assigned prisoner-patient security level, prisoners on suicide watch eventually have a higher risk of dying from suicide after being assigned to suicide watch even after controlling for past suicide attempts. Though best practice guidelines recommend cohabitated cells for suicidal prisoner-patients, 73% of prisoner-patient suicides in 2011 occurred in single cells and 38% of these same suicides had been judged to be "not in need of treatment" by clinical staff (Knoll, 2010; Pompili et al., 2009).

On the part of policymakers, best practices are also only as effective as their adoption rate. The National Commission on Correctional Health Care (NCCHC) has set standards that stipulate a three-pronged review after a prisoner-patient becomes a suicide decedent, including an administrative review, a clinical mortality review, and a psychological autopsy for facilities to learn and adapt to better protect future prisoner-patients (NCCHC, 2008). However, national surveys indicate that the majority of jail suicides (63%) were not followed with a mortality review (Hayes, 2011). These results suggest a grim reality that correctional suicide is likely "managed," rather than proactively studied and used to prevent future victimization. However, that assertion leads us to consider a few questions: What were the factors that prompted the development of suicide prevention methods and why have they gradually become less effective in the modern day?

#### The History of Correctional Suicide Prevention

One of the most important components of understanding where we are in the field of correctional suicide is to understand where we have been. It has been argued (Frühwald & Frottier, 2005; Torrey et al., 2014) that after the two major waves of deinstitutionalization in the mental health care system in the 1950s and the 1970s, the institutional framework of mental health treatment in America became dismantled due to social and legal influences. America's mentally ill found themselves with no treatment options and a shortage of clinicians willing or able to engage with them due to deinstitutionalization, a process known as the Penrose Effect. Unfortunately, failures in effective shuttling and reintegration efforts caused many of those displaced by these developments to be thrown into legal trouble (Grecco & Chambers, 2019). Those displaced by these waves found few treatment options or appropriate avenues of care. Incarceration rates began to rise amidst Reagan-era crackdowns on drug and alcohol offenses, which led to a shift wherein the responsibility of mental health treatment was soon placed onto correctional institutions.

As public outcry began to bury the institutional model, rates of correctional suicide began skyrocketing; suicide within correctional facilities reached a peak in 1977, with prisons carrying a rate of 34 deaths per 100,000 persons—a high that we as a country have yet to match (White et al., 2002). In a similar trend, jail suicides also peaked, with some states reporting over 100 per 100,000 persons (Hayes, 1995). The trend of deinstitutionalization efforts at the beginning of the decade and record highs in correctional suicide at the tail end of that same decade is likely no coincidence.

Moving into the 1980s, attention was given to this disproportionate rate of correctional suicide. Early in the decade, the American Medical Association established the NCCHC, a commission tasked with improving resources for services available to inmates. The NCCHC published standards for suicide prevention and intervention practices within correctional settings. This program, termed the P-58 (later, transitioning to the code P-54) directive, established a multitude of best practices for correctional settings to address the problem of prisoner-patient suicide (Hayes, 1995). This program consisted of specific directives for facilities and clinicians involved with offender care. These factors included Identification, Training, Assessment, Monitoring, Housing, Referral, Communication, Interventions, Notification, Reporting, and Review. Not long after, in 1996, the Federal Bureau of Prisons began auditing correctional facilities for standards of care, including suicide prevention programs and releasing these reports publicly (FBOP Program Statement 5324.08, 2007). These policies were effective as they not only detailed best practices for correctional staff, but also put forth enforceable standards for facilities as well.

In many ways, suicide prevention policy developed similarly for both adult and juvenile facilities. A similar report for juvenile facilities, termed the Conditions of Confinement, was released by the Office of Juvenile Justice Delinquency Prevention (OJJDP) in 1999, which identified four suicide risk assessment criteria: written policy, intake screening for suicide risk, welltrained staff, and careful observation of those deemed suicidal. The report was disseminated as it was found that only 25% of facilities were implementing all four prevention practices.

These concentrated efforts led to radical changes in the rate of correctional suicide. Increased research attention and landmark liability cases begat policy shifts and the development of best practices (Hayes, 1995). The increased attention and effort resulted in a suicide rate as low as 16 per 100,000 people in 1994 (Hayes, 1995), a number comparable to the general population outside of correctional facilities. This trend, drawing roots from systemic changes in the 80s and 90s, would continue well past the next decade. In 2004, the trend continued to be stable at around 15 deaths per 100,000 persons in state and federal prisons. Local jails also saw a reduction in suicides; in the same year, jails carried a suicide rate of 39 per 100,000 persons (Noonan, 2016). Though still triple the suicide rate of the general population, this figure represents a serious reduction from rates found two decades before that were estimated as high as 107 per 100,000 persons (Hayes, 1989). These downward shifts suggest that, when confronted with high rates of correctional suicide, coordinated responses from policymakers, suicide researchers, and social advocates were able to create remarkable change. Unfortunately, changes of this scope and magnitude are rarely seen in juvenile settings, where youth suicide has been a persistent problem met with little in the way of research-driven reform.

#### Suicide Prevention in the Juvenile Correctional System

The troubling suicide trends seen in adult incarcerated populations unfortunately extend to juvenile offenders, housed both in juvenile and adult facilities. It has been estimated that youth offenders are at an increased risk of suicide, with 21 deaths per 100,000 as compared to 10 per 100,000 in the general population age group of 15 to 19 years of age; estimates vary, yet elevated risk of death by suicide has consistently been found (Gallagher & Dobrin, 2006; Hayes, 2009). Compounding this issue of juvenile suicide-related risk is the controversial subset of juveniles incarcer-

ated in adult prisons. Approximately 4,500 juveniles are housed in adult prisons and jails, and these youth are the inmate group most likely to die by suicide (MST Services, 2019; Sawyer, 2019). Juveniles under age 18 exhibited the highest risk, with 32 suicides per 100,000 inmates, at a rate of double that of older adult inmate populations. Compared to juveniles in the general population, it is estimated incarcerated youth in adult prisons are 36 times more likely to die by suicide (MST Services, 2019). Suicide risk likely varies as juveniles move through pre-trial, confinement and release stages; however, current literature focuses exclusively on confinement (Stokes et al., 2015). Within our juvenile system, we are still in dire need of facility transparency and suicide risk detection. Identifying effective prevention measures and implementing better processes will likely require the identification of risk at all points of contact throughout the criminal justice process. Once processed and incarcerated, most facilities lack screening and assessment tools to identify mental health problems and suicide risk. When a mental health disorder or imminent risk is identified, most juveniles, particularly those incarcerated in adult prisons, will often go without treatment. The OJJDP has identified several other important factors in improving the quality of care and ethical implementation of practices. These include: exploring factors that lead to disproportionate confinement of minorities, developmentally appropriate programming that includes monitoring and tracking of successes and failures of each program, investigation of pros and cons of mixing offender types versus grouping offenders with similar offense histories, facilitating access to family members by appropriate placement locations, increasing access to legal counsel and improving staff relationships (Sedlak & Rantana, 2014).

The trend of high suicide rates is arguably the culmination of many compounding factors, such as neurodevelopmental vulnerabilities, higher rates of victimization, and punitive models debatably asserted as rehabilitative. Mental health needs continue to not only be neglected within juvenile facilities, but among the correctional system at large. In a 2000 Bureau of Justice Statistics study, it was determined that juveniles comprised 1% of the adult prison population but 21% of the victims of inmate sexual assault. They are also 50% more likely to be attacked by a weapon than their adult counterparts (Austin et al., 2000). If the end goal of corinmates face heavy costs were they to hon-

rectional incarceration is rehabilitation, juveniles are in dire need of additional resources considering that they are still of developmental age, especially if successful reintegration into society is the state's ultimate goal. Improper and contradictory practices such as solitary confinement, punitive models of care over rehabilitation efforts, and insufficient mental health care consistently predicts decreased rates of successful reintegration and increased recidivism rates (Gordon, 2014). Many would contend that rehabilitation is perhaps most important at a young age, but this has been mostly ideological rhetoric and is not currently reflective of common practice in the criminal justice system. A more honest, rehabilitative approach would likely reduce suicide rates in our youngest, most vulnerable population and a major reform and a paradigm shift in corrections will need to occur for this view to become realized. In evaluating current practices and evaluating their role within all correctional contexts, both adult and juvenile, clinicians should consider the underlying ethics of the issue in order to determine where the alliance ruptures in correctional care have formed, and what can be done to mitigate suicide risk.

#### The Ethics of Correctional Suicide Prevention

We, as clinicians, must share the mindset that we promote measures that ensure life and disallow those that ensure death per the APA's Ethical Guidelines Standard 3.04, which states that clinicians must "minimize harm where it is foreseeable and unavoidable" (APA, 2016). However, it is also important that while we hold this doctrine close to heart, we also should be mindful of the costs associated with this approach. The establishment of correctional liability led prisons and jails to develop strict suicide intervention guidelines, including policy around mandated interventions. These measures shift from facility to facility, but often can result in total possession restriction, placement in "bam-bam bags," restrictions to finger foods and 10-minute check-ins; it has been argued that these policies create a dehumanizing environment, robbing the prisoner-client of any agency over their own care (Elger et al., 2015). An uncomfortable ambiguity arises from these practices, dire and necessary as they may be, over whether the system of treating suicidal prisonerpatients can be thought of as treatment, punishment, or both. Under this model,

estly indicate suicidal ideation, and these strict practices may disincentivize inmates from reaching out for help. Clinicians treating juvenile offenders should not only be knowledgeable of the unique challenges facing incarcerated youth, but arguably also take more precaution to the ethical concerns when treating them. Juvenile offenders are frequently adjudicated equally with adult offenders despite research consistently indicating significant increased risk of sexual abuse, physical assault and death by suicide as well as maturity and developmental disparities. Foucault (1979) argued that clinicians are "enmeshed in a nexus of power over

are "enmeshed in a nexus of power over prisoners in which they are by definition instruments of control and punishment by the State," and this power differential is a tension that is omnipresent in the relationship between the clinician and the prisoner-patient they are treating. While there are myriad stakeholders in the clinicianprisoner-patient dynamic, three arise as the most prescient in every interaction. The clinician is often pulled between two parties, in that they have allegiance to the state facility which contracts them, but also a duty to the prisoner-patient themselves. Of course, the clinician is also a third party, and the most symbiotic relationship is one where the goals of all three parties can be brought into alignment. Somewhere amidst the line of help-seeking and treatment for the prisoner-patient, there are factors that can lead to a rupture of this symbiosis, and it is the clinician's task to bridge this divide. While the end goal of the clinician's duty-ensuring the safety of the prisoner-patient-never changes, we should strive to be mindful of where these ruptures have arisen, and what adaptable methods we may consider to bring these goals back into alignment once more.

## Conclusions: Where Do We Go From Here?

In light of the challenges in ethical conduct and the history of policy around suicide in correctional settings, particularly in juvenile corrections, a viable question remains: Where is the path forward? Researchers have begun investigating new methods of care to address the issue of correctional suicide. For instance, one study examined how each facility influences prisoner-patient suicidality at a macro-level, with attention given to levels of inmate conflict and disparity between racial/ethnic identity and the facility's composition as a whole (Stoliker et al., 2020). Additionally, there is a need for further research on differences in correctional suicide when comparing men's and women's prisons, as data suggests women are at a particular risk of suicide while incarcerated (Dye, 2011). Variable rates of prisoner-patient distress can be explained by significant differences in levels of respect, fairness, and humanity shown to inmates by staff, as rated by the inmates themselves (Liebling, 2011). When facilities emphasize the agency, dignity, and humanity of the prisoner-patient, they create a more "survivable" environment within our correctional system, resulting in

"survivability hierarchy." Exciting а research has been conducted under the Prevention of Suicide in Prisons (PROS-PeR) framework, which involved creating cognitive-behavioral therapy treatment plans informed and delivered by ex-offenders with lived experiences of struggling with suicidality while incarcerated (Awenat et al., 2017). Future research should continue to examine mental health at all points of contact with the justice system, including successful transitioning back into society. For example, one study currently being conducted targets an area of concern in examining suicide risk among formerly incarcerated jail releasees, with a Safety Planning Intervention meant to reduce suicide risk during the turbulent period of reintegration (Johnson & Weinstock, 2019). These efforts are important as they target times of transition directly tied to our legal system, but outside the scope of that system's reach. The goal of the clinician should also be to assist those facilities on the lower end of the correctional survivability hierarchy so as to create a safer environment for every inmate and a more agentic framework for treatment in the correctional system as a whole. Just as we responded to the critical rise in correctional suicide in the 1970s, we are facing a new crisis that will require conversations between facility administrators, suicide researchers, and clinicians who can administer treatment. However, the most important voices that can be heard in this discussion-a group whose absence in the conversation may have precipitated these rising suicide rates—would be those of the inmates themselves. Researchers should strive to develop adaptable methods of care that invite inmates into the conversation and foster a sense of agency in light of systematic barriers to the prisoner-patient's well-being. As we continue to discuss issues of justice in our correctional system, we must remember to bring the goals of the

facility, the clinician, and the prisonerpatient to their ultimate ethical objective: the safety and well-being of each person within our correctional system.

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No conflicts of interest or funding to disclose.

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# **Understanding Suicide to Prevent Suicide**

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BY MANY METRICS suicide prevention must improve. Suicide remains a leading cause of death worldwide, and in some countries (e.g., the United States) suicide rates have an upwards trajectory (Klonsky et al., 2016). In contrast, there have been large declines in mortality for other medical and behavioral health problems such as stroke (World Health Organization [WHO], 2018), homicide (United Nations Office on Drugs and Crime [UNODC], 2019), and drunk driving (Insurance Information Institute [III], 2020). An important question is why. Why does suicide prevention lag behind other medical and behavioral health problems?

## Accurate Prediction Is a "Red Herring" That Distracts From Understanding and Treatment

Some articles suggest that suicide prevention lags because suicide prediction lags behind. For example, Ribeiro et al. (2016) make the intriguing and thoughtful argument that suicide should be treated as "a complex classification problem," and Franklin et al.'s (2017) seminal meta-analysis includes the suggestion that identifying "longitudinal predictors" is a first step toward improving suicide prevention and treatment. The logic of these argument perhaps rests on the assumptions that (a) we otherwise do not know who is at risk, and (b) those identified as at-risk can be given access to effective treatments. Both of the above papers state that suicidology should prioritize "risk algorithms" if the field wishes to make progress. In short, improved prediction through complex prediction algorithms is viewed as a prerequisite for improved knowledge and prevention

However, for several reasons, I suggest that the quest for highly accurate suicide prediction may be a red herring that distracts the field from its most important work: understanding suicide to improve treatment and prevention. Specifically, (a) in other health fields, advances in prevention and treatment have not relied on advances in prediction; (b) suicide prediction will never be highly accurate; (c) even if an algorithm were to perfectly identify when suicide attempts will occur, we must still have effective ways to intervene that are grounded in a genuine understanding of suicide; and (d) prediction of suicide in the naturalistic world has only minor relevance for evaluating the validity and utility of suicide theories. I elaborate these points below.

First, in other health fields, substantial advances in treatment and prevention occur without advances in prediction. For example, mortality from stroke has decreased dramatically since the year 2000 (WHO, 2018), even though positive predictive values for predicting future strokes are low (e.g., between 6% and 14% in a systematic review; Gupta et al., 2014; between 2% and 8% using a risk-stratification tool plus imaging for follow-up periods between 7 and 90 days, Merwick et al., 2010). Similarly, meaningful reduction in homicide and drunk driving deaths (III, 2020; UNODC, 2019) are attributed not to advances in prediction methodology, but to practical interventions and contextual factors that reduce the likelihood of these behaviors-such as reduction in firearm access for homicides (Azrael & Miller, 2020) and improved laws, policing, and community norms for drunk driving (CDC, 2020).

Consider an example closer to home for readers of the Behavior Therapist. Behavioral principles such as reinforcement, punishment, habituation, and extinction have been enormously helpful in treating a variety of psychiatric disorders (Butler et al., 2006). Notably, these treatment advances in no way depended upon using behavioral principles to predict who will next develop a psychiatric disorder or which clients will develop a second disorder. We can understand and treat disorders and maladaptive behaviors without highly accurate prediction tools. In sum, across a variety of prevention and treatment success stories in the medical, behavioral, and public health literature, advances in prediction are absent or peripheral.

accurate prediction would improve treatment and prevention, highly accurate prediction of suicide will never be achieved. Some suggest that accurate prediction of suicide could potentially be achieved through complex prediction methods, such as algorithms optimized through machine learning. However, a systematic review and simulations of suicide prediction via machine learning suggest that, even under optimal conditions, the prediction of suicide will remain poor (Belsher et al., 2019). A separate review concludes that machine learning prediction methods for suicide yields very low positive predictive power and sensitivities similar to conventional prediction methods (McHugh & Large, 2020). These skeptical conclusions should not be surprising given a robust literature on failures of machine learning to improve clinical prediction. For example, a metaanalysis of 71 studies found that machine learning provides no benefit over simple regression for predicting a variety of clinical phenomena such as cancer and heart disease (Christodoulou et al., 2019). As a result, optimistic claims about suicide and machine learning may represent "hype" more than substance (Fazel & O'Reilly, 2020).

Second, even if one believes that highly

Third, for the moment let us assume the aforementioned argument is wrong, and that machine learning will soon enable perfect prediction of suicidal behavior. Suppose this method reveals the identity of 100 individuals who, within the next month, will attempt suicide and possibly die. What now? Current psychiatric practice for acutely suicidal patients is hospitalization-do we lock these individuals in a padded room for the next month? Obviously not. Beyond practical and ethical considerations of hospitalizing everyone predicted to attempt suicide, hospitalization itself can cause more harm than good (Ward-Ciesielski & Rizvi, 2020). The answer is that we must successfully intervene-we must learn to effectively and humanely lower risk for acutely suicidal individuals, and help them build a life worth living. This brings us back to where we started: We must understand suicide to prevent suicide. Even unrealistically perfect prediction would be only a small step toward improved prevention, because we must still understand the phenomena to effectively intervene.

Finally, some suggest that poor realworld prediction implies an inadequate understanding of suicide; thus, even if we accept that such prediction is not important for prevention, perhaps it is important for determining the validity and utility of our suicide theories and models. For example, Nock et al. (2018) discounts "overly simple" theoretical models of suicide on the basis that the risk factors they emphasize poorly predict suicidal behavior in the naturalistic world. Ribeiro et al. (2019) makes a similar argument to refute "simple conceptualizations" of suicide. However, I would like to gently push back, and suggest that these claims misrepresent the nature of the scientific enterprise and the relationship between theory and prediction.

The scientific enterprise is largely based on the premise that parsimonious theories can help explain complex phenomena (for elaboration in the context of suicide theory; see Klonsky, 2020). To assume prima facie that simple theories are inappropriate for understanding complex phenomena is to discard hundreds of years of scientific progress to the contrary (see Edge, 2012, for a long list of scientific "deep, elegant, or beautiful explanation[s]"). More to the point, the predictions most relevant for evaluating scientific theories are those made under highly controlled conditions, not naturalistic ones.

Behavioral principles of learning offer a wonderful example. They are relatively simple, yet help us understand behaviors across extremely diverse contexts. One reason we accept their validity is that psychologists can use these principles under controlled conditions to predict (and even determine) behavioral outcomes, such as when nonhuman and human animals will learn to fear and avoid a stimulus (Delgado et al., 2006). However, can these same behavioral principles be used to predict, in the naturalistic world, who will develop a phobia over the next week, month, or year? Certainly not with high accuracy. Behavioral principles accurately describe the conditions under which fear and anxiety develop, persist, and decrease. Yet, the naturalistic world remains too complex and dynamic to predict when and for whom these conditions will next occur.

There are similar examples throughout science. For example, basic laws of motion are highly valid, yet scientists can only make probabilistic judgments about the movements of debris through space (see Klonsky, 2020, for elaboration as applied to suicide). Similarly, as I type this sentence, there is a napkin next to a coffee cup on my desk; physicists would struggle mightily to tell you where this napkin will be in 2 weeks (still on my desk? in a compost bin? in an alleyway blowing in the wind?), even though the forces that will act on the napkin are ordinary and well understood. Likewise, behavioral principles are valid and have high clinical utility, despite limited utility for real-world prediction.

In summary, complex prediction methods are unlikely to be important for improving either suicide prevention or knowledge. Instead, we must use the basic tools of science to continue to cultivate our knowledge of suicide and suicide risk, and use this knowledge to improve prevention and treatment.

#### **Review of Articles in the Special Issue**

The articles in this special issue are a breath of fresh air. Rather than focus on novel technologies or algorithms, they focus on understanding and treatment. They identify evidence-based mechanisms of change likely to reduce suicide risk and describe practical interventions for targeting these mechanisms. Below I summarize these articles with attention to the mechanisms they emphasize.

Sears et al. (2020; this issue) describe the integration of two effective approaches to suicide prevention: Dialectical Behavior Therapy (DBT) and lethal means safety counseling. DBT has long been recognized as a key advance in the treatment of individuals at risk for suicide (DeCou et al., 2019), and succeeds in part by improving emotion regulation, distress tolerance, and interpersonal skills (Linehan et al., 2006). Evidence also supports lethal means restriction/safety as an important tool for suicide prevention (Jin et al., 2016). Thus, the integration of these two approaches represents an extremely promising approach to the clinical treatment of suicide risk. The focus on firearms, as opposed to lethal means more generally, makes particular sense in the American context where firearms are readily available and the leading cause of suicide death. Sears et al. provide detailed and thoughtful guidance about how to integrate firearm lethal means safety counselling into DBT. A DBT practitioner reading this article today can use this information in practice tomorrow.

Zullo et al. (2020; this issue) describe two complementary treatment approaches for youth who present with self-injurious thoughts and behaviors (SITBs). The two treatments are complementary in that one focuses on intervention in acute settings such as an emergency department, and the second is a DBT-informed, 12-week outpatient treatment that may represent a natural next-step in treatment following acute

intervention. There is an interesting parallel between Zullo et al. and Sears et al. in that both (a) ensure client safety and (b) utilize DBT principles to reduce suicide risk. The first treatment described by Zullo et al., referred to as SAFETY-Acute (SAFETY-A; also known as the Family Intervention for Suicide Prevention), aims to ensure youth safety in the context of an emergency and link the youth to appropriate follow-up care. The second treatment, referred to as SAFE Alternatives for Teens and Youths (SAFE), is informed by DBT and takes a cognitive-behavioral approach aimed at increasing safety and reducing suicide attempts. Notably, the treatment involves two therapists, one for the youth and one for the parent/family, with everyone coming together at the end of each session. Zullo et al. provide a rich description of these treatments, including their principles and implementation, as well as accumulating data that support their promise. Treatment of suicide risk in youth presents unique challenges compared to adults. SAFETY-A and SAFETY represents a potentially powerful one-two punch in the effort to reduce youth suicide.

Chapman and Hood (2020; this issue) address the unique considerations that come into play when a DBT clinic must provide telehealth (rather than in-person care) for clients at risk for suicide. In light of the COVID-19 pandemic, telehealth is playing an unusually large role in mental health care. While some may shy away from treating clients with high suicide risk via telehealth, providing quality care for such clients is critical, and telehealth is often the only feasible platform for doing so. Therefore, Chapman and Hood provide a valuable service in describing their experience offering telehealth to clients at a DBT clinic, and sharing research-informed advice for managing suicide risk for telehealth clients. Perhaps their most important take-home message is this: "management of suicide risk via telehealth is feasible, safe, and likely effective." Any clinician providing telehealth care, or considering whether to provide telehealth care to clients at risk for suicide, would benefit from the thoughtful discussion and suggestions that Chapman and Hood provide.

May (2020; this issue) and Khalifian et al. (2020; this issue) each apply principles of couples and family therapy to the treatment of suicide risk. May describes a relatively novel approach to the clinical treatment of suicide risk: Couples Crisis Response Planning (CCRP). CCRP involves clients' romantic partners in their safety planning and clinical intervention for suicide risk. CCRP seeks to "capitalize on partners' unique knowledge of their loved ones' suicide warning signs, close proximity to their partners, and ability to directly support clinical interventions designed to increase safety." Though many treatments for suicide risk appear helpful, there is room for improvement. It is therefore important to consider approaches like CCRP that are novel yet grounded in evidence-based knowledge about suicide and suicide risk. May suggests that CCRP has the potential to reduce suicide risk by increasing knowledge of both client and partner, facilitating communication between client and partner, and increasing support for the partner/caregiver. In support of this perspective, May notes that involving one's partner in treatment has been useful for other clinically significant behaviors (such as alcohol use, gambling, and smoking cessation), and that involving families appears beneficial for the treatment of teens at risk for suicide. As May notes, a clinical trial on CCRP is underway. We will have to wait patiently for the results of this important clinical trial.

Similar to May, Khalifian et al. (2020; this issue) describe a couples-based approach to the treatment of suicide risk that is grounded in evidence-based knowledge and currently undergoing empirical evaluation: the Treatment for Relationships and Safety Together (TR&ST). TR&ST is motivated by the large body of knowledge and theory on the role of connectedness in reducing desire for suicide and creating a life worth living. TR&ST is a marriage between two existing treatments: Brief Cognitive Behavioral Therapy for Suicide Prevention (BCBT; Bryan & Rudd, 2018) and Cognitive Behavioral Couple Therapy skills (Epstein & Baucom, 2002). In this manner, TR&ST addresses mechanisms of change emphasized in BCBT, such as emotion regulation, cognitive reappraisal, and problem solving, while also emphasizing romantic relationship dynamics as a potential source of problems driving suicidal desire and, therefore, an important focus for intervention. The four stages of TR&ST are crisis management and emotion regulation, self-awareness and communication skills, cognitive skills, and relapse prevention and building a life worth living. It is encouraging to see the development and piloting of approaches such as TR&ST that involve one's partner and therefore have advantages over individual treatment. As with May, we will

have to be patient as we await the results of the ongoing clinical trial.

Yarrington et al. (2020; this issue) carefully consider the link between social anxiety and suicidal thoughts and behaviors (STBs). A challenge in suicide research is that virtually every variable associated with distress-depression, anxiety, personality disorder, substance misuse, eating disorder, psychosis, and so on-will exhibit a positive zero-order correlation with STBs. It is therefore important to go beyond consideration of whether a given variable relates to STBs, and establish information on which variables exhibit the strongest associations and unique associations. Yarrington et al. is a good example of such work. They demonstrate a direct association between social anxiety and STBs but provide evidence that this association might be best understood as reflecting an association of STBs with distress or psychopathology more broadly. Given that analyses focused on a particular population (adults seeking employment), it will be important to determine if this pattern replicates in other populations.

Holman et al. (2020; this issue) and Marks et al. (2020; this issue) consider the implementation of interventions to reduce suicide risk in particular contexts. A forever-challenge in clinical science is how to translate knowledge into effective intervention, and this task depends greatly on context. Holman et al. describe major suicide prevention efforts conducted by the Veterans Administration (VA), and the various opportunities and challenges for suicide prevention within the VA context. While many therapists view suicide prevention through the lens of clinical care, suicide prevention can also be viewed and approached as a public health problem. As a massive but closed system of care, the Veteran's Health Administration (VHA) provides a unique opportunity for a tailored, coordinated, public health approach to suicide prevention. The VHA approach emphasizes improved identification of those at highest risk for suicide (so perhaps there is some use for the prediction methods I critique in the previous section), expansion of means safety measures among veterans, and the provision of evidence-based individual approaches to treatment for individuals in crisis or at high-risk. By addressing suicide risk at both population and individual levels, the VA provides a model for a comprehensive approach to suicide prevention, including upstream prevention, clinical care, crisis services, and postintervention. Some

lessons learned will be unique to the VA system, but others provide meaningful guidance and inspiration for public health approaches to suicide prevention in the public sphere.

Finally, Marks et al. (2020; this issue) examine the American correctional system, where suicide is the leading cause of death. They review the unique history of suicide prevention within the correctional system, and the unique dilemmas that clinicians face when treating suicide risk within this system. For example, disclosing that an inmate is at high risk for suicide can lead to that inmate experiencing 10-minute check-ins, severe restrictions on possessions and clothing, and restrictions to finger foods-interventions that are arguably dehumanizing and demoralizing. In short, as Marks et al. note, treatment for suicide risk in correctional settings can look and feel like punishment. The authors conclude by describing innovative approaches to suicide prevention, such as the Prevention of Suicide in Prisons (PROSPeR) framework (Awenat et al., 2017), which involves delivery of cognitivebehavioral treatment plans by ex-offenders with lived experience of suicidality in the correctional system. Marks et al. is a mustread for researchers and clinicians concerned about ethical, effective treatment for suicide risk within the American correctional system.

#### Toward a Parsimonious and Actionable Understanding of Suicide

As noted earlier, science is largely based on the premise that parsimonious theories can help us understand and influence complex phenomena. For example, behavioral principles are relatively simple, yet provide powerful insights into understanding and managing maladaptive behaviors in diverse persons and contexts. Can we identify principles of suicide that are similarly simple yet powerful? I propose that we can, and offer a potential example.

Converging evidence suggests that a small set of factors can explain suicide and suicide risk. Specifically, (a) overwhelming pain and hopelessness are near-universal motivations for suicide (May et al., 2020), (b) connectedness helps create a life worth living and protects against suicide risk (Zareian & Klonsky, 2020), and (c) because attempting suicide is difficult and fearsome, suicidal ideation can only progress to suicide attempts when one has the capability to attempt suicide (Dhingra et al., 2019; Klonsky & May, 2015; Tsai et al., in press). These principles are integrated in the Three-Step Theory (3ST) of suicide (Klonsky & May; Klonsky et al., 2018; Tsai et al.).

Importantly, the 3ST's focus on four factors-pain, hopelessness, connectedness, and capability-does not imply that other documented correlates, risk factors, and causes are irrelevant. Rather, the 3ST provides a context for understanding why other variables matter for suicide risk. For example, pain may explain the primary contributions of variables like depression, emotional distress, anxiety, and chronic physical pain; hopelessness may explain the contributions of variables like external locus of control and poor future orientation (as well as the seminal Beck Hopelessness literature); connectedness may explain the contributions of variables like interpersonal conflict, social isolation, and meaning in life; and capability for suicide may explain the contributions of variables like access to lethal means, knowledge of lethal means, and low harm avoidance temperament. The 3ST does not provide a comprehensive list of variables that cause pain, hopelessness, disconnection, and suicide capability for the same reasons that behaviorists have not published comprehensive lists of variables that can provide reinforcement or punishment. Life is too complex to list everything, and furthermore, what is painful or punishing for one person may provide hope or reinforcement for another (e.g., intense exercise). The key for any parsimonious theory is whether the principles are accurate and actionable.

Finally, as the title of this article implies, the main reason for understanding suicide is to prevent suicide. Thus, a good theory of suicide should not only be accurate, but directly inform prevention and treatment (Fox et al., in press). The 3ST identifies four clear targets for intervention. According to the 3ST, any intervention or prevention method will succeed in reducing suicide risk to the extent that it (a) decreases pain, (b) increases hope, (c) enhances connectedness, and/or (d) reduces capability for suicide. These targets are transdiagnostic and hypothesized to be relevant to all atrisk groups. Notably, these treatment targets are implicitly, if not explicitly, addressed by the articles in this special issue. For example, the distress tolerance and emotional regulation skills in DBT can reduce pain; the interpersonal skills in DBT as well as the couples interventions in CCRP (May, 2020) and TR&ST (Khalifian et al., 2020) can enhance connectedness; and the safety interventions by Sears et al.

(2020) and Zullo et al. (2020) can reduce capability for suicide.

In the fight to prevent suicide, knowledge is power. The articles in this special issue do a wonderful job of translating basic knowledge into potentially powerful interventions. This is the kind of work that deserves our support and attention; that deserves resources from our top funding agencies and space in our top journals; and that is most valuable as we seek to reduce suicide and help individuals at risk for suicide build lives worth living.

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No conflicts of interest or funding to disclose.

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OBITUARY

# **Arthur Freeman**

# Mark A. Reinecke, *Northwestern University* Ray DiGiuseppe, *St. John's University*

ARTHUR "ART" FREEMAN spent his life as a student of the human experience and a thoughtful teacher of the art and craft of cognitive-behavioral practice. Art passed away on August 18, 2020, at the age of 76. As Aaron Beck noted, "Art was a giant of the field."

Art was born, raised, and educated in the borough of the Bronx in New York City. He attended New York University, where he completed a bachelor's degree in psychology and a master's degree in counseling. He subsequently attended Teachers College-Columbia University, where he completed his doctorate in clinical psychology. Like many psychologists during that era, Art was trained in the psychodynamic tradition. However, he became intrigued by the then-novel cognitivebehavioral model and sought REBT training with Albert Ellis. These were exciting times in the field, and Art moved to Philadelphia, where he completed a postdoctoral fellowship with Aaron Beck at the University of Pennsylvania. After completing his fellowship, he joined the staff of the Center for Cognitive Therapy, where he served for many years as Director of Training. Art subsequently held faculty positions with several academic institutions, including Philadelphia Community College, the Philadelphia College of Osteopathic Medicine, Midwestern University, the University of St. Francis, and, most recently, at Touro University. Art started or directed doctoral programs in clinical psychology at two of these institutions, and he is responsible for the training of hundreds of clinical psychologists.

Widely published, Art authored or edited nearly 75 books on cognitive-behavioral therapy and evidence-based practices. Art was a master clinician and was among the world's leading disseminators of CBT. His books focused on a wide range of topics covering almost all of the clinical problems and populations that therapists could

encounter. Art's host of coauthors epitomizes his collegiality and cooperation, and his work had a global impact on psychology. His books were translated into more than 15 languages, and he gave workshops and invited lectures in over 45 countries. Thousands of students and colleagues around the globe benefited from his clinical insight and expertise, enjoyed his company, and benefited from his generous spirit. Quick-witted, warm, and gregarious, he was, as one colleague quipped, "everyone's Uncle Art." As another stated, he was "a master clinician and educator with a nimble, creative mind. His talks and workshops were a show. Art's presentations were engaging, funny, practical, and always insightful." As another remarked, "Art took great delight in making people laugh as they learned. He would tell stories that usually had a level of absurdity that would lead us to break up and ultimately get the point he was trying to make. He was part Mel Brooks, Woody Allen, and Allan Sherman."

Beyond his engaging, even effervescent, teaching style, Art was a clinical innovator. As one colleague remarked, "Art was an idea generator, he had a perpetual stream of ideas, and he always gave it his all. He had the energy of three guys." Art was facile with a range of theories and approaches, and he could discern not only their relative strengths and weaknesses but also their clinical utility. Although he was a CBT therapist to the core, Art was never dogmatic. This was reflected in a number of his edited volumes, including his "Comparative Treatments" book series as well as Cognition and Psychotherapy (1985) and Cognitive and Behavioral Theories in Clinical Practice (2010). Kurt Lewin once remarked, "There is nothing so practical as a good theory." Art took this maxim to heart. Before his passing, Art completed a course in object relations theory for a book he had planned, examining contact points between that theory and CBT. His interests were wide-ranging, encompassing the broad sweep of contemporary CBT. Art thought deeply and well about his craft.

Art was both loved and respected. He was a Fellow of the American Psychological Association and the American Board of Professional Psychology. He was Past President of both the Association for Behavioral and Cognitive Therapies and the International Association of Cognitive Therapy. In 2016 he was awarded an honorary doctorate from the Philadelphia College of Osteopathic Medicine, where he had initiated their doctoral program in clinical psychology.

As important as his accomplishments, though, were his family, his wife, and the many colleagues, students, and friends he loved and supported. As a close friend noted, "Art was not only a brilliant guy, he was such a good guy ... he was a terrific human being." As another commented, "his kindness and generosity made me a better psychologist and a better person." What more could we ask from a colleague, a mentor, or a friend?

Art is survived by his sons Aaron, Andrew, Russell, his daughter Rebecca, and his beloved partner, Rosie.

. . .

An academic fund has been established at Touro College for students studying CBT. If friends and colleagues would like to make a donation in Art's memory, this would be greatly appreciated:

• Arthur Freeman Memorial Fund All donations are tax deductible. Checks should be made out to Touro College, and can be sent to: Louis H. Primavera, Ph.D., Dean, Touro College School of Health Sciences, 1700 Union Blvd., Bay Shore, NY 11706.



OBITUARY

# Scott Lilienfeld

## Steve Hollon, Vanderbilt University

-With input from the SSCP Continuing Education Committee-

SCOTT LILIENFELD died at his home in Atlanta, Georgia, on September 30, 2020, of pancreatic cancer. Scott had an outsized influence on psychology and the larger culture. Scott had an impish sense of humor and an abiding disdain for the "pseudo" in the science that he challenged repeatedly with intelligence and wit. He was a provocateur in the finest sense of the term. He will be sorely missed in the field.

As described by Benedict Carey in his superb obituary on October 16 in the New York Times, Scott was "an expert in personality disorders who repeatedly disturbed the order in his own field, questioning the science behind many of psychology's conceits, popular therapies and prized tools...." For Scott, no cow was too sacred. He questioned the validity of the most popular constructs in the field, from repressed memories to multiple personality disorders, the validity of historically accepted assessment tools like the Rorschach ink blot test (see his 2000 monograph with Wood and Garb on "The scientific status of projective techniques" in Psychological Science in the Public Interest), and led the critique of widely popular interventions that had questionable support (like psychological debriefing) or attributed their demonstrable effects to questionable mechanisms of action (like eye movement desensitization and reprocessing; EMDR). His 2007 article in Perspectives on Psychological Science entitled "Psychological Treatments That Cause Harm" was a classic in the field that has garnered over a thousand citations and put the field on alert that not all treatments are benign. As he told the New York Times in 2004, "Many practitioners, because they don't keep up with the scientific literature, may be using suboptimal and, in some cases, even dangerous treatments." He has continued to lead the field in considering both the costs of harmful treatments and how

the field can more systematically guard against such harms (see 2020 Special Issue on potentially harmful treatments in *Clinical Psychology: Science and Practice*).

In many ways Scott anticipated the larger and more recent replication crisis in psychology that questions many of the long-held tenets in the field. Always a willing lightning rod, he founded The Scientific Review of Mental Health Practice, a journal devoted to distinguishing scientifically supported from unsupported claims in clinical psychology, psychiatry, and social work. As Benedict Carey notes in his NYT obituary, Scott became "... a self-appointed public ombudsman, an impish scientific conscience, at once easygoing, formidable and precise in his critiques." He was that rare critic who was highly regarded within the field, as evidenced by his selection to follow Alan Kazdin as editor of the prestigious journal Clinical Psychological Science.

I first got to know Scott in the early 1980's when he was a graduate student at the University of Minnesota and it was apparent even then that his intellect and wit were going to lead him to prominence in the field (as an exercise in humility try teaching the graduate course in behavior therapy to a group that includes Scott). Minnesota had a distinguished faculty at the time steeped in dust-bowl empiricism and devoted to the skewering of pretentions in the field. Scott's advisor David Lykken (himself an APA Distinguished Career Award winner) was perhaps the premier theorist in the area of psychopathy and led the way in exploding the myth that the polygraph was in fact a "lie detector" (a psychopath could easily beat the machine whereas the overly conscientious often appear to have "sinned"). Also on faculty at the time was Paul Meehl (also an APA Distinguished Career Award winner and former president of APA), who fired the first volley in taking apart the myth that

clinical training imparts some special ability to divine the "truth" behind the person in his classic 1954 treatise Clinical Versus Actuarial Prediction: A Theoretical Analysis and Review of the Evidence. It was this volume that launched the burgeoning area of research into the bias-besotted and heuristic-drive vagaries that lurk when clinical judgments are unconstrained by empirical evidence. It was Meehl (a practicing clinician who kept a couch in his office at work for seeing patients) who famously refused to go to case conferences in psychology and psychiatry because he found the intellectual level so low as to be boring, and the lack of concern for empirical facts so off-putting as to be offensive. He simply demanded more of fellow clinicians. There was no more fitting intellectual descendent of Lykken and Meehl (and other superb Minnesota faculty like Auke Tellegen and Ellen Berscheid) than Scott. In his classic treatise on evolutionary theory, The Selfish Gene, the author Richard Dawkins talks about memes as the psychological equivalent of biological genes in transmitting information from one generation to the next. No one I ever met so ably carried on the "memetic" tradition of using intellectual curiosity and personal humility to dismantle claims based on authority and opinion, rather than evidence. Scott was the true intellectual and philosophical descendent of Lykken, Tellegen, and Meehl

Scott's primary substantive contribution came in the area of the personality disorders although he was a polymath with many diverse interests (see his 2010 interview in the APS Observer in which he described his many interests in a free-ranging discussion). Building on the work of his academic mentor David Lykken, Scott distinguished between psychopathy, which he saw as a largely dispositional condition characterized by interpersonal (grandiosity) and affective (callousness) deficits, and antisocial personality disorder, which he saw as a nonspecific behavioral condition characterized by a lengthy history of having done bad things. He wanted to see the diagnosis move away from a focus on antisocial and criminal behaviors with heterogeneous etiology and toward a focus on personality constructs like lack of guilt or empathy paired with self-centeredness and boldness. In that sense he anticipated the subsequent move at NIMH from symptom-based diagnoses beset with comorbidity to the Research Domain Criteria (RDoC) that sought to emphasize the truly causal underlying dimensions of personality and

psychopathology. As so often occurred, Scott was well ahead of his times.

I reconnected with Scott about a decade ago when I was the chair of the steering committee advising APA on the generation of clinical practice guidelines. In an earlier article with the other members of the steering committee we laid out three successive definitions of what it meant for a treatment to work: efficacy, the lowest bar, simply meant that a treatment worked better than its absence; specificity meant that it worked better than the generic aspects of simply going into treatment; and superiority meant that it worked better than other viable alternatives. Scott lobbied for a fourth criteria that I initially resisted, scientific plausibility for its explanatory constructs. I am now convinced. For Scott, it was not enough that a treatment worked better than its absence if its underlying theoretical rationale is not plausible given our current understanding of natural law. Pseudoscience therapies like energy field therapies represent one clear example; they likely work better than their absence but for reasons that have nothing to do with the mechanisms claimed that fall outside of anything recognized by modern physics. Pseudoscience therapies have been with us since at least the time of Mesmer and Scott took up the challenge of calling them out much like Harry Houdini called out the spiritualists a century ago. Among his many activities, he had joined with a group of like-minded colleagues to push APA not to offer continuing education credits for such offerings.

No one knows academics better than their students, and if the lovely memorial in Psychology Today by Shauna Bowes posted October 2, 2020, is any indication, Scott was as nurturing and considerate of the students that he mentored as he was fierce in calling out false claims in the discipline. I highly recommend the article. Anyone who wants to get a sense for just how entertaining and instructive he was as a public speaker can go to the APS website and watch the video of his 2013 James McKeen Cattell Fellow Award for lifetime achievement, entitled "Psychology's Public Image Problem: Why Many Laypersons and Politicians Don't View Our Field as Scientific." It is masterwork of clear explication, replete with an analysis of the problem, and recommendations for a solution. It was in this talk that Scott quotes Meehl paraphrasing Bertrand Russell as saying that '... the dominant passion of the true scientist ... is not to be fooled and not to fool anybody else." Scott embodied that quote in his life and work better than anybody that I ever met. Moreover, Scott put tremendous energy into training the next generation to not be fooled. He was an author on multiple undergraduate psychology textbooks, and this writing showcases his passion to make thinking scientifically and questioning the evidence a new norm and not just the purview of those with doctoral degrees.

Scott is survived by his wife Candice Basterfield, his sister Laura, and friends and colleagues too numerous to count. He was a giant in the field and we will miss him greatly. He passed away far too soon but his meme of scientific questioning lives on.



## OBITUARY

# Don Vardell, Jr.

Carl Lovejoy, Mountain Valley Treatment Center

DONALD K. VARDELL, JR., died suddenly and unexpectedly on Sunday, August 30, 2020, while doing what he loved most—sea kayaking off the coast of New Castle Island in the Gulf of Maine.

Don was born on November 20, 1966, in Naples, Italy, to Donald K. Vardell, Sr., of the U.S. Navy. The oldest of two sons, Don was driven his entire life by a desire to live in service to others and to causes greater than himself.

Don was a seasoned health care administrator and operational leader with experience at the helms of residential treatment centers (RTCs), therapeutic boarding schools (TBSs), and nonprofit service organizations. He appreciated and embraced the responsibility of the various roles he had in all of his schools and programs, and had a unique way of working with kids. His management philosophy centered around ensuring the delivery of promises made to referral sources and families by prioritizing and supporting a culture of safety, professionalism, quality, and transparency.

After holding two Assistant Campus Recreation Directorships for Mississippi State University and the University of Tennessee, Don and his family spent 7 years living in the D.C. Metro area, working as a Division Director at the National Headquarters of the American Red Cross. Don's career path changed and he entered the private behavioral health care arena in 2002 when he took over as Administrator of Peninsula Village. Peninsula Village, then a fledgling, nonprofit, long-term residential treatment center in Knoxville, TN, serving adolescent boys and girls with significant co-occurring disorders, was one of the few,

true Positive Peer Culture modeled programs in the country. In late 2004, Don left Peninsula Village to lead the highly visible cultural, programmatic and financial turnaround of the Academy at Swift River, an Aspen Education Group therapeutic boarding school in Western Massachusetts. After that incredibly successful experience, Don transferred to Southeast Texas to attempt to right the Excel Academy of Texas at the same time Aspen was purchased by CRC Health. The Great Recession and Hurricane Ike forced the closure of Excel Academy in 2008. Don then went on to take over the helm of Island View RTC in Syracuse, Utah, leading the navigation of Island View's next chapter of brand positioning and solidifying its place in the evolving private pay RTC arena. In 2010, Don was recruited by Adam Rainer, Founder of Shortridge Academy in Milton, New Hampshire, to serve as Executive Director and lead the significant programmatic redevelopment effort to create a new, and controversial TBS model. Shortridge Academy gained national industry attention by challenging the paradigm of what a TBS should be by incorporating a true authoritative, partnership-based program structure as identified in the evidence based Positive Youth Development research. With the transition at Shortridge completed, Don joined Becket Family of Services in 2013 and took over the leadership of their private pay programs. Don's final, and favorite, post was at the Mountain Valley Treatment Center in Plainfield, NH, a not-for-profit, short-term RTC serving adolescents and emerging adults with debilitating OCD and anxiety disorders.

Don was a graduate of the University of Tennessee, where he attended on an Army R.O.T.C. scholarship, and an 8-year veteran of the Army Reserves serving as a Civil Affairs and Psychological Operations Officer. Don held a B.A. in Psychology and a M.S through U.T.'s College of Education in Recreation. Don was active in veteran service and reintegration efforts and was a regional leadership volunteer with Team Rubicon USA from 2012 until 2015. A military "brat" who has lived in various parts of the world, Don enjoyed spending time with his wife, Becky, their two children, Carson and Eva Mae, and dog, Penny; hiking, sea kayaking, cooking and watching his kids' sports endeavors.

Don leaves behind his wife, Becky; his beloved children, son Carson and daughter Eva (both of Portsmouth); father Don Sr. and wife Carol Vardell (Memphis); brother Robert and wife Mandy Vardell (Wisconsin); aunts Debbie Vardell (Texas) and Paulette Demko (Florida); mother-inlaw, JoAnn Sexton (Knoxville); his sisterin-law and brother-in-law, Sharon and Raymond Wall (Nashville); niece Amanda Riker (Wisconsin); and nephews Josh Vardell (Japan), Gabriel, Sanderson and Gideon Wall (all of Nashville).

The Vardells suggest that donations in Don's memory be made to Mountain Valley Treatment Center or to Team Rubicon.



То coincide with the its 54th Annual Convention. A B С Т launched its inaugural

Briefing Books project. The initiative is the brainchild of Emily L. Bilek, Ph.D., ABPP, of the Public Education and Media Dissemination (PEMD) Committee, and David Teisler, CAE, Director of Communications/Deputy Director. PEMD coordinates projects with the Publications Committee and handles press relations for ABCT. The driving force behind the Briefing Books was the desire to provide resources for media and the public who want quick access to materials that explain evidence-based treatments for mental health. In January the committee put out a call to members asking for volunteers to spearhead the project and manage a small team to produce these resources. Fast track to November and the first Briefing Book is available to download on the ABCT website.

The first Briefing Book is entitled Suicide Across the Lifespan, with 160plus pages covering the prevalence of death by suicide in youth (5 to 24 years), adulthood and midlife, and seniors. In addition, death by suicide within sexual and gender minorities and veterans is included, as well as the contributing role of nonsuicidal selfinjury, trauma, and disease.

The book's editor and contributing author of the Seniors & Veterans section of the Briefing Book's project, Rita Hitching, MSc., explains the reasoning behind the decision to cover suicide in the first edition: "Our first issue is being released at a time when society is experiencing an unprecedented level of stress. Emotionally demanding circumstances, persistent stress, and depression are strong risk factors for suicide, and when someone ends their own life,

# ABCT Launches Inaugural Briefing Books Initiative

the impact is felt by the entire community, and often, long after the event. The global coronavirus pandemic has led to a substantial increase in the number of people experiencing anxiety and depression, and 2020 has highlighted many social injustices and inequities. We felt that by providing evidence-based information that was accessible to all on death by suicide would be very timely."

By design, and with the needs of the reader in mind, flexibility has been built in by providing the option to download the entire book or individual sections. The book, or its sections, can provide useful background information for the busy journalist, as well as supplement the available expertise offered via phone or Zoom conversation by volunteer ABCT subject matter experts through the ABCT office.

Each of the six Briefing Book sections can stand alone, and covers the risk and protective factors, assessment, and treatment of suicidal behavior. Sections are co-authored by ABCT members and leading experts in their field, including Peggy Andover, Ph.D., who contributed to the Non-Suicidal Self-Injury section; Emily Bilek, Ph.D., who wrote the Adults & Mid-Life section; Lily Brown, Ph.D., who wrote the Trauma & Disease section; Mitch Prinstein, Ph.D., and his team Benjamin W. Nelson, Ph.D., Maya Massing-Schaffer, M.A., who penned the Youth section; and Iliana Seager van Dyk, Ph.D., who contributed the section on Sexual & Gender Minorities. The Briefing Books team hope, in future, to write about other topics such as PTSD, stress, gun violence, school shootings, grief, and survivor's guilt, to name a few.  2021

# Call for Award Nominations

to be presented at the 55th Annual Convention in New Orleans

The ABCT Awards and Recognition Committee, chaired by Sara R. Elkins, Ph.D., of University of Houston Clear Lake is pleased to announce the 2021 awards program. Nominations are requested in all categories listed below. Given the number of submissions received for these awards, the committee is unable to consider additional letters of support or supplemental materials beyond those specified in the instructions below. Please note that award nominations may not be submitted by current members of the ABCT Board of Directors.

#### Career/Lifetime Achievement

Eligible candidates for this award should be members of ABCT in good standing who have made significant contributions over a number of years to cognitive and/or behavior therapy. Recent recipients of this award include Thomas H. Ollendick, Lauren B. Alloy, Lyn Abramson, David M. Clark, Marsha Linehan, Dianne L. Chambless, Linda Carter Sobell and Mark B. Sobell, and Philip C. Kendall. Applications should include a nomination form (available at www.abct.org/awards), three letters of support, and the nominee's curriculum vitae. Please e-mail the nomination materials as one pdf document to ABCTAwards@abct.org. Include "Career/Lifetime Achievement" in the subject line. Nomination deadline: March 1, 2021.

#### **Outstanding Training Program**

This award will be given to a training program that has made a significant contribution to training behavior therapists and/or promoting behavior therapy. Training programs can include graduate (doctoral or master's), predoctoral internship, postdoctoral programs, institutes, or continuing education initiatives. Recent recipients of this award include the Doctoral Program in Clinical Psychology at SUNY Albany, Massachusetts General Hospital/Harvard Medical School Predoctoral Internship in Clinical Psychology, the University of Nebraska-Lincoln Clinical Psychology Training Program, the Charleston Consortium Psychology Internship Training Program, Clinical Science Ph.D. Program at Virginia Polytechnic Institute & State University, and Florida State University's Clinical Psychology Ph.D. program. Please complete the on-line nomination form at www.abct.org/awards. Then e-mail the completed form and associated materials as one pdf document to ABCTAwards@abct.org. Include "Outstanding Training Program" in your subject heading. **Nomination deadline:** March 1, 2021.

#### **Outstanding Contribution by an Individual for Research Activities**

Eligible candidates for this award should be members of ABCT in good standing who have provided significant contributions to the literature advancing our knowledge of behavior therapy. Recent recipients of this award include Alan E. Kazdin, David H. Barlow, Terence M. Keane, Thomas Borkovec, Steven D. Hollon, Michelle Craske, and Jennifer P. Read. Applications should include a nomination form (available at www.abct.org/awards), three letters of support, and the nominee's curriculum vitae. Please e-mail the nomination materials as one pdf document to ABCTAwards@abct.org. Include "Outstanding Researcher" in the subject line.

#### The Francis C. Sumner Excellence Award

The Francis Cecil Summer Excellence Award is named in honor of Dr. Summer, the first African American to receive a Ph.D. in psychology in 1920. Commonly referred to as the "Father of Black Psychology," he is recognized as an American leader in education reform. This award can be given on an annual basis, awarded in even years to a graduate student and in odd years to an early career professional within the first 10 years of terminal degree. Candidate must be a current member of ABCT at the time of the awards ceremony and priority will be given to students and professional members of ABCT at the time of the nomination. The award is intended to acknowledge and promote the excellence in research, clinical work, teaching, or service by an ABCT member who is a doctoral student or early career professional within 10 years of award of the PhD/PsyD/EdD/ScD/MD who identifies as Black or Indigenous. The award is given to recognize that Black and Indigenous practitioners and scholars are underrepresented in clinical psychology, despite making important contributions to our field. The Francis C. Summer Excellence Award is meant to reflect the overarching goal of ABCT supporting its members of color. The recipient will receive \$1,000 and a certificate. Please complete the online nomination materials at www.abct.org/awards. Then email the nomination materials as one PDF document to ABCTAwards@abct.org. Include "Francis C. Summer Award" in the subject line. Nomination deadline: March 1, 2021.

#### Anne Marie Albano Early Career Award for Excellence in the Integration of Science and Practice

Dr. Anne Marie Albano is recognized as an outstanding clinician, scientist, and teacher dedicated to ABCT's mission. She is known for her contagious enthusiasm for the advancement of cognitive and behavioral science and practice. The purpose of this award is to recognize early career professionals who share Dr. Albano's core commitments. This award includes a cash prize of \$1,000 to support travel to the ABCT Annual Convention and to sponsor participation in a clinical treatment workshop. Eligibility requirements are as follows: (1) Candidates must be active members of ABCT, (2) New/Early Career Professionals within the first 10 years of receiving his or her doctoral degree (PhD, PsyD, EdD). Preference will be given to applicants with a demonstrated interest in and commitment to child and adolescent mental health care. Applicants should submit: nominating cover letter, CV, personal statement up to three pages (statements exceeding 3 pages will not be reviewed), and 2 to 3 supporting letters. Application materials should be emailed as one pdf document to ABCTAwards@abct.org. Include candidate's last name and "Albano Award" in the subject line. Nomination deadline: March 1, 2021.

#### Michael J. Kozak Critical Inquiry and Analytical Thinking Award

"Clarity of writing reflects clarity of thinking." This statement reflects the overarching goal that Michael J. Kozak sought to achieve himself and that he vigorously encouraged others to reach as well. His penchant for critical inquiry cut across contexts: whether in providing cognitive-behavioral treatment itself, offering supervision of treatment, in scientific inquiry and writing, or in advising investigators about how to put their grant applications in the best possible position for success. Dr. Kozak was always in search of clarity. Accordingly, recipients of the Michael J. Kozak Critical Inquiry and Analytical Thinking Award from ABCT should embody this same spirit in their own work. Michael was able to achieve this high standard and promote its achievement in others with great skill and kindness, so recipients should also conduct themselves in such a way in their professional lives. This award will be given in alternate years. The recipient will receive \$1,500 and a plaque. Please complete the online nomination materials at www.abct.org/awards. Then email the nomination materials as one PDF document to ABCTAwards@abct.org, Include "Michael J. Kozak Award" in the subject line. **Nomination deadline:** March 1, 2021.

#### **Student Dissertation Awards**

- Virginia A. Roswell Student Dissertation Award (\$1,000)
- Leonard Krasner Student Dissertation Award (\$1,000)
- John R. Z. Abela Student Dissertation Award (\$500)

Each award will be given to one student based on his/her doctoral dissertation proposal. Accompanying this honor will be a monetary award (see above) to be used in support of research (e.g., to pay participants, to purchase testing equipment) and/or to facilitate travel to the ABCT convention. Eligibility requirements for these awards are as follows: 1) Candidates must be student members of ABCT, 2) Topic area of dissertation research must be of direct relevance to cognitive-behavioral therapy, broadly defined, 3) The dissertation must have been successfully proposed, and 4) The dissertation must not have been defended prior to November 2020. Proposals with preliminary results included are preferred. To be considered for the Abela Award, research should be relevant to the development, maintenance, and/or treatment of depression in children and/or adolescents (i.e., under age 18). Self-nominations are accepted, or a student's dissertation mentor may complete the nomination. The nomination must include a letter of recommendation from the dissertation advisor. Please complete the nomination form found online at www.abct.org/awards/. Then e-mail the nomination materials (including letter of recommendation) as one pdf document to ABCTAwards@abct.org. Include candidate's last name and "Student Dissertation Award" in the subject line. Nomination dead-line: March 1, 2021

#### President's New Researcher Award

ABCT's 2020-21 President, David F. Tolin, Ph.D., invites submissions for the 43rd Annual President's New Researcher Award. The winner will receive a certificate and a cash prize of \$500. The award will be based upon an early program of research that reflects factors such as: consistency with the mission of ABCT; independent work published in high-impact journals; and promise of developing theoretical or practical applications that represent clear advances to the field. Requirements: must have had terminal degree (Ph.D., M.D., etc.) for at least 1 year but no longer than 5 years (i.e., completed during or after 2015); must submit an article for which they are the first author (in press, or published during or after 2018); 2 letters of recommendation must be included; self-nominations are accepted; the author's CV, letters of support, and paper must be submitted in electronic form. Applicants from traditionally underrepresented backgrounds, or whose work advances our understanding of behavioral health disparities, are particularly encouraged to apply. E-mail the nomination materials (including letter of recommendation) as one pdf document to PNRAward@abct.org. Include candidate's last name and "President's New Researcher" in the subject line. Nomination deadline: March 1, 2021.

#### Graduate Student Research Grant

The ABCT Research Facilitation Committee is sponsoring a grant of up to \$1000 to support graduate student research. The grant will be awarded based on a combination of merit and need. Eligible candidates are graduate student members of ABCT seeking funding for an unfunded (including internal sources of funding) thesis or dissertation project that has been approved by either the faculty advisor or the student's full committee. Applications should include all of the materials listed in GSRG Application Guidelines (https://www.abct.org/Resources/index.cfm?m=mResources&fa=GraduateStudentGrant) and one letter of support from a faculty advisor. Please email the application, excluding the advisor letter, in a single pdf to the chair of the Research Facilitation Committee, Shannon Sauer-Zavala, PhD, at ssz@uky.edu. Include "Graduate Student Research Grant" in your subject heading.

Please ask your faculty advisor to e-mail a letter of support separately.

Application deadline: March 1, 2021

#### Nominations for the following award are solicited from members of the ABCT governance:

#### **Outstanding Service to ABCT**

Please complete the nomination form found online at www.abct.org/awards/. Then e-mail the completed form and associated materials as one pdf document to ABCTAwards@abct.org. Include "Outstanding Service" in the subject line. **Nomination deadline:** March 1, 2021.

For details on all ABCT Awards, visit our website at www.abct.org





# **55th Annual Convention**

November 18-21, 2021 | New Orleans

# for Ticketed Sessions

## Workshops & Mini Workshops

Workshops cover concerns of the practitioner/ educator/researcher. Workshops are 3 hours long, are generally limited to 60 attendees, and are scheduled for Friday and Saturday. Please limit to no more than 4 presenters. Mini Workshops address direct clinical care or training at a broad introductory level. They are 90 minutes long and are scheduled throughout the convention. Please limit to no more than 4 presenters. When submitting for Workshops or Mini Workshop, please indicate whether you would like to be considered for the other format as well.

For more information or to answer any questions before you submit your abstract, email Christina Boisseau, Workshop Committee Chair, workshops@abct.org

## Institutes

Institutes, designed for clinical practitioners, are 5 hours or 7 hours long, are generally limited to 40 attendees, and are scheduled for Thursday. Please limit to no more than 4 presenters.

For more information or to answer any questions before you submit your abstract, email **Samantha G. Farris, Institutes Committee Chair, institutes@abct.org** 

# **Master Clinician Seminars**

Master Clinician Seminars are opportunities to hear the most skilled clinicians explain their methods and show taped demonstrations of client sessions. They are 2 hours long, are limited to 40 attendees, and are scheduled Friday through Sunday. Please limit to no more than 2 presenters.

For more information or to answer any questions before you submit your abstract, email Tejal Jakatdar, Master Clinician Seminars Committee Chair, masterclinicianseminars@abct.org

## **Research and Professional Development**

Presentations focus on "how to" develop one's own career and/or conduct research, rather than on broad-based research issues (e.g., a methodological or design issue, grantsmanship, manuscript review) and/or professional development topics (e.g., evidence-based supervision approaches, establishing a private practice, academic productivity, publishing for the general public). Submissions will be of specific preferred length (60, 90, or 120 minutes) and format (panel discussion or more hands-on participation by the audience). Please limit to no more than 4 presenters, and be sure to indicate preferred presentation length and format.

For more information or to answer any questions before you submit your abstract, email Cole Hooley, Research and Professional Development Committee Chair, researchanddevelopmentseminars@abct.org

Portal Opens: Monday, Jan. 4

Submission deadline: February 8, 2021, 3:00 а.м. EST

Conference Theme:

"Championing CBT: Promoting Cognitive and Behavioral Practice and Science in the Context of Public Health, Social Justice, Policy, Research, Practice, and Training"

Information about the convention and how to submit abstracts will be on ABCT's website, www.abct.org, after January 1, 2021.



CHAMPIONING CBT Promoting Cognitive and Behavioral Practice and Science in the Context of Public Health, Social Justice, Policy, Research, Practice, and Training



# **CALL for PAPERS**

ABCT is proud to announce the 2021 convention theme of *Championing CBT*: *Promoting Cognitive and Behavioral Practice and Science in the Context of Public Health, Social Justice, Policy, Research, Practice, and Training.* 

Sometimes it can feel like swimming against a strong current when advocating for cognitive and behavioral science and practice (i.e., henceforth, "CBT") outside of our close professional circles. The international landscape of mental health prevention, intervention, and training is replete with alternative theories, practices, and interests. The 2021 Annual Convention will place a spotlight on success stories, trials, and lessons learned related to promoting CBT and differentiating it from the other mental health worldviews. In doing so, the ABCT community will come together for a rich discussion that facilitates a core component of the organization's mission to facilitate "the global application of behavioral, cognitive, and biological evidence-based principles." Examples of topics consistent with this theme include, but are not limited to, the following (in no particular order):

- Advocating for the value of CBT in the priorities of major funding agencies and organizations (e.g., importance of promoting cognitive and behavioral science within the NIMH RDoC framework).
- Providing a platform for CBT in the context of social justice (e.g., using cognitive and behavioral science and practice to affect change in prejudice and stigma).
- Encouraging CBT with policymakers to enhance public health through science and practice (e.g., adopting cognitive and behavioral science and practice to reduce unhealthy behaviors, like smoking).
- Promoting CBT priorities in the training of the mental health researchers and practitioners of tomorrow (e.g., encouraging CBT principles as part of establishing training competencies and standards).
- Educating the public about CBT on social media and other public-facing platforms (e.g., impacting public perception of CBT via #CBTWorks).
- Supporting dissemination and implementation of CBT (e.g., integrating CBT principles in a population-level health initiative or system).

Submissions may be in the form of symposia, clinical round tables, panel discussions, and posters. Information about the convention and how to submit abstracts will be on ABCT's website, www.abct.org, after January 1, 2021. The online submission portal for general submission will open on February 8, 2021.

*the Behavior Therapist* Association for Behavioral and Cognitive Therapies 305 Seventh Avenue, 16th floor New York, NY 10001-6008 212-647-1890 | www.abct.org

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# Renew YOUR MEMBERSHIP for 2021

... because, in these uncertain times, membership is crucial. ABCT provides a ground of training, of learning, of collaborating, of rethinking. When you renew, we renew— when you uncover new expertise and awareness at the convention or through a webinar, when you join a SIG, when you forge connection with colleagues on the list serve, when you take action and vote, when you absorb new insights from a journal article, when you gain a client from Find a CBT Therapist, this vitality carries us all. **Our aim is to help sustain, on may levels, your crucial work in this world.** 

> Visit us at www.abct.org and click RENEW