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December 2014

Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

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Abstract

An elevated rate of suicide among Veterans remains a growing and pressing public health concern. Available interventions often lack empirical support or are too protracted and expensive to implement on a wide scale. Primary care represents a unique opportunity with which to engage those Veterans who are experiencing suicidal ideation. However, Veterans who are not at imminent risk often fall into a treatment gap and experience significant wait times until beginning treatment with a specialty mental healthcare provider. An efficacious intervention introduced into this gap in services may reduce suicidal ideation among Veterans and increase rates of follow-up with specialty care. One therapeutic intervention that has been identified as being efficacious in the reduction of suicidal ideation and suicidal self-directed violence is dialectical behavior therapy (DBT). A brief intervention aimed at reducing suicidal ideation was piloted among a sample of Veterans enrolled in primary care at a Department of Veterans Affairs (VA) medical center (n = 4; 1 completed full protocol). The intervention drew on elements of DBT and included four brief training modules including (mindfulness, distress tolerance, interpersonal effectiveness, and emotion regulation). Using single-case experimental design methodology and ecological momentary assessment, preliminary data from daily assessments indicate this method of data collection is feasible and suggests that the emotion regulation and interpersonal effectiveness modules may help to reduce the variability of suicidal ideation, as well as alcohol consumption.

Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans
in a Primary Care Setting

by

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Dissertation
Submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in *Clinical Psychology*.

Syracuse University
December 2014

Acknowledgements

I would like to acknowledge several individuals who have supported me throughout graduate school and the completion of this dissertation. I would like to thank my advisor Dr. Stephen Maisto. The time and effort you have invested to mentor me have been instrumental in my development as a scientist and a person. Thank you to the many coaches, role models, and mentors I had throughout my early development, including my teachers in the Jordan-Elbridge school district who always pushed me to do better.

I would also like to acknowledge my family and friends who have supported me throughout this entire experience. Even when I was overly focused on academics, you always made time for me and provided me with balance. Thank you to my wife Ellen Bishop. Your love and support for our family allowed me to pursue this dream. Lastly, I would like to thank my parents, Raymond and Elizabeth Bishop. Your support and love has been unwavering and invaluable. For making me believe that I could do anything, for showing me true character, and for every overtime shift, I dedicate this to you.

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Suicide remains a major public health concern, and as of 2010 remained the 10th leading

cause of death in the United States, responsible for almost 38,000 deaths, more than Parkinson's,

kidney, or liver disease (Murphy, Xu, & Kochanek, 2010). This represents an increase from

2001, when suicide was the 11th leading cause of death in the United States (CDC, 2012).

Among the general population of the United States, approximately 12 out of every 100,000

deaths can be attributed to suicide. These rates are even greater among younger age groups, with

suicide being the 3rd leading cause of death for individuals between the ages of 15 and 24 and the

4th leading cause of death among people between the ages 25 and 44 (Murphy et al., 2010).

Additionally, although most completed suicides occur as the result of a first attempt

(Mann, 2002), attempts occur much more frequently than completed suicides (Hirschfeld &

Russell, 1997). The large number of annual suicide attempts each year in the United States also

contributes to creating a significant cost and resource burden for the healthcare system, with

approximately half a million individuals utilizing emergency department services following a

suicide attempt (Gaynes, West, Ford, Frame, Klein, & Lohr, 2004; Office of the Surgeon

General, 1999).

In the ongoing prevention and intervention efforts to reduce the rate of suicide, several

correlates of suicide and suicidal behavior have been identified. Most prominently, suicide has

been associated with mental illness, with approximately 90% of those who complete suicide

meeting criteria for a mental illness at the time of death (Hirschfeld & Russell, 1997). Comorbid

conditions such as depression, alcohol dependence, and posttraumatic stress disorder (PTSD)

have been associated with suicide outcomes (Nock, Borges, Bromet, Cha, Kessler, & Lee, 2009).

Additionally, previous suicidal and self-harm behaviors (Black, Blum, Pfohl, & Hale, 2004), as well as suicidal ideation (Bulik, Carpenter, Kupfer, & Frank, 1990), have been identified as predictors of whether an individual will attempt suicide.

Suicide and suicide attempts have also been described as *suicidal self-directed violence*, or "behavior that is self-directed and deliberately results in injury or the potential injury to oneself [where] there is evidence, whether implicit or explicit, of suicidal intent" (O'Neil et al., 2012, p. 1; Brenner et al., 2011). The construct of suicidal self-directed violence has proved difficult to assess and research (O'Neil et al., 2012), as it is a low base rate behavior and requires large samples and prolonged follow-up periods that can require substantial resources to investigate (Brown, Have, Henriques, Xie, Hollander, & Beck, 2005). Self-harm, also referred to as self-injurious or parasuicidal behavior, represents a broader classification of behavior and includes acts of self-directed violence, where the intent to die may not be explicit. In contrast to the frequency of suicidal self-directed violence and self-harm, suicidal ideation is reported much more readily in clinical settings, is an antecedent of suicide (Conner, McCloskey, & Duberstein, 2008), and is responsive to interventions (Beck, Kovacs, & Weissman, 1979; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991). In addition, suicidal ideation theoretically affects functioning in multiple realms, such as straining occupational and interpersonal relationships.

Suicide Prevention Interventions

Broad interventions aimed at changing public perceptions regarding suicide have been employed with some success (Mann et al., 2005). Public service campaigns and interventions delivered through the media seem to decrease stigma of mental health difficulties and increase knowledge of mental health and suicidal behaviors alike. However, they fail to consistently reduce rates of suicidal behavior and do not necessarily increase treatment utilization (Mann et

al., 2005). In this same vein, some of the best methods currently available for reducing suicide and suicidal self-directed violence remain the restriction of access to lethal means (e.g., providing gun locks) and education of physicians in the recognition of mental illness (e.g., screening for depression; Mann et al., 2005).

There are also several protective factors that can reduce risk such as knowledge of positive coping skills, social support, sense of connection/community, and mental healthcare (National Action Alliance for Suicide Prevention, 2014). Primary care patients who are experiencing sub-threshold psychopathology or distress may benefit from adding positive coping skills in an effort to improve overall psychological health or buffer individuals against stress.

At the individual level, the prescription of pharmacological medication, particularly anti-depressants, is one of the more commonly used methods of treatment. However, in a recent review, O'Neil and colleagues (2012) reported that the available evidence for the efficacy of pharmacotherapy in the prevention of suicide is limited. Specifically, it was reported that the available data do not support the common assumption that anti-depressants reduce the rate or likelihood of suicide attempts or completions. Additionally, the reviewers posited that restricting the sample by not including individuals at higher risk for suicide in these pharmacology studies may have contributed to the null findings regarding the effect of antidepressants on suicide variables. Indeed, half of the studies examined as part of O'Neil and colleagues' review specifically excluded individuals at the greatest risk for suicide, limiting the inferences that can be drawn from their data (O'Neil et al., 2012).

Additional interventions attempting to reduce suicidal behavior at the individual level have included problem solving therapy and manual-assisted cognitive-behavioral therapy (MACT; Evans et al., 1999). The evidence for using problem solving therapy as a suicidal

behavior intervention has been described as weak or insufficient (Mann et al., 2005). However, because of more recent findings among non-Veteran inpatients in which a sub-group of individuals with multiple hospitalizations pre-intervention showed improvement (Hatcher, Sharon, Parag, & Collins, 2011), problem solving therapy has been identified as an intervention that warrants additional research (O'Neil et al., 2012).

Manual-assisted, cognitive-behavioral therapy (MACT; Evans et al., 1999) is a brief intervention that was developed in the United Kingdom for the treatment of patients at risk for self-harm. MACT includes bibliotherapy and portions of individual therapy drawn from both dialectical behavior therapy (DBT) and cognitive-behavioral therapy (CBT). In a randomized controlled trial, 34 patients of mental health clinics in London were either assigned to MACT (N = 18) or treatment as usual (N = 16). Participants receiving MACT had between two and six sessions with a mean number of 2.7 sessions. Cognitive and problem-focused therapy was augmented with bibliotherapy regarding problem solving, basic cognitive techniques to manage emotions and negative thinking, and strategies to prevent relapse (Evans et al., 1999). At a 6-month follow-up, 56% of those assigned to MACT reported a parasuicidal act (defined by Evans and colleagues as any intentional, acute, self-injurious behavior with or without suicidal intent) since the end of treatment as compared to 71% of those in the treatment as usual group. Using nonparametric statistics, the authors also reported that the median rate of self-harm episodes per month was not statistically different between groups (MACT = .17 & TAU = .37; p = .11). The only reported significant difference between groups at follow-up was improvement in self-rated depression symptoms (p = .03) for individuals receiving MACT (Evans et al., 1999).

Results were mixed in the few subsequent studies that examined MACT. The largest of the trials reported a non-significant difference between MACT and treatment as usual in post

treatment reports of self-harm (Byford et al., 2003; Tyrer et al., 2003). Two subsequent trials with small sample sizes ($N = 16$; More, Lowmast, & Hopwood, 2010) and ($N = 15$; Weinberg, Gunderson, Hennen, & Cutter, 2006), reported significant decreases in suicidal ideation and self-harm for the MACT group.

Although there have been mixed findings in tests of the MACT intervention, it is representative of a positive trend in mental healthcare towards briefer and more cost-effective treatments. Implementation of efficacious and cost-effective interventions that can be delivered outside of specialty care have the potential to make a more immediate impact with patients when they initially present in distress. Indeed, it has been suggested that the most feasible means of addressing suicidal thoughts and behaviors is by focusing on high-risk groups early in treatment (e.g., depressed patients presenting in primary care; Gaynes et al., 2004).

In summary, available interventions aimed at reducing suicidal behavior have made some positive contributions, but leave much work to be done in this field of research. Broad, population-based interventions serve to raise awareness and decrease stigma regarding suicide, while results have been mixed for individual level interventions such as pharmacotherapy, problem solving therapy, and MACT. Development of brief interventions that can be implemented early in treatment, among those at the highest risk for suicide, remain a research priority.

Suicide & Veterans

The most efficient use of limited prevention and intervention resources may be to target the most at risk groups for suicide (e.g., depressed individuals in primary care; Gaynes et al., 2004). Veterans have been identified as a group that is at a significantly greater risk for suicide than the general population and that reports elevated levels of suicidal ideation (Lish,

Zimmerman, Farber, Lush, Kuzma, & Plescia, 1996). The frequency of completed suicide is

greater among Veterans than in the general population (Shekelle Bagley, & Munjas, 2009), and

although military service has been previously considered a protective factor, the rate of suicide

has recently increased in the early years following deployment (DoD, 2010). Additionally, the

military suicide rate has increased steadily since 2005 to 18.4 suicides per 100,000 in 2009

(Institute of Medicine, 2008).

Increased rates of completed suicides may indicate that Veterans are uniquely vulnerable.

Several factors could contribute to this higher rate, such as experience with firearms, elevated

rates of unemployment post military career, as well as the commonly identified factors of mental

illness and substance use. Previous studies have suggested that up to a third of individuals

receiving care at VA outpatient clinics experience depressive symptoms (Zivin et al., 2007), and

that substance abuse is related to an elevated risk for suicide among Veterans who are depressed

(Hankin, Spiro, Miller, & Kazis, 1999). Unfortunately, there is a dearth of quality research

regarding the assessment and prevention of suicide among Veterans. Even among the

innovations in suicide prevention that the VA has implemented (e.g., hotlines, suicide

coordinators, and outreach programs), the evidence is insufficient to draw firm conclusions

regarding their efficacy (Valenstein, 2012).

In regards to the available interventions for Veterans, recent reviews did not reveal a

single published RCT that specifically examined self-directed violence among Veterans (Gaynes

et al., 2004, Mann et al., 2005; O'Neil et al., 2012). The interventions that do exist (developed

using non-Veteran populations) have been described in these reviews as being either largely

ineffective or having insufficient empirical support to make claims as to their efficacy.

There is one RCT underway with the focus of treating suicidal ideation among Veterans in an inpatient hospital setting. A pilot study conducted by Britton, Conner, and Maisto (2012) found that one to two sessions of motivational interviewing among Veterans ($N = 19$) admitted to inpatient care for suicidal ideation resulted in post treatment reductions in suicidal ideation as well as strong follow-up rates with mental health providers in the following 2 months (73% of patients engaged in at least biweekly therapy; Britton, Conner, & Maisto, 2012). Currently, a larger RCT is underway to replicate these findings.

As Veterans report elevated suicidal ideation (Lish et al., 1996) and an increased rate of completed suicide has been observed among Veterans (Shekelle et al., 2009), they should be considered an at-risk group for suicide. However, the majority of the research conducted regarding self-directed violence has occurred among non-Veteran populations or is still at an early stage (e.g., Britton et al., 2012). Given the gravity of the risk to our Veterans and previous reviews suggesting the early implementation of interventions (Gaynes et al., 2004), addressing suicide at the primary care level within the VA system is of the utmost importance.

Suicide Prevention in Primary Care

Primary care providers represent the front line of mental healthcare, as it often is where patients in acute distress present long before they can be seen in specialty care. Part of the key role played by primary care providers is the identification and management of suicidal ideation and other mental health symptomatology. Previous studies show that approximately 2%-3% of primary care patients report experiencing suicidal ideation during the preceding month (Gaynes et al., 2004; Olfson, Weissman, Leon, Sheehan, & Farber, 1996; Zimmerman, Lish, Lush, Farber, Plescia, & Kuzma, 1995). Rates of suicidal ideation have been reported as being two to three times as great among VA primary care patients, with 7.3% of consecutively seen primary

care patients reporting suicidal ideation in a study conducted before the beginning of the wars in Iraq and Afghanistan (Lish et al., 1996).

The suicidal ideation experienced by those in primary care tends to decrease in intensity over time for many patients (Schulberg et al., 2005). However, when the natural course of suicidal ideation is observed, large numbers of individuals continue to experience ideation as time progresses (e.g., 36.7% at 1-year follow up; Raue, Meyers, Rowe, Heo, and Bruce, 2007). Examinations of the naturalistic course of suicidal ideation among primary care patients suggests that those at zero to low risk appear to remain at zero to low risk at three and six-month follow-ups (Schulberg et al., 2005). However, among those identified as being at intermediate risk or having higher levels of suicidal ideation, a substantial percentage reports elevated ideation at 3-month (24%) and 6-month (20%) follow-ups (Schulberg et al., 2005).

The presentation of suicidal ideation in the primary care setting is made more relevant when one considers that up to two-thirds of individuals who complete suicide visited their primary care provider within the prior month, and up to 40 percent of those patients visited the week before committing suicide (Blumenthal, 1988; Gaynes et al., 2004; Luoma, Martin, & Pearson, 2002; Pirkis, & Burgess, 1998; Robins, Murphy, Wilkinson, Gassner, & Kayes, 1959). Among the Veterans who died by suicide between April 2010 and June 2011 ($N = 996$), 19 percent were last seen by a primary care provider (Bossarte & Kemp, 2011).

These final primary care visits can often occur without the presence of obvious indications of impending risk (Zeiss & Kemp, 2012), and it is often unclear whether individuals are seeking care for emotional distress or other medical conditions (Dobscha, 2012). Some findings suggest, however, that mental health and suicidal ideation are not addressed during

these final visits (Denneson et al., 2011; Dobscha, 2012; Smith, Craig, Ganoczy, Walters, & Valenstein, 2011).

Denneson and colleagues (2011) reported that even when questioned about suicidal ideation during their last visit, only one third of Veterans experiencing suicidal ideation acknowledged they were considering suicide. Other research has suggested that simple screening in the primary care setting can be quite effective in the identification of individuals who are experiencing suicidal ideation (Funderburk, Fielder, Demartini, & Flynn, 2012). Once an at-risk individual is identified, however, the provider is faced with the decision of whether to treat him/her within the primary care setting or refer the patient to specialty care (e.g. outpatient mental health counseling), a process that many Veterans are hesitant to engage in (Visco, 2009). Indeed, it has been reported that for those Veterans willing to report their mental health symptoms, only a small percentage (10% males, 26% females) choose to pursue treatment. Many avoid treatment due to concerns such as stigma and uncertainty regarding the effect it may have on their military careers (Visco, 2009).

While some Veterans may not wish to engage in mental health services, primary care providers must be prepared to meet the demands of those that do. Given the time constraints and caseloads encountered by primary care providers, interventions need to be both brief and use staff resources efficiently. Researchers have begun to implement brief interventions in the primary care setting for a variety of mental health difficulties and have shown that treatment gains can be maintained over significant periods of time (e.g. Ray-Sannerud et al., 2012).

Gaynes et al. (2004) identified two randomized controlled trials aimed at reducing suicide in patients presenting in primary care. However, only one of these trials (Bennewith et al., 2002) actually took place within the primary care setting. The second study recruited from primary

care, but the intervention occurred in a psychiatric outpatient setting (Koons, Robins, Tweed, &

Lynch, 2001).

Bennewith and colleagues (2002) tested a three-part intervention with a focus on

physician behavior. Following an episode of deliberate patient self-harm, researchers mailed

his/her primary care provider a letter describing the patient's recent attempt. The providers also

received a letter that they could forward to their patients offering to schedule an appointment and

providing guidelines on the management of self-harm in the primary care setting. Study results

were not promising, as only 58% of the primary care providers sent letters to their patients.

Follow-up analyses also revealed that the "treatment as usual" and intervention groups had

similar rates of attempted suicide at a 12-month follow-up (19.5% vs. 21.9%; Bennewith et al.,

2002; Gaynes et al., 2004).

Given the difficulties sometimes encountered in getting at-risk individuals enrolled in

specialty care, and the available platform of primary care, it makes sense to streamline access to

behavioral healthcare. For the last decade there has been a drive to integrate specialty mental

health and primary care services. One model that has been spearheaded by the VA is the Primary

Care Mental Health Integration (PC-MHI) system, the goal of which is to improve the overall

health of Veterans by offering them behavioral health services within the primary care setting

(Beehler, Funderburk, Possemato, & Vair, 2012). Specifically, co-located, collaborative care

features the presence of behavioral health providers, embedded within primary care, with the aim

of supporting in the assessment and treatment of mental health conditions. This is one of a

number of approaches currently being offered by VA.

Suicide Prevention within VA Primary Care

The VA provides additional services aimed at decreasing the rate of suicidal self-directed violence amongst Veterans. Some of the changes recently implemented include increasing the overall capacity of specialty care services, making available a Veteran suicide/crisis hotline, creating patient aligned care teams (PACT), and having care managers and suicide prevention coordinators located at VA hospitals (Valenstein, 2012). In the care management model, a nurse follows up with patients, usually by phone, to monitor and reinforce adherence to the treatment plan developed in primary care (Bryan & Corso, 2011). Some treatment centers have also implemented a Behavioral Health Laboratory, which gives the primary care provider the ability to refer patients to a service where structured assessment and monitoring of treatment can be provided over the phone (Zeiss & Karlin, 2008). Perhaps the best-disseminated service throughout the VA system is the crisis hotline that is accessible to Veterans. The line is available 24-hours a day; it has received over half a million calls and has initiated 19,000 plus rescues since its inception in 2007 (Zeiss & Kemp, 2012). An advantage of this crisis line is the ability to access the Veteran's medical record, facilitating linkages among the Veteran, suicide prevention coordinators, and current providers (Valenstein, 2012).

In addition to self-report of suicidal ideation, Veterans are required to receive annual screening for depression using the Patient Health Questionnaire-2 (PHQ-2; Kroenk, Spitzer, & Williams, 2003). If the provider suspects depression or the presence of suicidal thoughts, then further assessment is suggested in order to determine the level of care required. Current VA/DoD practice guidelines for the treatment of depression in primary care (VA, 2012) suggest three classifications for suicide risk (imminent, short-term, and long-term). During the course of a suicide assessment, the Veteran is judged to be at imminent risk if he or she endorses suicidal intent, reports an organized plan, has lethal means at hand, expresses extreme pessimism, or

shows both ideation and the evidence of psychosis. In this case the provider is urged to immediate action (i.e. hospitalization of the Veteran) and the Veteran's chart is flagged. Those at the highest risk also fall under the care of the local Suicide Prevention Coordinator and receive extra help in the form of facilitation of subsequent referrals and care management (Bossarte & Kemp, 2011). Short-term risk is suggested if the Veteran has endorsed thoughts of suicide and several risk factors are present (e.g., family history of suicide, male, substance dependence) but criteria for imminent risk (i.e., active intent, means, active plan, extreme pessimism, and psychosis) are absent. If short-term risk is indicated, treatment suggestions include: developing a safety plan, initiating steps to remove lethal means, giving the patient a suicide hotline number, including family and/or friends in the plan (if patient gives consent), maintaining frequent contact with patient, and/or treating mental health and substance abuse conditions that are present (e.g., pharmacotherapy or referral to psychotherapy). In cases considered to be at long-term risk the guidelines suggest treating the existing psychiatric and substance abuse conditions and maintaining contact with the patient in order to conduct reevaluation (VA, 2012).

Despite these programs, a treatment gap remains. Individuals referred to psychotherapy or started on a course of pharmacotherapy may not be seen for several weeks or drop out of treatment at numerous time points (e.g. not engaging with referral, not filling a prescription, waiting for an opening in the schedule to see a therapist). Available brief interventions such as MACT (Evans et al., 1999), or promising interventions under development such as Britton and colleagues' (2012) motivational interviewing intervention, have either not been tested in in the primary care setting or have been designed for use in other treatment settings (i.e., inpatient; Britton et al., 2012). Development and implementation of efficacious interventions designed to be carried out by behavioral health providers (BHPs) during the referral period between a

primary care visit and the start of specialty care may serve to fill an important treatment gap. This offers the Veteran a chance to engage in slightly more intensive treatment than care as usual while waiting for outpatient mental health care to begin. Dialectical Behavioral Therapy (DBT; Linehan, 1993) is an intervention that has shown promise in the reduction of suicidal ideation, the essential components of which may be able to be disseminated in the primary care setting.

Dialectical Behavior Therapy

Structure of DBT. Dialectical behavior therapy has shown promise in the reduction of suicidal behavior and has been identified as a priority for future research (O'Neil et al., 2012). Dialectical behavior therapy (Linehan, 1993) has been described as a cognitive behavioral based treatment aimed at addressing suicidal, treatment interfering, and other self-harm behaviors, among individuals with borderline personality disorder (BPD; Linehan et al., 2006). However, the treatment has also been demonstrated to be equally effective in the reduction of borderline pathology (including parasuicidal behavior) among individuals that do not meet diagnostic criteria for BPD (Hong, 2003). It was proposed by Linehan (1993) that the judgment and behavior of a person can be significantly affected by unregulated emotional experience, often resulting in behavior that can be impulsive and self-destructive (Hong, 2003). Dialectical behavior therapy attempts to address several goals including: increasing the patient's behavioral repertoire/development of new skills, addressing motivation for using these skills and barriers, generalization of skills to daily life, and reinforcement of functional behavior (Linehan et al., 2006; Robins & Chapman, 2004).

At the center of DBT are the concepts of acceptance and change (Linehan, 1993). Although these concepts may at first seem opposed, the aim is to achieve positive change facilitated by a context that is accepting and validating (Linehan, 1993). The patient is

concurrently accepting of his/her thoughts, feelings, and self, while trying to change them in desirable ways. This strategy is purported to draw on Zen principles and practice (Robins & Chapman, 2004).

Given that individuals with suicidal and self-harm behaviors typically face difficulties in a number of areas of their life, DBT involves the use of a treatment hierarchy to address the most severe behaviors earlier (Linehan, 1993; Robins & Chapman, 2004). As self-harm and suicidal ideation are predictors of suicide (Black et al., 2004), they are given the highest priority in the treatment hierarchy (Linehan, 1993). Treatment is conceptualized as occurring in four stages (Robins & Chapman, 2004). The focus of stage one treatment (the stage that has received the most attention in regards to DBT research) is on developing skills, behavioral control, and decreasing destructive behaviors such as self-harm, substance abuse, and suicidal behavior. As destructive behaviors come under control, stage 2 shifts the focus of treatment to the handling of emotion and increasing appropriate emotional response or experiencing (Robins & Chapman, 2004). The third conceptual stage of DBT involves focusing more on an individual's general happiness, improving relationships, and enhancing self-esteem. This is followed by the fourth and final stage of DBT treatment, which is the emphasis on and promotion of feelings of connectedness, freedom, and joy. At the beginning of therapy, patient and therapist try to agree on treatment goals and methods. Goals are established based on the hierarchy of stages of treatment, with prevention of suicide and suicidal self-directed violence taking the priority.

In its standard form, DBT consists of individual therapy, skills training delivered in a group format, telephone booster sessions, and therapist supervision. All four treatment modalities occur concurrently, theoretically allowing the individual therapist to focus on acute distress, while skills are provided in a psychoeducational group. Therapists are expected to attend weekly

supervision with other members of the DBT treatment team in order to refine skills and avoid burnout. The actual treatment components and strategies employed in DBT frequently draw on established cognitive-behavioral techniques and rest on findings from research on learning, emotion, and social psychology (Robins & Chapman, 2004).

Therapy, specifically skills training, is broken down into four modules: distress tolerance, mindfulness, emotion regulation, and interpersonal effectiveness. Groups can either be closed or have rolling admissions, with members picking up with whatever module the group is currently covering. Individual DBT therapy, which can last for up to a year, occurs concurrently with skills group training, reinforcing what is learned in skills group and helping to apply it to the patient's unique situation.

Theoretically, the acquisition and rehearsal of these skills should help patients to improve their ability to interact with others in productive and assertive ways, to regulate emotion, tolerate stressful situations and feelings of distress, inhibit harmful behaviors, and increase awareness of self and one's feelings (Robins & Chapman, 2004). Improvements of this sort would invariably contribute to a reduction in pathology, less frequent self-harming behaviors (e.g., substance abuse) and suicidal ideation as well as other positive mental health outcomes. To date there is a shortage of quality component analysis studies examining how each module of DBT affects subsequent behavior. Theoretically, however, it is reasonable to expect reductions in substance use following the completion of the distress tolerance and mindfulness modules, as they provide alternatives to the escape offered by substance use. Likewise, reductions in suicidal ideation and behavior may be a product of improved emotion regulation and interpersonal effectiveness, as the individual that has completed these modules may have acquired better ways to communicate his/her distress to others.

Empirical Support for DBT. Since its inception (Linehan et al., 1991), DBT has been the focus of several randomized controlled trials and has been consistently shown to be an efficacious treatment for the reduction of self-directed suicidal behavior among individuals with borderline personality disorder (Koons et al., 2001; Linehan et al., 2006; Verheul, van den Bosch, Koeter, de Ridder, Stinjnen, & van den Brink, 2003). Additionally, in a 2010 meta-analysis of 26 trials it was reported that DBT appears to have a moderate effect size in the reduction of suicidal self-directed violence and self-harm (Kliem, Kroger, and Kosfelder, 2010).

Early randomized controlled trials (RCTs) of DBT (Linehan et al., 1991; Verheul et al., 2003) helped to establish its efficacy as a treatment for suicidal behavior among those with borderline personality disorder. However, one recurring criticism of the work is that treatment gains may have been the result of common factors or components regularly seen in other treatment programs. However, it has been reported in a RCT examining the effects of DBT that the treatment was effective in reducing suicide attempts and hospitalizations as compared to treatment as usual by experienced matched experts in the community, even after controlling for the influence of common factors often presumed to lie at the core of treatment effectiveness (Linehan et al., 2006). This study was important to the overall evidence base of DBT, as it helps to establish that the treatment does not produce treatment effects that are solely attributable to common factors.

Also lending support to DBT as an efficacious alternative to treatment as usual, Koons and colleagues (2001) carried out an RCT examining the effects of a 6-month trial of DBT among female Veterans with borderline personality disorder. Individuals completing DBT showed significantly greater decreases in suicidal ideation and depressive symptomology than those in the active control condition (Koons et al., 2001).

Following up on this work, McMain and colleagues (2009) reported that DBT and psychiatric management, which included psychodynamically informed therapy and medication management, both reduced incidents of self-injury and hospitalizations, and resulted in improvements of mood symptoms at post treatment assessment (treatment duration was one year). The authors, however, also reported that there were no significant differences between therapy modalities.

Trials of DBT have traditionally analyzed data following one year of treatment, with assessment occurring both during the intervention and the follow-up period (Stanley et al., 2007), but have not as frequently reported on the unique contribution and effectiveness of each treatment module (Robins & Chapman, 2004). The modules of DBT are each designed to target different target behaviors, and that it is generally assumed that all four are important components of the treatment. Unfortunately, the influence of each component on target behaviors has received little attention in the available research on DBT (Hong, 2003).

In one such study, Dewe & Krawitz (2007) reported on the perceived value of 27 DBT skills typically taught during skills group. Following six months of standard DBT treatment, patients rated each of the 27 skills on its perceived effectiveness using a 5-point, Likert-type scale. All 27 skills had means that indicated that participants viewed them as effective and useful. Participants rated skills from the interpersonal effectiveness and mindfulness modules among the most effective, with distress tolerance skills receiving ratings that were lower, but still positive. The authors concluded that the various skills may take different amounts of time for participants to learn and incorporate into daily life, with some being easily implemented early in treatment while others may take on greater value later in treatment (Dewe & Krawitz, 2007). The authors also suggested teaching the distress tolerance module early in treatment, as it is easily

understood and can be implemented with the most ease into clients' daily lives; these factors have been identified as important to the perceived usefulness of DBT skills (Cunningham, Wolbert, & Lillie, 2001). Although the analysis presented by Dewe and Krawitz does not support a firm conclusion about the effectiveness of these DBT skills, it provides useful information concerning their perceived utility.

A 2003 component analysis of DBT treatment among a sample of 65 outpatients both with and without borderline personality disorder revealed several interesting results regarding the nature of DBT and its effectiveness (Hong, 2003). Dialectical behavior therapy led to reductions in borderline pathology as measured by the Personality Assessment Inventory (Morey, 1991), which includes items regarding impulsive behavior such as self-harm, at treatment conclusion. The reductions in pathology were not exclusive to participants with BPD, as DBT was equally effective for those without a BPD diagnosis, suggesting that this treatment can be extended to a broader population than initially intended. Additionally, significant reductions in pathology were observed between baseline and completion of the first module, as well as between initiation and completion of the fourth and final module (Hong, 2003).

However, analysis of results did not reveal significant *module specific* gains (e.g., improved distress tolerance scores following the completion of the distress tolerance module). Rather, many of the skills that were observed to have significantly improved did so during the mindfulness module regardless of what module they were originally intended to be part of (Hong, 2003). Hong posited that the inability to obtain module-specific gains may have been the result of insufficient statistical power. An additional impediment to the interpretation of these results is the selection of the time-points for analysis. Assessments occurred at five time points (baseline and following the conclusion of each of the four DBT modules). However, time of

entry into the study was variable, meaning that two participants may have had significantly different DBT experiences between time points. For example, the assessment at time point #2 for one participant may have been initiated by the conclusion of the mindfulness module (2-3 weeks), whereas another participant at time point #2 may have just completed emotion regulation (8-10 weeks). Therefore, there is the possibility of significantly different time in group between assessment periods.

The analysis of how each component of DBT affects treatment outcome should be addressed in future research regarding the intervention. Even when multifaceted interventions such as DBT are empirically supported, the question remains as to which components of the intervention contribute to reductions in suicidal ideation and self-harm. Additionally, there may be synergistic effects among components, or other factors that affect component delivery and effectiveness (Mann et al., 2005; Shekelle et al., 2009).

Despite the absence of definitive research on the efficacy of each component of DBT, it remains a widely accepted and disseminated treatment. In addition to reducing suicidal behavior and ideation, DBT has also been demonstrated to be effective in the reduction of other risky, but non-suicidal injurious behaviors. Individuals assigned to DBT engaged in a mean of 6.05 acts of self-harm over the course of therapy as opposed to 32.32 by the treatment as usual group (Linehan et al., 1991). Dialectical behavior therapy has also been implemented with good results in BPD populations with co-occurring substance use disorders (Verheul et al., 2003). Verheul and colleagues conducted an RCT comparing year-long DBT to treatment as usual using a sample of individuals with BPD and a co-occurring substance use disorder. Individuals receiving DBT not only reported fewer incidents of self-harm, but they also showed reductions in other risky behaviors such as substance misuse, binge eating, gambling, and reckless driving.

The behaviors and symptoms addressed via DBT (e.g., suicidal ideation, intense anger, impulsivity, self-harm, and unstable relationships) are not exclusively found among those with a diagnosis of BPD. Dialectical behavior therapy has been adapted for use in non-BPD populations including, individuals with eating disorders (Telch, Agras, & Linehan, 2001), depressed elderly patients (Lynch, Morse, Mendelson, & Robins, 2003), couples (Fruzzetti & Fruzzetti, 2003), individuals with ADHD (Hesslinger et al., 2002), and inmates (McCann, Ball, & Ivanoff, 2000). Dialectical behavior therapy has not yet been tested among primary care patients, likely because the standard duration of DBT is one year and involves multiple components. However, it would seem that DBT can successfully be implemented in this setting in a much reduced form and result in the desired treatment effects.

Alternative Forms of DBT. In a recent attempt to test a "brief" version of DBT, the treatment was reduced to six-months in duration (Stanley, Brodsky, Nelson, & Dulit, 2007). Twenty individuals with borderline personality disorder underwent a condensed version of DBT. At three- and six-month assessment periods, the participants enrolled in DBT reported decreases in non-suicidal self-injury (NSSI), NSSI urges, suicidal ideation, subjective distress, as well as lower scores on the Beck Hopelessness Scales, Beck Depression Inventory.

This is consistent with earlier hypotheses that individuals enrolled in DBT show the greatest treatment gains during the initial four months of treatment, with the final eight months being viewed largely as a consolidation period and time to reinforce newly learned skills (Linehan et al., 1991; Stanley et al., 2007). This is further supported by Hong's (2003) component analysis of DBT, from which he reported that significant treatment gains were made during the initial phase of treatment, regardless of skills group module, with further gains from completion of subsequent modules generally being non-significant (Hong, 2003).

These findings raise the question of whether a year-long, cost and resource intensive, multiple component intervention is necessary to achieve the same treatment effect as might otherwise be obtained with a reduced version of DBT. Nowhere is this made clearer than in Stanley et al.'s (2007) study, which demonstrated that DBT can still be a highly efficacious treatment at far less than the recommended 12-month length. Only three months of DBT were sufficient to reduce reported suicidal ideation, incidents of self-harm, and subjective distress.

Bohus and colleagues (2004) designed and tested a 3-month inpatient DBT program and reported significant differences with treatment as usual (inpatient hospitalization in this case) at follow-up. Those receiving 3-months of DBT showed improvements on parasuicidal behaviors (i.e. self-mutilation), depression, anxiety, interpersonal functioning, and social adjustment.

An additional argument for the utility of shorter treatment times is that individuals enrolled in longer therapies often drop out of treatment prior to completion of the protocol. DBT is not an exception to this pattern, as evidenced by McMain and colleagues' (2009) study in which 39% of DBT participants dropped out of therapy prior to completion as compared to 38% of the psychiatric management group. One attempt to reduce the treatment burden was an adaptation of DBT that incorporated skills training into individual therapy (Turner, 2000). The therapy, which lasted six months, resulted in significant reductions in suicidal ideation, self-harm behavior, number of days hospitalized, and depressive symptoms for those receiving the modified DBT as compared to the group receiving client centered therapy. This finding would seem to provide further support for the reduction DBT sessions over a shorter time period.

In summary, DBT appears to be an intervention that holds much promise in the reduction of suicidal ideation and self-directed violence. It is has been tested and found efficacious among numerous populations and has been identified as a research priority (O'Neil et al., 2012).

However, the current structure of DBT is not conducive to its being easily implemented in primary care, a setting identified as a critical point in treatment from which interventions can be launched. There is evidence, however, that the essential elements of DBT could be disseminated in a reduced format as part of a brief intervention.

Delivery of brief and efficacious interventions in the primary care setting may be the best use of limited resources and may represent increased potential to reach at-risk individuals. However, with limited evidence available to guide primary care providers' management of individuals at risk for suicide, further research is needed in this vital area of public health. One challenge in conducting research in the area of suicide is that it remains a low base rate behavior, even among high-risk groups such as Veterans. Although RCTs remain the gold standard for establishing evidence-based approaches to care, the size of RCTs that would be necessary to examine such low a base rate behavior, and the preclusion of a true placebo arm due to ethical concerns, make them difficult to implement and impractical in studies of suicide (Gaynes et al., 2004). Indeed, during both the 2-year data collection period of Linehan and colleagues' 2006 study and the 1-year data collection period of McMain and colleagues (2009), there was not a single documented suicide in either the treatment or active control conditions.

The Current Study and Hypotheses

A large proportion of Veterans seen in primary care who express suicidal ideation are referred to specialty care but may choose not to follow-up, leaving a gap in services through which a significant number of Veterans may be lost. The suggested alternative is to provide Veterans with a primary care intervention that is convenient, accessible, and lower in stigma because it is primary care-based. Accordingly, the purpose of this study was to develop and test a brief intervention aimed at reducing suicidal ideation in a sample of Veterans enrolled in VA

primary care who are considered to be at short-term risk for suicide. The intervention consisted of four individual treatment sessions with a behavioral health provider within the primary care setting. Each of the four DBT modules (distress tolerance, mindfulness, interpersonal effectiveness, and emotion regulation) was the focus of a single session.

It was hypothesized that participants would show reductions in suicidal ideation from baseline following each module of the intervention, regardless of which specific module was being covered in session. It was anticipated that the largest decrease in suicidal ideation would follow the interpersonal effectiveness and emotion regulation modules, as participants would theoretically be better able to conceptualize the distress that they are experiencing and have gained additional skills useful in effective communication. Substance use was also monitored, as it is often a comorbid condition observed among individuals in VA primary care that adds an additional element of risk in regards to suicide. It was hypothesized that the greatest reductions in substance use would be observed following the completion of the distress tolerance and mindfulness modules, as the Veteran would have gained alternative methods for handling stressful situations.

Method

Participants & Setting

Single case experimental design methodology with visual inspection analysis was utilized. Veterans ($N = 4$) of the United States military were recruited from primary care within an upstate NY VA Medical Center and consented to participate in the study. One advantage of the single case experimental designs is that few participants, often only one, are required to demonstrate experimental control (Rizvi & Nock, 2008).

Referrals came directly from BHPs who were co-located within primary care. Referral sources were provided with a recruitment aid that outlined the study, eligibility criteria, research staff contact information, and a recruitment script that the BHP could read to the patient (see Appendix F). The study therapist was on site in primary care 8 hours per week to accept referrals in person. As the flow of referrals was limited, researchers also presented at the monthly primary care staff meeting in order to generate additional referrals. Behavioral health providers then made referrals based on their knowledge of the protocol and the following inclusion/exclusion criteria.

Inclusion criteria consisted of: Veteran status, age 18 or over, English speaking, currently enrolled in VA primary care, and being at an elevated risk for suicide as indicated by a Beck Scale for Suicidal Ideation (BSS; Beck & Steer, 1991) score greater than 2. Individuals were excluded from the study if they were a non-Veteran or had a history of traumatic brain injury (TBI), per the electronic medical record. Individuals with a significant treatment history involving DBT (more than 3 months of weekly sessions) were also excluded from the study. This was to ensure that the content being covered during the course of the intervention was relatively novel to each participant. In order to increase participant safety, individuals that were currently experiencing acute psychotic symptoms (as indicated by the participant's medical record), or were otherwise considered an imminent risk for suicide (i.e. report an active plan, intent to act on plan, possession of means) were not included in the study. Furthermore, individuals at imminent-risk for suicide were not the target population for the current protocol, as this particular intervention was aimed at reducing suicidal ideation among individuals at a short-term to long-term risk for suicide. Those deemed to be at imminent-risk would have been referred to more intensive specialty care (see Suicide Risk Protocol).

Participant 001 was a 63-year old, white, male, Vietnam Veteran without a history of mental health treatment. The Veteran was service connected for PTSD related to combat trauma experienced during his service in Vietnam. He also carried diagnoses of major depressive disorder and alcohol use disorder. Participant 001 began to report the presence of PTSD symptomology and suicidal ideation to his primary care provider following his recent retirement in 2014. His ideation included daily thoughts of death, and in the days prior to beginning study participation he reported that he had relapsed and began to consume alcohol after nearly 30 years of sobriety. The Veteran identified his alcohol consumption as an attempt to self-medicate and reduce symptomology.

Participant 002 was a 44-year old, black, male, Persian Gulf War Veteran with a sporadic history of mental health treatment including spending 6 weeks in inpatient treatment related to a cocaine use disorder, and who carried a diagnosis of major depressive disorder. At baseline, he was seeing a behavioral health provider in primary care on a biweekly basis and had been referred for outpatient therapy for his ongoing alcohol use but had not followed through on that referral. Participant 002 was unemployed during his participation in this protocol and had been chronically under-employed for several years. The Veteran reported that his criminal record has made it difficult to find employment, and he attributed much of his daily suicidal ideation to his perception that his employment situation is hopeless. He however identified a need to care for his children as a strong protective factor that keeps him in control of his ideation, despite its intensity and duration.

Participant 003 was a 61-year old, white, male, non-combat Veteran with a significant history of suicidal ideation and attempts, diagnosed with major depressive disorder. The Veteran was not employed at the time of his participation in the study and was attempting to establish

disability benefits for type II diabetes and depression. In 2009 Participant 003 spent three days in inpatient psychiatric care following a suicide attempt in which he took an overdose of insulin. The Veteran spent an additional six days inpatient after a second attempt, also with insulin, was made in April 2014, three months prior to his enrolling in the present protocol. Since that time the Veteran has been flagged by the VA as being at high risk for suicide and followed by a suicide prevention coordinator.

Participant 004 was referred from the women's health clinic in primary care and was a 51-year old, female, Hispanic, HIV seropositive Army Veteran who served in the Cold War Era during the 1980s. Participant 004 had a diagnosis of major depressive disorder and had a history of military sexual trauma. The Veteran saw a behavioral health provider in primary care on a biweekly basis and had received individual treatment focused on suicidal ideation in the past. Participant 004 reported attempting suicide several years ago but did not provide a specific date of the attempt.

In addition to the participants who enrolled in the protocol, two participants scheduled initial baseline sessions but subsequently cancelled, were never consented, and reported that they were too distressed to meet with another provider to discuss suicide. One referral made two baseline appointments and no-showed for both, never disclosing the reason he declined to participate. Yet another referral met with the researcher, but declined participation after hearing about the project and reporting that he had just enrolled in outpatient psychotherapy for the first time and thought that it would be too overwhelming to try both therapies concurrently.

Pre-Intervention Assessments

 Demographics and Military Service Questionnaire. The demographics and military service questionnaire (see Appendix B) was administered at the baseline interview. Information

regarding age, socio-economic status, ethnicity, mental health treatment history, and military service was collected. Despite the relatively small sample size, this was a diverse set of participants. The sample consisted of 3 men and 1 woman with a mean age of 54 years old. All four participants reported that they were high school graduates and had annual incomes of less than $20,000, save Participant 001, who reported an annual income in the $20,000 to $40,000 range. Two of the participants identified as White males, one as a Black male, and one as a non-White, Hispanic female.

Beck Scale for Suicidal Ideation. (BSS; Beck & Steer, 1991). The BSS consists of 21 items (see Appendix C) designed to measure the participant's current intensity of attitude, behavior, and plan to commit suicide during the past week. Items 1 through 19 are scored on a 3-point scale (0-2) and are summed to produce a total score (0-38). The remaining two items assess incidence and frequency of previous suicide attempts and are not included in the total score.

The BSS has been found to be internally consistent among both inpatients ($\alpha = .90$) and outpatients ($\alpha = .87$; Beck & Steer, 1988). Concurrent validity has been established by comparison to the Beck Depression Inventory with correlation coefficients ranging from .58 to .69 (Beck, Steer, & Ranieri, 1988). The BSS has been used for the assessment of suicidal risk in emergency department settings and has demonstrated 90% specificity and 71% positive predictive value when used to distinguish which consecutively admitted patients would proceed to an inpatient stay based on suicide risk (Cochrane-Brink, Lofchy, & Sakinofsky, 2000).Validated cut scores have not yet specifically been established for the BSS, however, scores greater than 2 on the Scale for Suicidal Ideation (Beck et al., 1979), the BSS precursor with which it shares considerable overlap, indicate that an individual has a seven times greater

risk of completing suicide over his/her lifetime as compared to those individuals who score 2 or lower (Brown, Beck, Steer, & Grisham, 2000).

Dependent Variables and Data Collection

Interactive Voice Recording (IVR). Cellular phones were the primary vehicle through which data were collected during this study. The cellular phone was programmed to restrict the participant's ability to dial out phone numbers other than those programmed to the IVR system and the research project and to call the VA crisis/suicide hotline, local suicide hotline, and 911 in an emergency. Participants were not provided with the number for the phone and therefore were unable to receive calls other than those from the IVR system or research staff. All calls to the IVR system were time and date-stamped, and, together with the interview responses, were recorded in a computer database.

The IVR system consisted of programmable software (SmartQ) and a computer telephony voice board (Dialogic). The software was programmed to administer three "random prompt interviews" patterned after those used in previous ecological momentary assessment (EMA) research (Collins et al., 2003; Helzer et al., 2006). Each interview question included a multiple-choice response set to which participants were able to respond to by clicking numbers on the telephone keypad. In addition, error-trapping loops were built into the interview administration, such that if participants pressed a key outside the possible range of responses the system issued an alert and re-administered the question.

For these random prompt interviews, participants received three separate telephone prompts (rings) distributed during three two-hour blocks (9 a.m. – 11 a.m.; 2 p.m. and 4 p.m.; and 7 p.m. – 9 p.m.). The program dialed the cell phone number and administered the previously recorded assessment questions. If participants were unavailable at the time of the call, they

would be able to see that they had missed a call in the phone's display. In case that they were unable to respond immediately, participants were asked to do so at the earliest opportunity by calling the IVR system directly; however delays of more than 60 minutes were not considered valid data.

It was decided to collect data at multiple time points for two reasons. First, the more data points that are observed, the less likely random occurrences or fluctuations tend to affect scores without the research staff's knowledge. Second, collecting data in both the morning and evening allowed for the examination of intraday fluctuations of the dependent variables. It was decided to initially contact participants every five hours in order to ensure that the necessary skill usage prompts were present. This also represented an opportunity to observe the frequency of skill usage throughout the day while not imposing an undue assessment burden on the participants.

Self-Monitoring Suicide Ideation Scale. (SMSI; Clum & Curtin, 1993). The SMSI consists of three items derived from the Scale for Suicidal Ideation (SSI; Beck et al., 1979). The items are designed to measure the intensity and duration of suicidal ideation, as well as the level of perceived control in making a suicide attempt. Duration of suicidal ideation is measured by posing the question: "Today I have thought about making an active suicide attempt". The participant is asked to answer this item using a 5-point scale ranging from 0 (not at all) to 4 (continuously). Intensity is assessed on a 4-point scale 0 (none) to 3 (strong) following the question: "Today I have had thoughts of making an actual suicide attempt". To assess the level of control a person feels in regards to suicide the participant is asked: "Today I have felt that the control I have over making a suicide attempt was…?" The participant responds to a 4-point scale ranging from 0 ("strong; no doubt that I had control") to 3 ("absent; no sense of control").

The SMSI was standardized using a population of severely and chronically suicidal college students (mean age = 20; Clum & Curtin, 1993). Items from the SMSI have been shown to be moderately correlated with the SSI at pretreatment (.46 to .56) and at post-treatment (.71 to .82). The SMSI has also been used as part of a randomized controlled trial with suicide attempters to measure change in suicidal thinking (Patsiokas & Klum, 1985).

The Columbia-Suicide Severity Rating Scale (C-SSRS; Posner et al., 2008). In order to further ensure the safety of participants, we also included an item on suicidal intent. The C-SSRS is frequently used in both clinical and research settings to measure suicidal ideation and a variety of self-harm behaviors. The 2-part item from this measure that was included on the IRV assessment read: "Have you started to work out or worked out the details of how to kill yourself? Do you intend to act on them?" Answering "yes" to both items would be indicative of active suicidal ideation with at least a partial plan and intent." This would trigger the SMART-Q system to automatically contact study staff at which point the suicide protocol outlined below would have been put into place and study staff would have called the participant in order to perform a full suicide assessment using the complete version of the C-SSRS as a guide.

Alcohol Use. The number of drinks that a participant has consumed was assessed using a single item: "Please report the number of standard drinks containing alcohol that you have consumed since your last study phone call. Remember we have defined a standard drink as 12 ounces of beer, 1.5 ounces of hard liquor, or 5 ounces of wine."

Tobacco Use. The amount of tobacco used by a participant was assessed using five items. The first item assessed any tobacco use. The participant was prompted with the question: "Have you used any tobacco products since your last phone call?" The participant was given the option for a "yes" or "no" answer. If the participant indicated that he or she used tobacco it

triggered a series of questions regarding the quantity of use broken down by route of administration: (1) "Please report the number of cigarettes that you have smoked since the last phone call" (2) "Please report the number of times you have dipped chewing tobacco since the last phone call" (3) "Please report the number of times you have smoked a cigar since the last phone call" and (4) "Please report the number of times you have smoked tobacco using a pipe since the last phone call".

Drug Use. Drug use was assessed using two items. First, the participant was prompted with the question: "Since your last phone call have you used a drug other than alcohol with the intent of getting high?" If the participant responded yes, he or she was then asked to indicate the type of drug from several options in the following prompt: "You have indicated that you have used a drug since your last phone call with the intent of getting high. Please select which drug you used: 1) Marijuana, 2) Cocaine, 3) Heroin, 4) Other Opiates including prescription medications, 4) Hallucinogens, 5) Other, or 6) I entered yes by mistake.

Skill Utilization. To assess skill usage, participants were prompted with the question: "How many times have you used the (insert mindfulness, interpersonal effectiveness, emotion regulation, or distress tolerance) skills since the last phone call?" In addition to the base prompt, language was added that specifically referenced the skills practiced in session. For example, "How many times have you used the mindfulness skills, such as diaphragmatic breathing or observing mindfully, since the last phone call?" Participants were asked to respond numerically by entering a value onto the keypad of their phone.

Treatment Feedback Questionnaire. Following the conclusion of the intervention, participants were asked to complete a treatment feedback questionnaire (see Appendix D). The questionnaire consisted of five items regarding treatment satisfaction, treatment completion, and

suggestions for alterations in the intervention, as well as items assessing whether the participant has engaged in follow-up care.

Experimental Design & Procedures

  Single Case Experimental Design. This study utilized single case experimental design methodology. Specifically, an ABAB reversal design with A representing baseline phases and B representing treatment phases was implemented. During each treatment phase (B), participants were prompted to self-monitor their use of two different skill sets. Participants monitored use of only one skill set at a time for 1-2 days and then alternated to the other skill set to reduce the daily monitoring burden. As such, an alternating treatments design component was embedded in the B phases of the ABAB reversal design. During baseline phases (A), participants were asked to provide self-monitoring data on suicidal ideation, alcohol use, and drug use, but not skill usage.

  Each of the unique modules being introduced to the participant is represented by a designated roman numeral (I = mindfulness, II = interpersonal effectiveness, III = distress tolerance, and IV = emotion regulation) and was the focus of a single session. The final round of EMA assessment (V) consisted of the combination of the two modules that resulted in the greatest reduction in suicidal ideation.

  Baseline. During the initial baseline interview participants completed the informed consent process (see Appendix G), demographics questionnaire, and the Beck Scale for Suicidal Ideation (BSS; Beck & Steer, 1991). Following completion of the baseline assessment, each participant received training on the use of the study cell phone. This training included a review of the meaning of all items assessed and available responses. At this training, participants also received the intervention workbook (see Appendix A) which included all intervention

materials/worksheets, the project director's phone number, the participant's study identification number, a personalized safety plan developed during the baseline interview, and a list of external resources available to Veterans in crisis. Once participants exhibited mastery of the EMA procedures, they were given a cellular phone, and data collection was initiated that same day.

For subsequent "A" phases the participants continued self-monitoring and were instructed to continue the use of their new skills between sessions. However, they did not receive prompts via the IVR system specifically cueing them to use these skills. Skill utilization cues occurred exclusively via IVR calls conducted during the assessment period following each intervention session (i.e., B phases).

Intervention Phases. Each intervention session contained eight elements: 1) a check-in, 2) introduction to the module to be covered, 3) psychoeducation, 4) instruction of skills, 5) modeling of skills, 6) participant practice of skills, 7) corrective feedback and reinforcement, and 8) a check-out. A session by session guide served as the treatment fidelity checklist (see Appendix E).

During the intervention phases of the study, participants were encouraged to complete two modules each week, imparting different skills intended to reduce their suicidal ideation and risky behavior, although scheduling difficulties sometimes made this timeline difficult to adhere to. The IVR phone prompts that followed these sessions then alternated which skill utilization cues the participant received. For example, if during the initial "B" phase the participant completed the emotion regulation module (IV) in the first session, then he/she was cued via calls from the IVR system to practice those emotion regulation skills for approximately 2-3 days. This would be followed by another individual appointment during which the participant would have completed another module (e.g. interpersonal effectiveness skills; module II). The participant

would then have been cued, again via calls from the IVR system, to practice interpersonal effectiveness skills during the following 2-3 days. Depending on the initial visual inspection of data, there may then have been another rapid cycle of "IV" and then "II" prompts, before once again returning to the "A" phase of the study and a withdrawal of skill usage cues. By utilizing the rapid cycling between conditions, a hallmark trait of single case multi-element methodology, it is more feasible to determine how the intervention is affecting the target behavior and to account for any sequence and order effects that may occur.

A second intervention phase followed with the same methodology and the remaining two modules of the intervention were compared (e.g. I and III). This was again followed by a return to phase "A". Lastly, the combination of the two modules that resulted in the greatest reduction in suicidal ideation was tested as a package (V). During (V), data were collected on suicidal ideation, drinks per day, and drug use. The participants were also again asked to provide data three times per day on the frequency of skill use.

Treatment Fidelity. Sessions were digitally recorded in order to document treatment fidelity. Each session was scored by two raters to identify which aspects of the proposed intervention had been implemented using the Treatment Fidelity Script (see Appendix E). Reliability was examined in the form of inter-observer agreement and was anticipated to be greater than 80%. Raters agreed on the presence of 75 out of 78 treatment elements and the absence of one element, resulting in an excellent rate of inter-observer agreement (97%). Raters agreed that the initial check-in step for Participant 003's emotion regulation session was not present. Upon listening to the recording, it was confirmed that the researcher did not start the recording device until the session had already been running for 2-3 minutes. Rater 2 reported that step 8 of the interpersonal effectiveness module (psychoeducation for the "GIVE FAST" skill;

see Appendix E, page 26) for Participant 001 was absent. This was likely a scoring error, as a subsequent review of the recording revealed that the intervention component was indeed present. Overall, agreement was high and suggests that the majority of treatment elements were presented in a clear fashion.

      Suicide Risk Protocol. As this was an intervention assessing suicidal ideation, a strict safety plan was implemented for participants. If at any point during the baseline assessment or intervention phase of the study the Veteran provided information that indicated that he or she was at an imminent risk for suicide (i.e. stated intent to commit suicide, possessed lethal means, and reported a detailed and active plan, or the presence of psychosis was indicated), the following action plan was implemented. First, research activities were stopped so that the researcher could perform a thorough suicide assessment. Following this assessment, the researcher contacted clinical backup at the VA for supervision and as needed. Dr. Kyle Possemato, Ph.D., a licensed clinical psychologist at the Syracuse VAMC served as clinical backup and was available for consultation. If Dr. Possemato was unavailable, the Veteran would have been asked to meet with the on-site behavioral health provider embedded within primary care so that further assessment could have been performed. Additionally, at the end of each IVR phone assessment the Veteran had the option to connect directly to the Veteran's Crisis Hotline.

      Analysis Plan. Data were analyzed via visual inspection, an accepted practice in single case experimental design research. When analyzing single case experimental design data, demonstration of experimental control is typically assessed by examining three characteristics (change in level, change in trend or slope, and change in variability). Change in level is best indicated by the observation of differences between experimental conditions in magnitude of change in the dependent variable (Barlow, Nock, & Hersen, 2009). Change in trend or slope is

observed by examining how rapidly and in what direction (increase or decrease) a dependent variable changes. Variability refers to the degree of fluctuation in the dependent variable from one condition to the next. Experimental control is best demonstrated by large and clear changes in level and/or slope. Changes in variability are also viewed as a positive, yet somewhat less desirable, indicator of experimental control.

For this study, daily data on suicidal ideation were plotted in order to facilitate the visual inspection. Once a baseline of suicidal ideation was established (data appeared to be adhering to a stable pattern), we began the first intervention phase of the study. Performance of the intervention components was evaluated visually. Production of a visually identifiable change in level, slope, or variability of daily suicidal ideation was considered indicative of the positive effect of the intervention. The two treatment components that produced the greatest change were combined and re-examined during phase F of the study.

Substance use was analyzed separately. Visual inspection was again used. However, the establishment of baseline and implementation of the different phases of the intervention were based upon self-reported suicidal ideation and not substance use. Engagement in follow-up or specialty care was qualitatively assessed at the end of the intervention as part of a treatment feedback questionnaire.

Results

IVR Compliance

Participants generally completed calls at an acceptable rate during the baseline period. Participant 001, who finished the full protocol, completed 95.5% of his possible IVR assessments. This value excluded a 6-day time period during the first intervention assessment period when the Veteran took a hiatus from the study to address a family health concern. During

that time IVR calls were not issued to the participant. If the IVR assessment that would have

occurred on those days are deemed missing data, then his response rate would be 87.5%. During

his initial baseline period Participant 002 completed 76.7% of his calls. Following the first

intervention session, however, Participant 002's call completion rate dropped to 16.7%, and he

was eventually removed from the study for noncompliance. Participants 003 and 004 completed

calls only during the initial baseline period, with completion rates of 81.5% and 57.1%,

respectively. Both 003 and 004 withdrew from the trial after not reporting suicidal ideation

during the baseline IVR.

Suicidal Ideation

Suicidal ideation, alcohol and tobacco use, and skill usage are reported on separate

figures for each participant. As noted earlier, Participant 001 completed the full protocol. Figure

2 presents his daily fluctuations in suicidal ideation, including the duration, intensity, and his

perceived control over the ideation. The SMSI duration, intensity, and control items were

summed to create a SMSI total score. This composite score had a possible range of 0-10, with

the upper end of the scale indicating the more severe ideation. Participant 001 reported variable

suicidal ideation during his initial baseline period ($M = 2.04$, range: 0-4). This variability

continued into the first intervention phase of the protocol, and the SI slightly intensified during

the mindfulness (I; $M = 3.36$, range: 2-6) and distress tolerance modules (II; $M = 3.07$, range: 2-

4), with items appearing to equally have contributed to the increased total SI score. The Veteran

partially attributed the increase in SI during the mindfulness and distress tolerance modules to

increasing marital discord related to his PTSD symptomatology and additional stress on the

relationship due to his mother-in-law's declining health. Midway through the first intervention

phase (B), the Veteran requested that his participation in the study be paused so that he could

focus on these family concerns. The Veteran did not receive calls during a six-day period but re-engaged with the study after this hiatus. It was decided to let the skill reminders for the mindfulness module continue for 3 additional days to re-establish the participant's level of ideation before alternating to the next treatment element.

It is of note that during the mindfulness intervention session, Participant 001 reported that the self-monitoring of his thoughts and feelings may be having an influence. Specifically, he stated that he thought that the phone calls may have served to lessen the duration of his suicidal ideation. He described experiencing SI, looking forward to the IVR assessment call, and when the call occurred having it break his train of suicidal thought. This was not necessarily borne out in the data, as means for duration, intensity, and perceived lack of control of SI all increased during the subsequent intervention phase of the study. However, reactivity to the self-monitoring may have suppressed the baseline scores, making subsequent changes in level or slope of SI more difficult to identify.

The second baseline period was the time of the most severe ideation for Participant 001. While his overall SI did not significantly change in duration or intensity, variability still existed ($M = 2.85$, range: 1-4). Most notable, midway through the 2nd baseline period (7/6/14) Participant 001 reported that he intended to kill himself, prompting a call from the researcher and enactment of the safety plan. The Veteran endorsed items on the IVR assessment drawn from the Columbia-Suicide Severity Rating Scale indicating that he had a plan to kill himself, and that he imminently intended to act on it. The participant was reached by telephone shortly after completion of the survey on which he endorsed intent to kill himself. A thorough suicide assessment was performed. It was confirmed that Participant 001 had planned to kill himself via asphyxiation (hanging) earlier in the day, however, he had spoken with his wife and he was on

his way to meet her in order to discuss their relationship. The conversation with his wife had broken the Veteran's train of suicidal thought at that time and curtailed feelings of hopelessness. Participant 001 was very appreciative of study staff reaching out to him and assured us that the time of crisis was now passed. Participant 001 was reminded of specific elements of his safety plan including: contacting a previously identified friend, using the Veteran's Crisis Line should thoughts of suicide return, and scheduling an appointment with his behavioral health provider. The subsequent survey revealed 001's ideation to be at normal levels and a denial of plan or intent to commit suicide. Despite the potential lethality of Participant 001's SI during this baseline period, a commensurate increase in SI scores was not observed via the IVR assessment.

Although Participant 001's initial baseline suicidal ideation and subsequent return to baseline did not reveal an easily discernable change in level or slope, as he progressed through the intervention a clear decrease in the variability of his suicidal ideation was observed. Mean total SI score during the emotion regulation (II; $M = 2.92$, range: 2-3) and interpersonal effectiveness (IV; $M = 2.96$, range: 2-3) modules stabilized (see Figure 2) with any deviations from Participant 001's response pattern being in the desired direction of change and indicating a decrease in the duration of suicidal ideation and therefore total SI score.

Skill usage prompts were again withdrawn during a third baseline assessment period (A) prior to the implementation of the final intervention phase. As can be seen in Figure 4, Participant 001 reported that he consistently used the skills he was trained on throughout all intervention phases of the protocol with a modal response of practicing a skill once during an assessment period. A return to variability was not observed during the third baseline, with SI again remaining stable ($M = 2.92$, range: 2-3). The two treatment components that produced the greatest change, emotion regulation and interpersonal effectiveness, were to be combined and re-

examined during the final phase (V) of the study. Participant 001's SI again remained stable during this final phase of the study ($M = 3.00$, range: 3-3). As a return in variability of SI was not observed during the preceding baseline assessment, it cannot be established that this stable pattern in SI was directly attributable to this phase of the intervention.

Figure 5 presents Participant 002's daily fluctuations in suicidal ideation, including the duration, intensity, and his perceived control over the ideation. During the first few days of his initial baseline period, the Veteran was only sporadically endorsing suicidal ideation, which affected his overall baseline mean SI total score ($M = 3.52$, range: 0-7). By the conclusion of the baseline session, however, his ideation had stabilized ($M = 7.00$, range: 7-7), with the Veteran consistently reporting that he constantly thought about suicide (duration = 4) and that the thoughts were very distressing (intensity = 3) but that he felt he had absolute control over them (control = 0). This pattern would persist throughout Participant 002's remaining time in the study.

Participant 002 did not provide a complete data set. Data were successfully collected during the initial baseline period. However, following the first intervention session (distress tolerance) the participant's compliance with the IVR protocol became sporadic, and he only completed an additional 14 IVR assessment calls in an irregular pattern that did not lend them to analysis (see Figure 5). What SI the Veteran did report showed no difference from baseline ($M = 7.00$, range: 7-7). Participant 002 did not return attempts to contact him by phone or letter. He was scheduled for a primary care appointment, and I arranged with his BHP to meet him that same day. He confirmed his interest in participating, completed the next two assessments, but then did not show for our next appointment. He was subsequently considered lost to follow-up.

Participant 003 diligently completed the IVR phone assessments and met initial eligibility criteria. During the baseline IVR assessment period, however, the Veteran was not reporting suicidal ideation in response to the survey questions. It was initially unclear whether this was a result of ideation not being present, or failure of the dependent variables to capture variation in suicidal thinking. Denial of even passive suicidal ideation was an unexpected occurrence, as Participant 003 was hospitalized for an attempted suicide two months prior to enrolling in this protocol. During follow up with the participant on two occasions he indicated that he was not presently having suicidal thoughts, despite maintaining a well-developed plan for suicide. Baseline monitoring was extended for an additional week, but Participant 003 continued to deny suicidal ideation, and his scores were zero across all dependent variables. At that time, he was offered the sessions and continued monitoring. Following completion of the emotion regulation module that same day, Participant 003 expressed his disinterest and decided to withdraw from the study.

A subsequent chart review indicated that three weeks after withdrawing from the study, Participant 003 reported acute suicidal ideation, with a plan, to his primary care provider. He stated that "he did not feel safe at home" and that he had a plan of overdosing on his medications. The Veteran was admitted to the acute psychiatric ward overnight. In the morning, he denied SI to his provider and stated that he had "calmed down". It is noted that the Veteran reported that he does not like the idea of staying on a locked unit and was unimpressed with the care he received during his last inpatient stay. Participant 003 was subsequently discharged, and the physician's recommendations were specifically that he should pursue dialectical behavioral therapy and a day treatment program. The Veteran also denied SI during a call from a BHP the following day and had scheduled appointments with outpatient mental health providers.

A similar pattern was observed with Participant 004. The Veteran was eligible for participation based on her score of 11 on the BSS, but this ideation did not translate to elevated scores on the SMSI, as she no longer reported suicidal ideation, once baseline IVR data collection commenced. Phone calls and in-person meetings were conducted in order to confirm that Participant 004 understood the nature of the IVR questions and to confirm that she was indeed not experiencing ideation. The baseline data collection period was extended for Participant 004 in order to ensure that this was not a temporary phenomenon and indeed represented current functioning. When offered further assessment and participation in the study modules, Participant 004 withdrew from the study, citing the absence of suicidal ideation since the baseline interview. The Veteran reported that she had been reading the intervention materials (skills workbook) since we initially met and found the material very helpful. Participant 004 also stated that she wished that a similar service were available to her during her recent times of crisis and that she believed that it would be valuable to those experiencing distress.

Participant 004's chart was reviewed two weeks after she had withdrawn from the study. The Veteran had continued to meet with her BHP in primary care for 30-minute, biweekly sessions. During her last session she reported a recurrence of SI related to the anniversary of her mother's death. The SI was characterized by frequent thoughts about death, wanting to be dead, and a feeling of hopelessness. The SI occurred without a plan or intent to act on the thoughts.

Substance Use

Participant 001 endorsed a history of alcohol use disorder. He recalled that he began drinking heavily after his return from Vietnam, but stopped in the early 1980s and maintained 30 years of sobriety. The Veteran relapsed shortly before his study participation began and attributed it to his recent retirement, re-emergence of PTSD symptoms, and increased suicidal

ideation. During Participant 001's initial baseline period (see Figure 3), the Veteran reported

consuming a mean of 3.52 standard drinks per day, with the majority of the consumption

occurring between 11am and 9pm ($M = 3$.13 standard drinks). Alcohol consumption reported in

the 9 am to 11am assessment period may have been a product of drinking that occurred the

previous night between the outer limit of the evening IVR assessment (9pm) and sleep onset as

opposed to early morning alcohol consumption.

As was the case with Participant 001's SI, a worsening of symptoms was observed during

the first intervention period as indicated by an increase of alcohol consumption for both the

mindfulness ($M = 4.86$ standard drinks) and distress tolerance ($M = 5.36$ standard drinks)

modules. Moreover, alcohol consumption appears to have co-varied with SI throughout much of

the study (see Figure 8) such that on days when ideation was more severe, more standard drinks

were consumed. During the return to baseline phase that followed, alcohol consumption was still

heavy in the first few days of the assessment period, and the Veteran reported consuming 5

standard drinks on the day that he had planned to kill himself. Following this crisis and

subsequent intervention, alcohol consumption began to decrease ($M = 1.94$ standard drinks).

During this time the Veteran also reported that on at least two occasions he had used his

mindfulness skills without being prompted to do so.

The emotion regulation and interpersonal effectiveness modules followed the second

baseline period. A significant change in level was discernable in alcohol consumption during

these modules (see Figure 3), as daily consumption for both the emotion regulation ($M = 0.3$

standard drinks) and interpersonal effectiveness ($M = 0.5$ standard drinks) modules dropped off

to negligible rates. This pattern was maintained for both the subsequent baseline period and the

combined intervention period, as the Veteran denied all alcohol consumption during the final 11 days of the study.

Participant 002 provided baseline data on alcohol and nicotine use (see Figure 6). The Veteran reported daily consumption of alcohol ($M = 8.09$ standard drinks) and nicotine ($M = 2.88$ cigarettes). However, after completing his first intervention module (distress tolerance) his rate of survey completion became sporadic, and it was not possible to compare these data to his baseline rates of use. No participants endorsed illicit drug use.

Discussion

This study was an examination of a brief intervention that utilized elements of dialectical behavioral therapy to address SI among Veterans in a primary care setting. To our knowledge, this is the first study to use IVR to examine SI among Veteran's receiving primary care services. The findings contribute to the existing literature on primary care and suicidal ideation in several important ways. First, our hypothesis that participants would show reduction in baseline SI following each module of the intervention, regardless of what specific module was implemented first was not supported. Indeed, SI somewhat worsened for Participant 001 during the first intervention period (mindfulness). It is possible that for some individuals reductions in self-harm brought on by participation in DBT are module specific. It may also be the case that the mindfulness and distress tolerance modules require additional instruction, or practice until skill level rises to a level where it has a positive effect on patient functioning. This would be consistent with previous findings from Dewe & Krawitz (2007) who suggested that various DBT skills may take different amounts of time for participants to learn and incorporate into daily life, with some being easily implemented early in treatment while others may take on greater value later in treatment.

Second, findings from this study were consistent with our hypothesis that the interpersonal effectiveness and emotion regulation modules may be effective interventions in the stabilization of SI when Veterans receiving services in VA primary care consistently apply the relevant skills. As Participant 001 progressed through the protocol, a clear decrease in the variability of SMSI scores was observed during the emotion regulation and interpersonal effectiveness modules. It would appear that use of the interpersonal effectiveness and emotion regulation skills provided the participant with additional ways of coping with distress besides alcohol consumption and that he was able to use these skills to navigate a difficult period of his life. However, given that the variability of SI did not return to pre-intervention levels during the subsequent baseline phase, there was insufficient experimental control to claim that this hypothesis was fully supported. Replication of these data, perhaps with a new study design, seems necessary before firmer conclusions can be drawn.

Third, that emotion regulation skills contributed to a stabilization of SI is consistent with the hypothesis that SI and associated variables (e.g., hopelessness and mood lability) are related to a failure to regulate depressive and suicidal thinking, which contributes to the distress associated with the variability of negative cognitions (Witte, Fitzpatrick, Warren, Schatschneider, & Schmidt, 2006). Therefore, coping with negative affect through positive emotion regulation strategies may serve to alleviate some of the distress associated with the variability of negative cognitions, including SI. If replicated in additional prospective research, this finding would be important to further establishing the research base for DBT and identifying how individual modules act to reduce self-harm.

Fourth, a significant change in level of alcohol consumption was observed for Participant 001 during the emotion regulation and interpersonal effectiveness modules. This result is not

consistent with our initial hypothesis that the distress tolerance and mindfulness skills would lead to the greatest reductions in substance use. Although the modules we predicted to provide the greatest amount of change proved to be incorrect regarding substance use, these preliminary data may help to elucidate how some of the DBT modules function to reduce self-harm behaviors. It may be that the stabilization of SI, as facilitated by the emotion regulation and distress tolerance modules, reduced the participant's overall distress, which in turn led to decreased alcohol consumption. Further examination of the interrelationships between skills training modules, self-monitoring, and substance use patterns is needed to clarify these findings.

Fifth, this project provided some support for the feasibility of collecting EMA data via IVR assessment among Veterans experiencing SI in primary care. Although participant recruitment difficulties were encountered, the Veterans that were enrolled were able to quickly master the IVR protocols. In addition, IVR provided a unique way to examine daily fluctuations in SI and substance use that cannot be captured using traditional assessment methods. Further, the use of EMA may help to facilitate the exploration of temporal relationships between SI and psychological or contextual variables (e.g., pain).

Sixth, an additional implication for DBT that can be drawn from these results is that the treatment may be able to be delivered in a much briefer format. Dialectical behavioral therapy skills training groups can often run longer than six-months and sometimes last in excess of one year. This study's data suggest that DBT can be distilled into its most efficacious components as determined by dismantling research and can be delivered in a briefer, more cost-effective format and thus delivered to a larger proportion of those individuals in need of the intervention.

Seventh, treating every individual that experiences SI in specialty care, whether it is inpatient or outpatient, is not feasible given the limited amount of mental health resources

available to most communities. The improvement demonstrated by Participant 001 during this study provides some indirect support for the use of the co-located collaborative care model as a platform for treating behavioral health difficulties in the primary care setting. Interventions in primary care can potentially reach larger numbers of individuals at risk for suicide. Addressing SI at the primary care level may increase the availability of mental health providers in specialty care to treat individuals exhibiting the most severe pathology.

A number of study limitations deserve comment. As this protocol utilized a single-case experimental design, the sample size was intended to be small; often, only one participant in single-case experimental design protocols is sufficient to demonstrate experimental control. Although it was our intent to enroll additional participants in order to replicate and extend the findings based on Participant 001's data, recruitment for this protocol proved difficult. As such, the generalizability of these results is limited. At this time, inferences drawn from these findings apply to pre-Persian Gulf War Veterans receiving primary care services and cannot be extended to recent Veterans of the conflicts in Iraq and Afghanistan. One factor that greatly influenced the rate of recruitment was provider discomfort with SI. Behavioral health providers on occasion had expressed difficulty discussing suicidal ideation with certain patients and a hesitancy to refer patients whom they perceived as potentially fragile.

Provider discomfort with SI is not a recent development. Most clinicians, including behavioral health providers, receive little to no training in the management of SI and suicide risk (National Action Alliance for Suicide Prevention, 2014) and may feel uncertain how to broach the topic of suicide. One potential long-term solution for this problem is to require, through the respective accrediting organizations of each healthcare-related discipline, that graduate/professional programs provide training on the assessment and management of SI. At a

minimum, it has been suggested that "gate keeper training" or screening programs be offered at facilities where individuals are known to be at greater risk for suicide (National Action Alliance for Suicide Prevention, 2014).

In addition to the recruitment difficulties encountered and limitation of single case-experimental research, the ABAB reversal design may not have been the best design choice for this type of research. In this design, there is reliance on a return to baseline in order to demonstrate experimental control. We believed that by removing the cues to practice the skills learned during the intervention modules SI would return to its baseline pattern. As SI did not appear to return to baseline following withdraw of these cues, it may have been more prudent to use an alternative design, such as a multiple baseline design across participants (Christ, 2007). However, this design would require careful consideration and planning, as potential ethical challenges associated with a staggered start to treatment could leave some individuals with SI without an active treatment component at baseline. A lower risk alternative might be to utilize a multiple baseline design across dependent variables (e.g., suicidal ideation and substance use).

The IVR system performed as programed and was an effective and efficient way of collecting data. However, the version of the software that was used did have some limitations, the most important of which was that the call schedule could not be truly randomized. A random number generator was used to determine a priori when calls would occur by creating an internal delay that affected all three calls for a given day. For example, if the random number generator produced a value of "15" each of the three IVR calls that day would occur 15 minutes after the beginning of the call period (i.e., 9:15 am, 2:15 pm, and 7:15 pm). An updated version of the SMART-Q program now offers the opportunity to have call times randomly generated in real time, at the onset of each assessment period.

A related limitation and measurement problem was the operationalization of the skill usage variable. Although only specifically trained in the use of two skills per module, the workbook included a range of possible skills (see Appendix A) that participants could choose to use. During each IVR assessment participants were cued to the two skills practiced during the previous training session. Though data were obtained on the frequency with which skills from the indicated module were used, they do not indicate which specific skill was practiced. In addition, our mode of measurement did not include a way to assess ongoing skill usage from other modules. For example, if a participant continued to use mindfulness skills during a time when distress tolerance was being measured, the data on how often those mindfulness skills were used would not be available. This further highlights the difficulties in measuring skill usage during baseline periods without prompting a participant to use those skills. With items that assess skill usage effectively acting as prompts to practice a given skill, any assessment of the use of a skill during a baseline period may prompt the participant to use that skill. This is a research design element that needs to be addressed in future research. Knowing which specific skills have the greatest influence on SI and other self-harm behaviors will not only lead to a more nuanced interpretation of findings, but will also help to ensure that the most efficacious components are included in future interventions.

An additional concern was the use of SI as a dependent variable in this study. In one view, although SI is linked to whether an individual will attempt suicide (Bulik et al., 1990), it is not the most sensitive predictor of who will complete, and that actual past suicidal behaviors and self-directed violence are better predictors of who will attempt suicide (O'Neil et al., 2012). The construct of self-directed violence, however, has proven difficult to investigate quantitatively, as the base-rate of these behaviors is low (O'Neil et al., 2012). Future studies, including replication

of the findings from this trial, should seek to incorporate a broader range of theoretically driven dependent variables (e.g., thwarted belongingness; Joiner's Interpersonal-Psychological Theory of Suicide; Joiner, 2005). Such an approach would allow for a fuller understanding of the risk and protective factors that influence an individual's decision to commit suicide.

When SI is used as a dependent variable in future studies, its operationalization should be carefully considered. Suicidal ideation is complex, and the three items from the SMSI may not have been adequate to capture the different variations of ideation that may occur. For example, the items appear to be worded quite strongly, using phrases such as "active suicide attempt" and "actual suicide attempt," and may dissuade participants from reporting more passive suicidal ideation. Additionally, the three times of the SMSI were summed to create a composite score for SI, which ranged from 0-10. This range of possible scores, however, may have restricted the range of SI that could be observed in this primary care setting. It would seem that a more sensitive measure would capture daily and intraday fluctuations of SI and a wider range of suicidal thoughts. In this regard, a measure with additional items, including one to measure hopelessness, which has been identified as an important construct in suicidology (Brown et al., 2000), may serve to broaden the breadth and depth of SI reported. It might be argued that expanding the sample to include individuals with passive suicidal ideation overlooks individuals who are the greatest risk. Having a more inclusive sample, however, would be congruent with a public health approach that seeks to reach the most individuals in order to reduce risk and enhance protective factors for a broader impact on the community.

Several avenues are open for future research. A natural place to start would be incorporating additional variables into future protocols that measure SI in light of recent advances in suicidology. The Interpersonal-Psychological Theory of Suicide (Joiner, 2005) is a

theory that hypothesizes people's feelings of perceived burdensomeness, social alienation, and acquired ability to harm themselves as important constructs as determinants of suicide attempts. Assessment of perceived burdensomeness and social alienation could be incorporated into future clinical trials in the form of pre- and post-intervention measures, which would contribute to investigation of how these variables relate to SI and suicide attempts over time and in testing the validity of Joiner's theory. Such data also would help to clarify how identified factors might alter suicide prevention intervention effects, and what the most effective content and timing of administration of such interventions might be.

The data are consistent with previous research that suggests that individuals receiving primary care services experience a broad range of suicidal ideation and have a varied history of attempts. As such, our data suggest that there are clusters of patients who experience suicidal ideation in distinct, and clinically significant, ways (e.g., chronic ideation with low variability; periods of intense ideation that abate after a crisis passes), which may help guide future research in a more complete exploration of the clinical course of suicidal ideation in the primary care patient. For example, Participants 003 and 004 had a prior history of suicide attempts, yet provided data that suggest that they did not experience suicidal ideation from day to day, but rather only during times of acute crises. This was later supported with data obtained via chart review, which revealed that Participants 003 and 004 entered periods of acute SI three weeks after having withdrawn from the study. In contrast, 002's data suggest that he consistently experienced daily, intense SI, yet he did not have a history of self-harm and reported feeling in complete control of his thoughts. In addition, Participant 001 had less intense ideation that varied somewhat from day to day during the baseline assessment period. When Participant 001 endorsed intent to act on his ideations, a commensurate increase in SI was not observed.

The data are also relevant to the utility of self-monitoring, as Participants 001 and 004 both reported that receiving the calls initiated a period of reflection, with 001 adding that they often broke his suicidal train of thought. This supports Clum and Curtin's (1993) findings, which showed that in the absence of an active treatment, SI can decrease when assessed daily. It is important to note, however, that although these participants reported that the calls had an impact, it was not reflected in the daily quantitative assessments of SI. Although reactivity to the IVR assessments was not hypothesized to have a positive effect on SI, it is an area worthy of future consideration and study. If it is indeed borne out that simple self-monitoring is sufficient to reduce SI and risk for suicide, then it could potentially serve as a supplement to existing or future interventions.

A related area of inquiry would be a further examination of how the assessment schedule may influence SI. For example, what would be the effect of reducing the number of skill usage prompts? It may be possible that adding additional reminders would reveal a dose-response type relationship such that the more skills one practiced, the larger or more rapid the subsequent drop in SI.

As noted earlier, the clinical course of SI is an area of interest for future research. There is not yet a consensus in the literature on the natural or clinical course of SI. In the case of this study's Participant 001, although his SMSI total score did not return to baseline levels of variability following the withdrawal of skill utilization cues, he did continue to experience severe SI as indicated by his crisis during the second baseline period. The rapid buildup to, and brevity of, Participant 001's period of most intense ideation underscores the importance of gaining a more complete understanding of suicidal crises.

Suicidal crises, which are marked by an acute period of time during which a person is actually prepared to attempt suicide, tend to be fairly brief in duration, with 71% of suicide attempt survivors indicating that less than an hour passed between making the decision to commit suicide and the actual attempt (National Action Alliance for Suicide Prevention, 2014). The data from this trial are consistent with this finding. Participants 003 and 004, both of whom had a history of suicide attempts, were monitored for several weeks without reporting suicidal ideation or thought. Within three weeks of withdrawing from the project, both had again reported significant SI, with Participant 003 requiring inpatient treatment. This rapid shift from denial of SI to severe SI demonstrates its variability. That the profile of a patient's SI can change so quickly suggests that longer periods of assessment may be monitored to capture an individual's true pattern of SI, and that there may be differences between those who report chronic SI and patients who only report SI during times of crisis.

The variability of SI may also be linked to whether an individual has ever attempted suicide, and how often (Witte et al., 2006). In their 2006 study of how SI variability relates to history of suicide attempts, Witte and colleagues reported that individuals who have a history of multiple attempts also reported more variability in their daily SI than those participants with a history of either a single attempt, or no attempt history. The authors posited that increased variability in SI may be more distressing than SI that is elevated and stable across time, as ongoing shifts in the intensity and frequency of suicidal thoughts may be experienced as more upsetting than consistent ideation. This is reflected in the data that this study's Participant 002 reported of highly intense, constant ideations that he felt completely in control of, as compared to another Participant (001), who reported less intense, yet highly variable SI that he perceived to be more distressing.

Reduced variability of SI, and decreased alcohol consumption were observed for Participant 001 following the interpersonal effectiveness and emotion regulation training modules. If this pattern were to be replicated with additional participants in future studies, the examination would be enhanced by follow-up interviews to determine whether positive changes were maintained following the conclusion of intervention sessions and self-monitoring. Follow-up data would help to guide future modifications of the intervention and contribute to a greater understanding of how it may be best implemented (e.g., booster sessions may enhance participant outcomes).

 In sum, to our knowledge this was the first study to utilize ecological momentary assessment to examine the effects of a brief intervention to reduce suicidal ideation among Veteran's receiving primary care services. Findings from this study provide preliminary data that suggest that the use of EMA, specifically IVR, is a feasible approach to examining SI and substance use variables among Veterans. Although the data do not allow firm conclusions about the use of the emotion regulation and interpersonal effectiveness modules as interventions to address SI, they do suggest that further inquiry is warranted. In addition, the findings demonstrate that DBT modules may be able to be delivered in a much briefer, primary care friendly, format than usual. The findings also support prior theory that suggests that coping with negative affect through positive emotion regulation strategies may serve to alleviate distress associated with the variability of negative cognitions (Witte et al., 2006). Replication of this study's findings should precede the pursuit of additional research directions based on the results of this study, however, identification of the predictors of suicidal behavior and the design of efficacious interventions to prevent SI remain critically important areas of research.
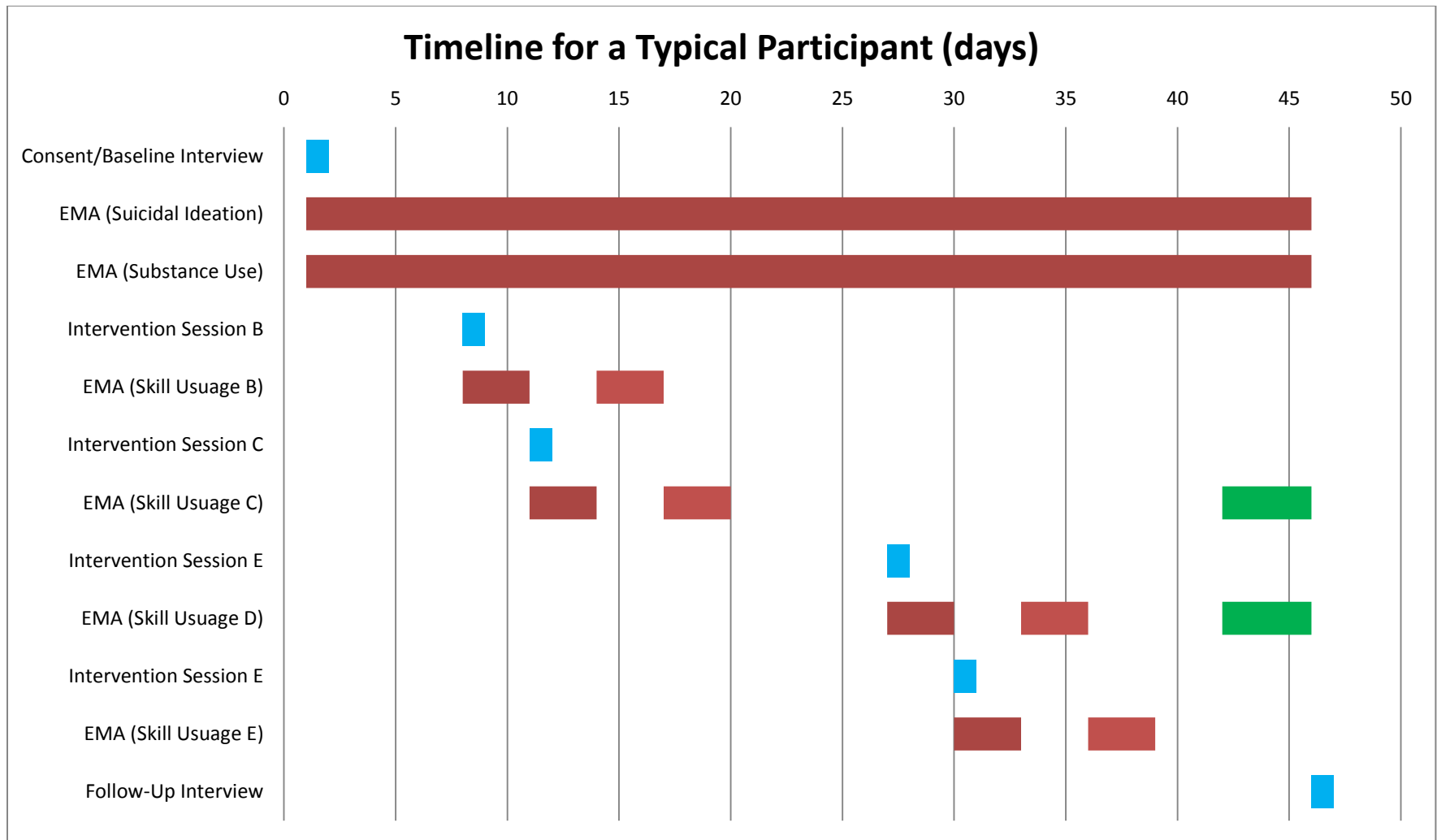
Figure 1: Typical Participant Timeline

Figure 2: Participant 001 Suicidal Ideation Data

Figure 3: Participant 001 Substance Use Data

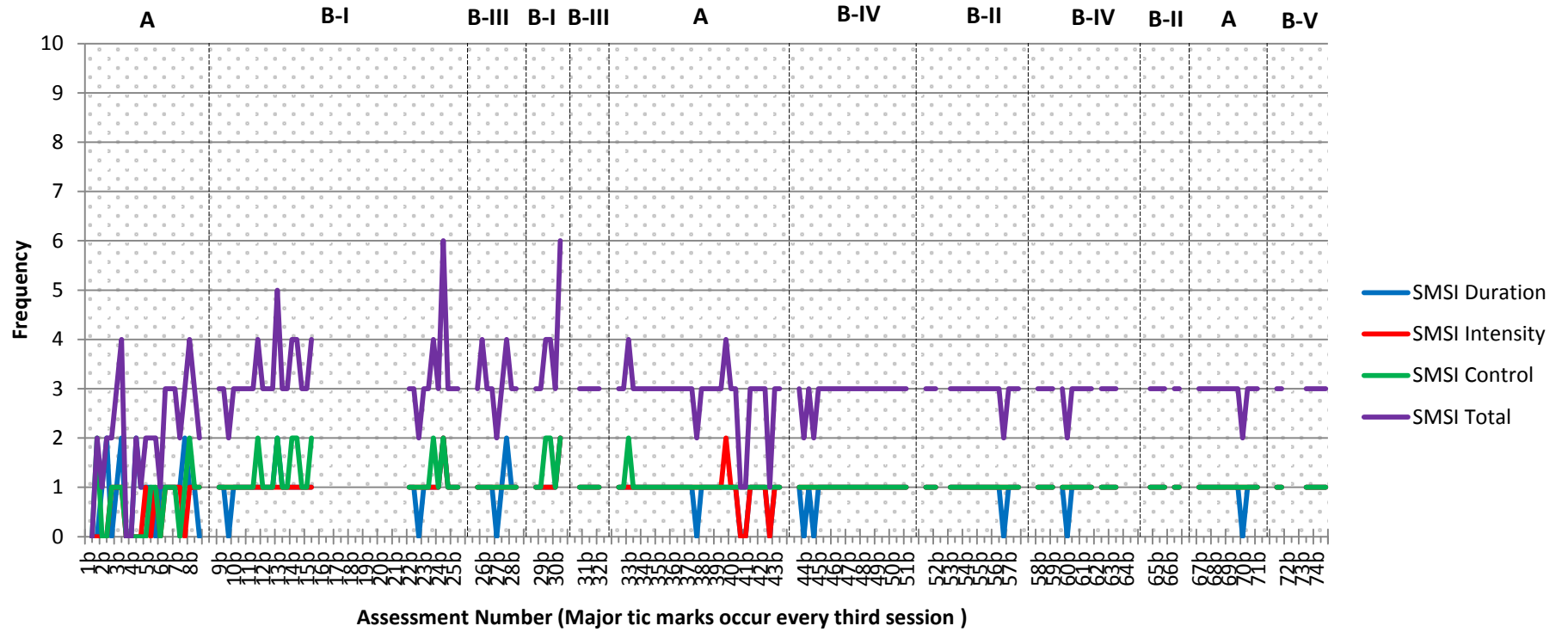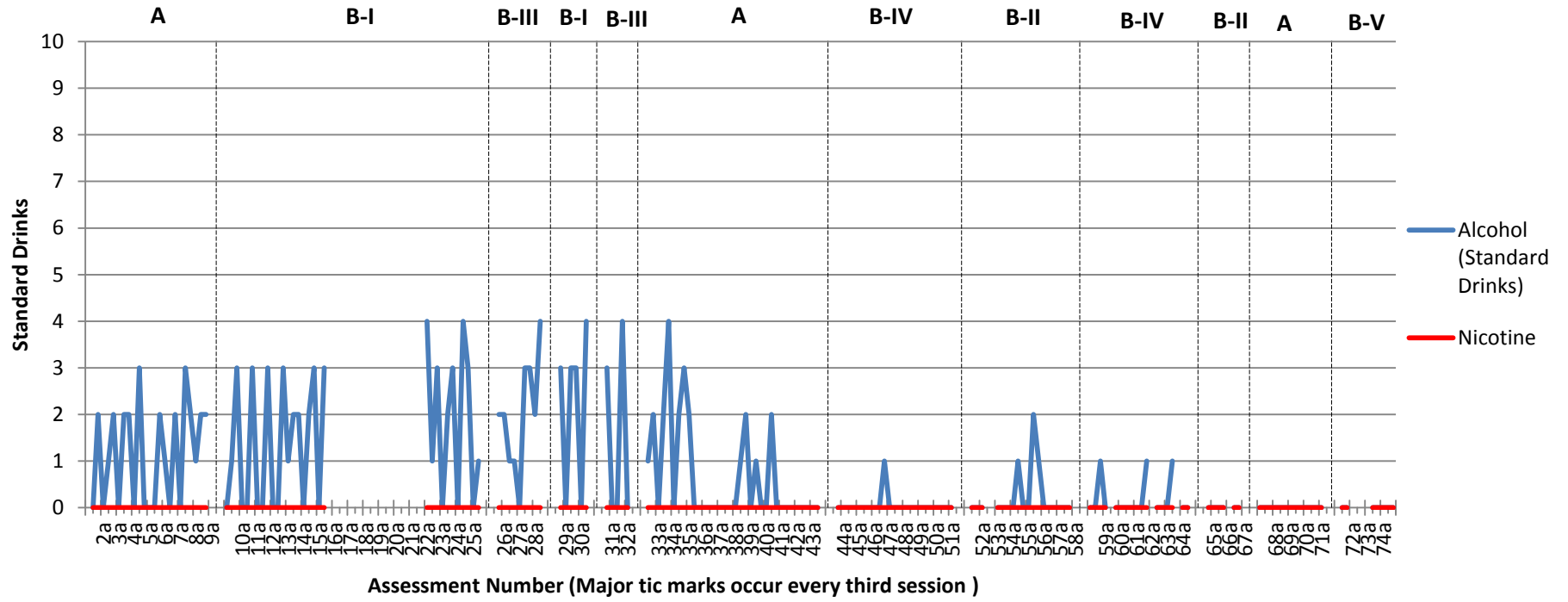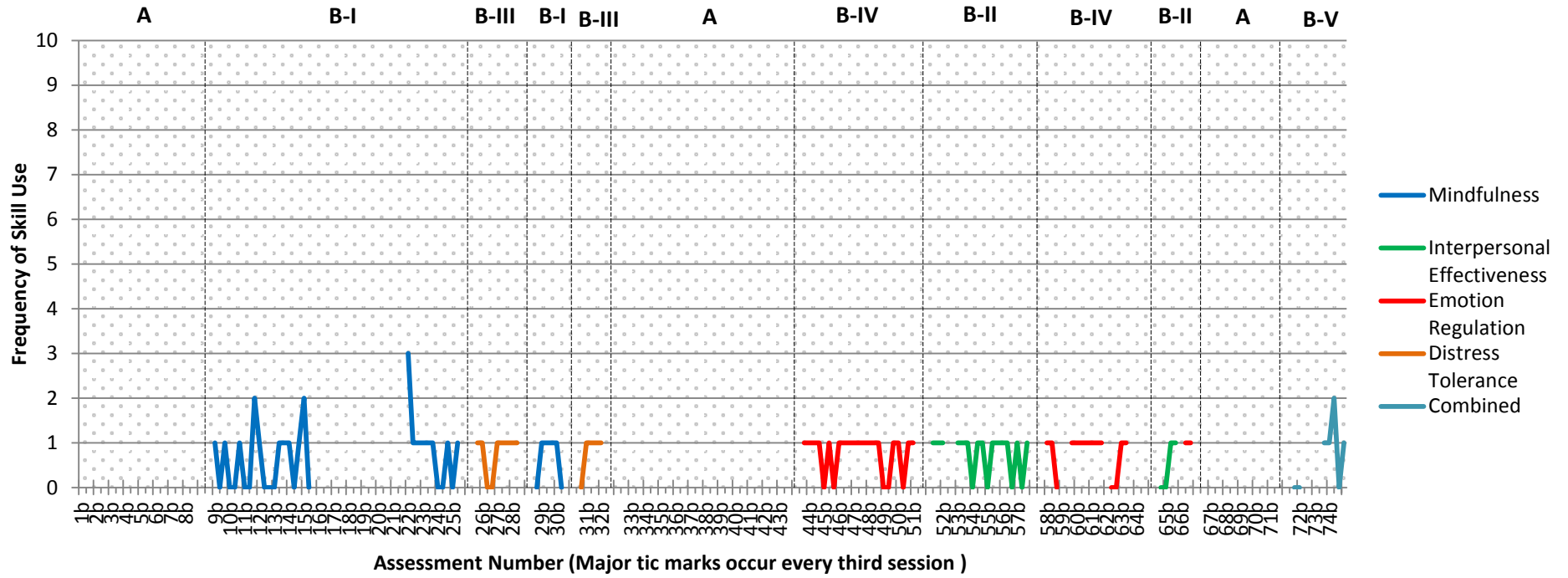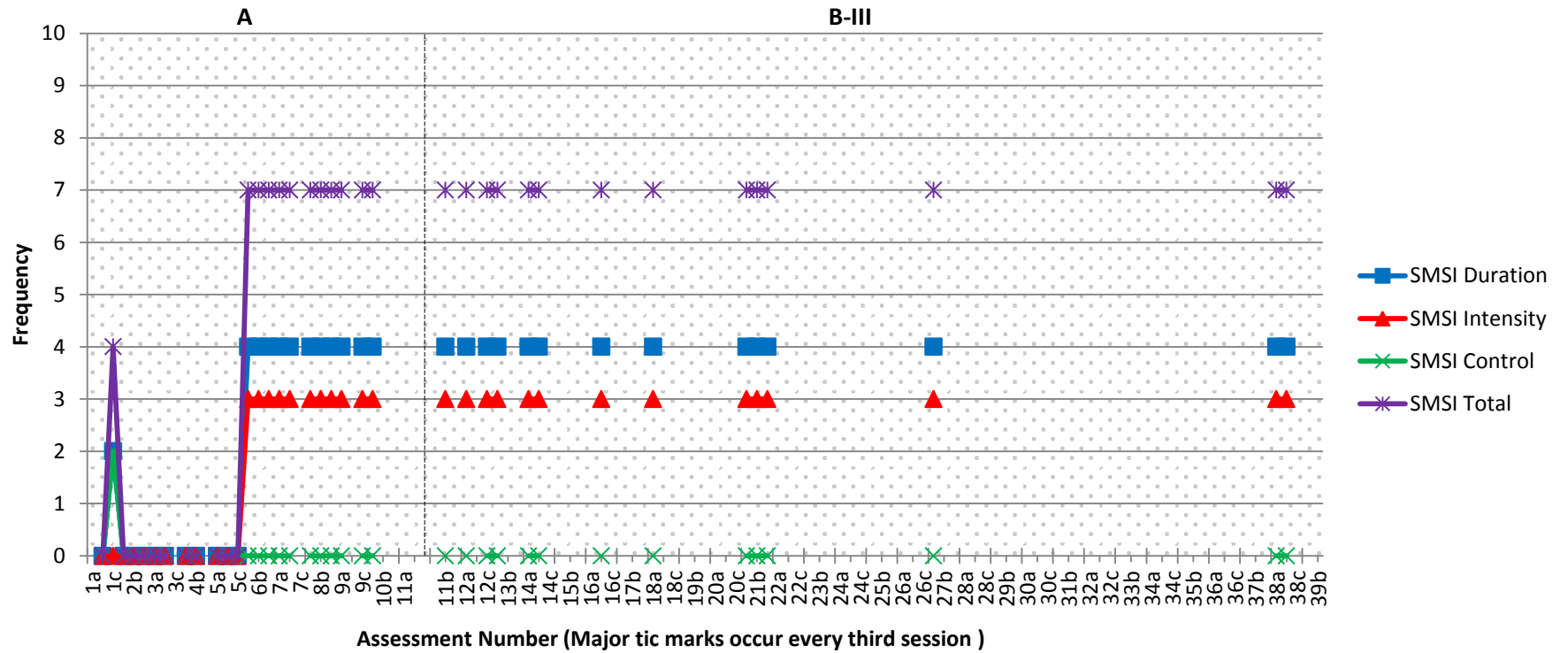*Figure 4:* Participant 001 Skill Usage Data
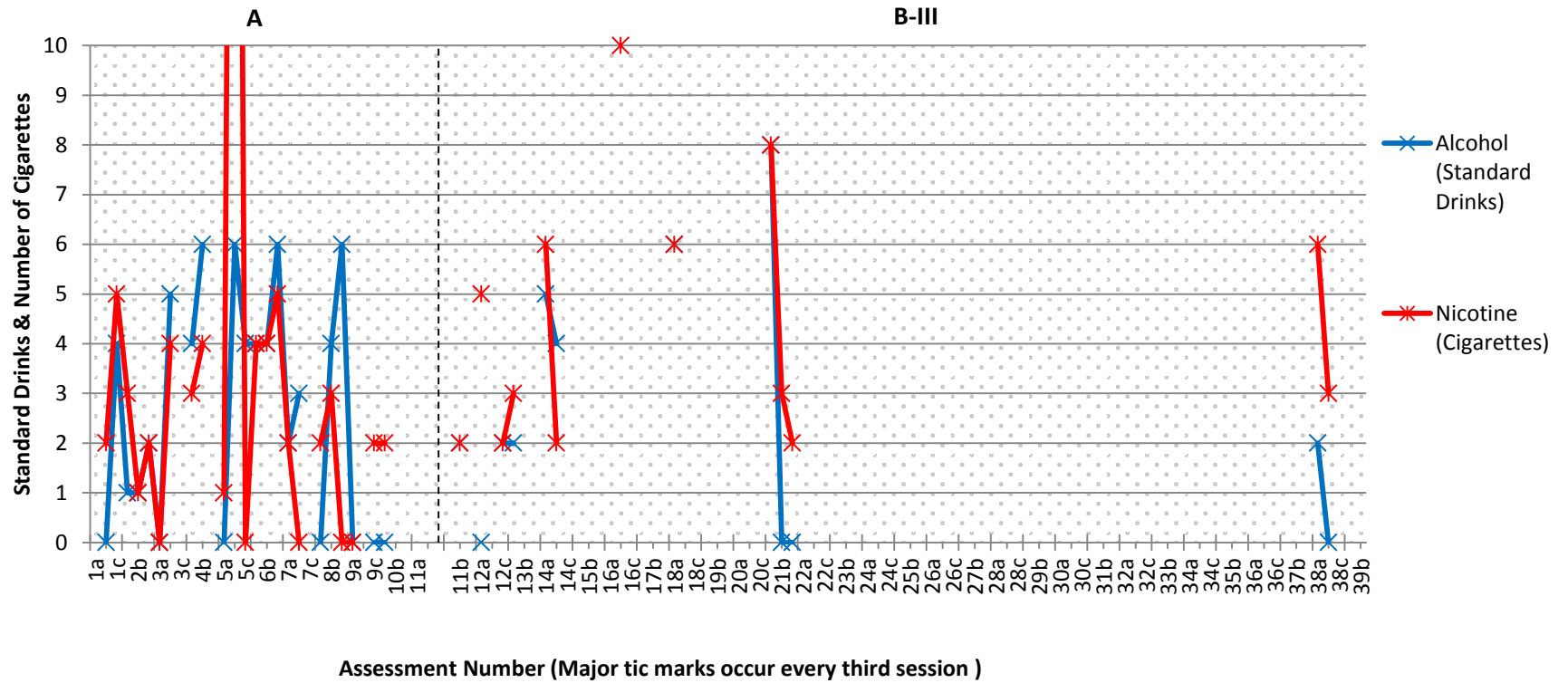
Figure 5: Participant 002 Suicidal Ideation Data

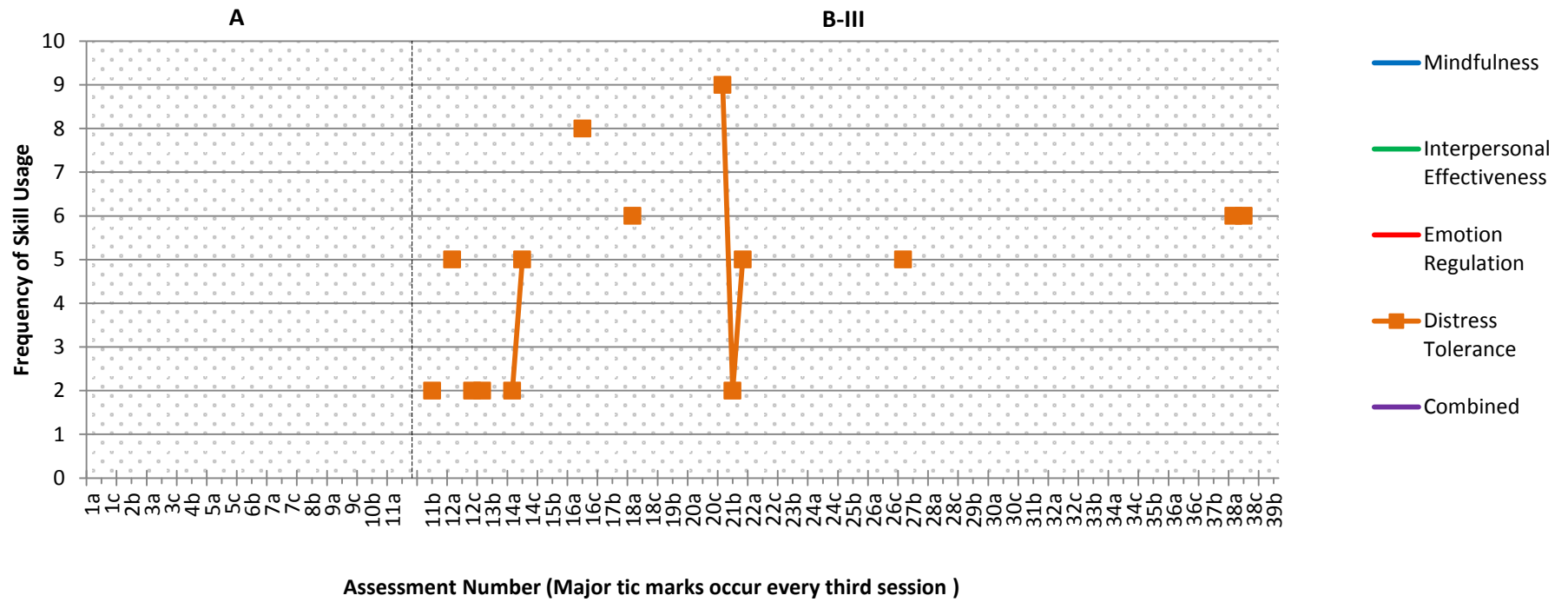*Figure 6:* Participant 002 Substance Use Data

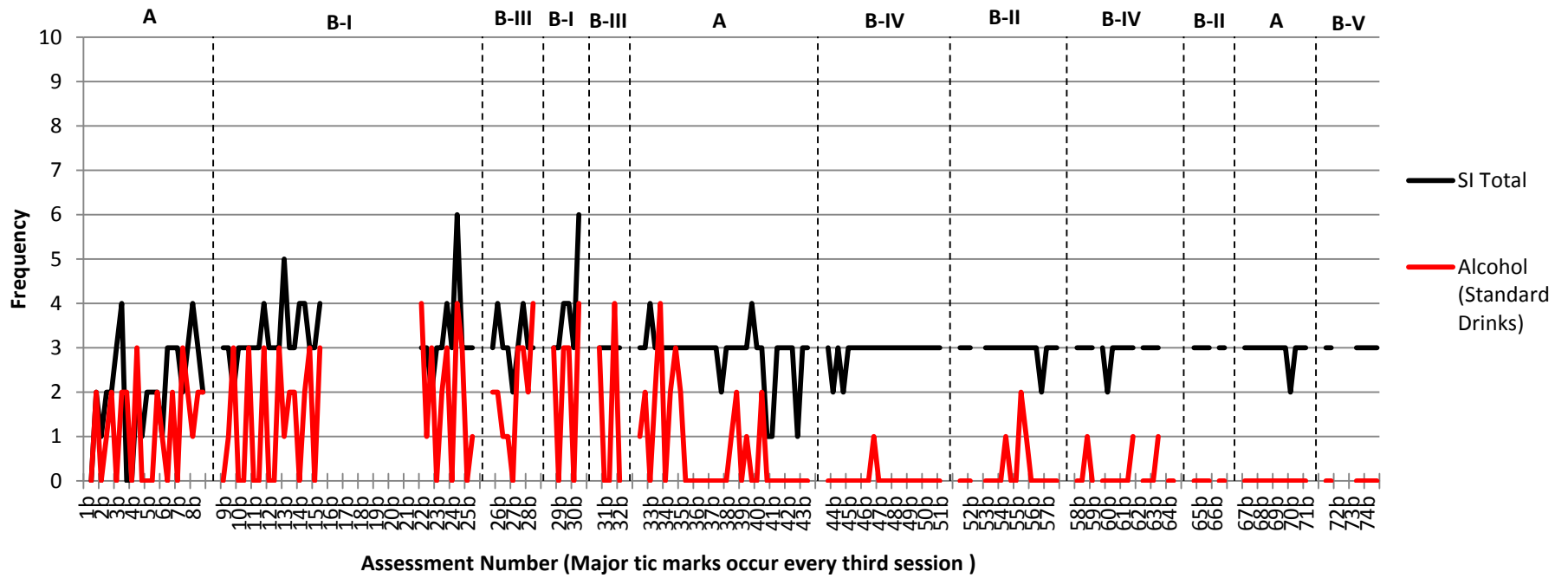*Figure 7:* Participant 002 Skill Usage Data

Figure 8: Participant 001 Suicidal Ideation & Substance Use

Appendix A: Veteran Workbook

Reducing Suicidal Thoughts: Skills Training

Veteran Workbook

Introduction to the Workbook

Welcome to your workbook and the beginning of your intervention program for suicidal thoughts. This workbook will be a very important part of your efforts to reduce your thoughts of suicide. It is my hope that making extensive use of this workbook, practicing the skills contained within, and attending our scheduled sessions will help you in your quest to improve your quality of life.

As we have previously discussed, the intervention that is being tested consists of four face-to-face intervention sessions. In between these meetings, please use this workbook as a reminder of what you have learned, a source of information, and a guide for practicing your skills. Additionally, you will receive reminders on the cell phone we have provided you to practice your skills and assess your daily experience with suicidal thoughts and substance use.

In the pages that follow, the workbook is divided into four main modules, each of which will be the focus of one of our face-to-face meetings. As part of the material in that module you will find additional readings, suggested activities, and skills that we may not have had time to cover during our face-to-face meeting. While you can certainly read ahead, it is expected that you only practice the skills for the assigned week. In other words, during a given week, try to only do the exercises that we are covering in that portion of the intervention and avoid doing exercises that we have not covered yet.

The information contained in this workbook is largely derived from Dialectical Behavior Therapy. Although this therapy was initially developed to be used with a very specific group of individuals, it is our belief that the skills contained within can be highly useful to all people, including Veterans experiencing thoughts of suicide. People who have the most success with these types of treatment tend to have one major thing in common: they are highly engaged in their own treatment. Therefore I encourage you to make the most of this opportunity and actively practice these skills. Some of them will come easily, and others may take time to develop. However, the more consistently you apply yourself, use these strategies, complete assignments, and practice the skills, the greater the likelihood for success.

Good luck in the weeks to come,

Todd M. Bishop, M.S.

Table of Contents

Resources for Research Participants

Veteran's Service Center
(888) 823-9656

Binghamton Area

Binghamton Vet Center
53 Chenango Street, Binghamton, NY 13901
Phone - (607) 722-2393

Binghamton Outpatient Clinic
425 Robinson Street, Binghamton, NY 13901
Phone - (607) 772-9100
Services offered: Primary care services, behavioral healthcare, smoking cessation, & specialty services

Syracuse Area

VA Medical Center
800 Irving Avenue, Syracuse, NY 13210
Phone - (315) 425-4400
OEF/OIF Point of Contact……………… (315) 425-4426
Behavioral Healthcare…………………..(315) 425-3463
PTSD Treatment………………….......… (315) 425-3486
Substance Treatment Services………. (315) 425-3463
Smoking Cessation…………………….. (315) 425-4400 x52721
Homeless Veterans' Program…………. (315) 425-4428
Vocational Assistance…………………. (315) 425-4404
Primary Care……………………………. (315) 425-6515
Women's Clinic………………………..… (315) 425-2609

Syracuse Vet Center
716 Washington Street, Syracuse, NY 13210
Phone - (315) 478-7127

Auburn Outpatient Clinic
17 Lansing Street, Auburn, NY 13021
Phone - (315) 255-7002

Services offered: Primary care services, behavioral healthcare, smoking cessation, and some specialty services

Cortland VA Outpatient Clinic
1104 Commons Avenue, Cortland, NY 13045
Phone - (607) 347-4101
Services offered: Primary care services, behavioral healthcare, smoking cessation, & some specialty services

Rome CBOC
125 Brookley Road, Building 510, Rome, NY 13441
Phone - (315) 334-7100
Services offered: Primary care services, behavioral healthcare, smoking cessation, & some specialty services

Rochester Area

Canandaigua VA Medical Center
400 Fort Hill Avenue, Canandaigua, NY 14424
Phone - (585) 394-2000 or (800) 204-9917

OEF/OIF Point of Contact………......... (585) 393-7134
Behavioral Healthcare……..…. (585) 394-2000 x 37969
PTSD Treatment…………………….…... (585) 393-7252
Substance Treatment Services………. (585) 393-7710
Vocational Assistance…………………. (585) 393-7137
Homeless Veterans' Program............. (585) 393-7257
Primary Care……………………........... (585) 393-7401
Women's Program………………....…… (585) 393-7621

Rochester Outpatient Clinic
465 Westfall Road, Rochester, NY 14620
Phone - (585) 463-2600

Behavioral Healthcare………………… (585) 463-2668
Substance Abuse Services………….. (585) 463-2668

Rochester Vet Center
2000 South Winton Road, Building 5, Suite 201,
Rochester, NY 14618
Phone - (585) 232-5040

Watertown Area

Watertown VA Outpatient Clinic
C.A.N.I. Building
19472 US Route 11, Watertown, NY 13602
Phone - (315) 221-7026 or (800) 310-5001
Services offered: Primary care services, behavioral healthcare, & smoking cessation

Watertown Vet Center
210 Court Street, Suite 20, Watertown, NY 13601
Phone - (315) 782-5479

Hotline

National Suicide Prevention Hotline
Vet Centers and VA Medical Centers stand ready to reach out and help veterans at risk for suicide. Call the toll-free National Suicide Prevention hotline and indicate you are a veteran. You'll be immediately connected to VA suicide prevention and mental health professionals.

- 1-800-273-TALK

Internet Resources

Returning OEF/OIF Soldier Resources: http://www.oefoif.va.gov/
This website is your link to VA services especially for those that have served in Iraq or Afghanistan. This site will direct you to many services, including primary care, mental health, dental and VA benefits.

Returning OEF/OIF Soldier Resources in Upstate New York:
http://www.visn2.va.gov/vet/freedom/index.asp
This VA website explains services for returning OEF/OIF soldiers available in Upstate New York and how to get connected to your local VA Medical Center or Outpatient Clinic.

National Center for PTSD
http://www.ncptsd.va.gov
A V.A. maintained site that provides information and educational materials about PTSD.

Outward Bound Course Finder.http://www.outwardbound.org/course-finder/veteran-adventures/?view=1
This website provides veterans with no-cost opportunities for different wilderness adventures throughout the United States..

Center for Integrated Healthcare

My Safety Plan

What do I experience when I start to think about suicide? What are my warning signs?

    1. _____

    2. _____

    3. _____

    4. _____

What can I do, on my own, if I feel that my thoughts of suicide have become more serious than usual?

    1. _____

    2. _____

    3. _____

    4. _____

Who can help you take your mind off these problems for a little while? What person, settings, or people make you feel better when you socialize with them?

    1. _____

    2. _____

    3. _____

    4. _____

Which friends and family members do you think that you could reach out to during a crisis? Who is supportive of you during stressful times?

    1. _____

    2. _____

    3. _____

    4. _____

What are the names and phone numbers of the mental health professionals whom you can list as potential resources? Other healthcare providers?

1. _____

2. _____

3. _____

4. _____

Limit access to lethal means, such as firearms. What steps can you take to reduce the access to lethal means of suicide at your disposal?

1. _____

2. _____

3. _____

4. _____

Don't forget, besides all of the strategies and resources that you have listed above, you also have access to the 24-hour resources available to you on page 4 of this workbook. If you are concerned about your present level of suicidal thoughts and want to reach out, please do so.

Distress Tolerance

From time to time we are faced with situations or feelings that are difficult to manage, unpleasant, and simply upsetting. However, there are just some times when either the pain is too intense or the situation prevents us from addressing what is hurting us then and there. Take the example of attending the wedding of a friend and running into your ex-wife or ex-husband with whom the relationship ended particularly badly. You may have a strong emotional response to this person. However, you may also want to avoid making a scene at a friend's wedding, or realize that you will not be as effective in that moment because of how angry you are. This is where distress tolerance skills come into play.

The skills that follow are part of the distress tolerance module. They are designed to do just that, help you to tolerate a stressful situation until you can address it later from a position of emotional strength. These skills are also useful for addressing thoughts of suicide and self-harm. By using the alternative skills and strategies below you may be able to better weather a stressful and upsetting period. It is important to note that these strategies are not about avoiding something that upsets you, but, rather, gaining the time and space from which you can act more effectively and resolve what is bothering you.

Practicing the skills in this module should help you increase your ability to:
- Bear pain SKILLFULLY
- TOLERATE crises
- ACCEPT life in the moment

Key Points:
- Distress tolerance skills help you to use other skills that you have developed
- Accepting reality in the moment is <u>not</u> the same as approving of reality
- Distress tolerance skills are geared towards helping you to get through stressful times as EFFECTIVELY as possible

Skills/Concepts Covered:
- Crisis Survival Strategies
  - Wise Mind ACCEPTS
  - Self-Soothe the Five Senses
  - IMPROVE the moment
  - Pros & Cons
- Observing Your Breath
- Radical Acceptance

[Pages 165-180 from Linehan (1993) will follow]

Mindfulness

The skills and approach to life advocated as part of the mindfulness module is about practicing a more effective way of moving through the world. The goal is the development of a lifestyle where you participate with a fuller awareness while avoiding behavior that is impulsive or dependent on your mood.

Drawing from Eastern spiritual practices and Zen, the mindfulness skills that follow will help in your effort to balance your different states of mind (emotional mind, reasonable mind, and wise mind). When we are mindful of our emotions, thoughts, and feelings, we are better able to balance and incorporate that information and allow ourselves to make the most effective and mindful decisions possible.

Practicing the skills in this module should help you increase your ability to:
- Be a conscious observer of the world around you
- More fully participate in your life
- Take hold of your mind by being non-judgmental, doing one thing at a time, and focusing on being effective and not "right" in a given situation

Skills/Concepts Covered:
- States of Mind
  - Wise Mind
  - Reasonable Mind
  - Emotional Mind
- What Skills
  - Observe
  - Describe
  - Participate
- How Skills
  - Non-Judgmentally
  - One-Mindfully
  - Effectively

[Pages 109-113 from Linehan (1993) will follow]

Interpersonal Effectiveness

The interpersonal effectiveness module focuses on our interactions with others. Sometimes, those interactions do not proceed as planned, or we become so upset we lose sight of what we wanted to accomplish in the first place. The skills that you will learn and practice during the course of this module focus on putting you in a position to be <u>effective</u> and get what you want from in a given situation, as opposed to being "right" or "wrong". For example, if an unreliable friend asks to borrow your car and you are inclined to say "no", could you do it? Would you be able to maintain the relationship while still being able to assert yourself? If you were going through a particularly rough patch where you were having an increase in suicidal thoughts would you be able to effectively communicate to others how you felt and how they could help you without damaging the relationship? Learning and practicing the interpersonal effectiveness skills that follow will help you communicate your needs to others while maintaining your relationships and your self-respect.

Practicing the skills in this module should help you increase your ability to:
- Navigate your relationships in an EFFECTIVE manner
- Recognize those factors that either enhance or reduce your interpersonal effectiveness
- Communicate your needs to others while maintaining relationships and self-respect

Skills/Concepts Covered:
- Goals of Interpersonal Effectiveness
- Factors Reducing Interpersonal Effectiveness
- Factors Effecting the Intensity of Asking or Saying No
- DEAR MAN
- GIVE FAST

[Pages 115-133 from Linehan (1993) will follow]

Emotion Regulation

Emotions can be both useful and destructive forces in our lives. For example, for some people, anxiety over not having completed a task can drive them to get a lot accomplished. For others, not having completed a task leads to feelings of shame and guilt and avoiding the task entirely because they do not want to experience those emotions.

Difficulties with emotion can range anywhere from emotions that change rapidly from one to another, chronic feelings of emptiness, to intense anger that feels uncontrollable.

The goal of emotion regulation is <u>not</u> to get rid of emotions, but rather to reduce the suffering that we experience from them. A variety of approaches follow, but one very important take-away is that it is okay to experience emotion and that it can be a valid and valuable part of your experience. Practicing the skills that follow should help you to better understand and identify the emotions you are experiencing, decrease your vulnerability to negative emotional states, and help to decrease the suffering that you experience during these times. This in turn may help your ability to weather your pain and/or express it to others in a constructive way, enriching your relationships.

Practicing the skills in this module should help you increase your ability to:
- Understand emotions that you experience
- Reduce your vulnerability to negative emotions
- Decrease your emotional suffering

Skills/Concepts Covered:
- Model for describing emotion
- What good are emotions?
- Reducing vulnerability to emotion
- Steps for increasing positive emotion
- Letting Go and Opposite Action

[Pages 135-139 & 153-164 from Linehan (1993) will follow]

Appendix B: Demographics and Military Service Questionnaire

Demographics and Military Service Questionnaire

It is important to know some background information about our participants.

1. **Your Sex:**   Male ☐   Female ☐

2. **Your Age:** _____

3. **Yearly Family Income:**

   a. Under $10,000
   b. $10,001 - $20,000
   c. $20,001 - $40,000
   d. $40,001 - $60,000
   e. $60,001 - $80,000
   f. $80,001 - $100,000
   g. $100,00 or more

4. **Level of Education:**

   a. 8th grade or less
   b. Some high school
   c. High school equivalency (GED)
   d. High school graduate
   e. Some college (college, vocational school, associate's degree)
   f. Bachelor's degree
   g. Post-graduate degree

5. **Ethnic Background:**

   a. American Indian or Alaska Native
   b. Asian
   c. Black or African-American
   d. Native Hawaiian or other Pacific Islander
   e. White

6. **Are you Hispanic or Latino?**   Yes ☐   No ☐

7. **Relationship Status?**

    a. Single
    b. Married
    c. Living with Partner
    d. Separated/Divorced
    e. Widowed

8. **What is your present (or usual if not currently employed) occupation?**

    _____

9. **Are you currently employed?**

    a. Yes, full time
    b. Yes, part-time only
    c. No

10. **If you are not currently employed are you?**

    a. Temporarily laid off
    b. Poor health/disability
    c. Student
    d. Homemaker
    e. Retired
    f. Other: _____

11. **When did you first enroll in VA healthcare?** _____

    Month and Year

12. **Do you also use healthcare providers outside the VA?**   Yes ☐   No ☐

    If yes please describe: _____

The following questions are about your previous treatment for mental health difficulties including thoughts of suicide or suicide attempts:

13. **Have you ever been hospitalized for thoughts of suicide or a suicide attempt?**

    Yes ☐   No ☐

    If yes, please list the approximate dates that this occurred. _____

    Months and Years

14. Have you received any type of counseling or therapy in the past?

<div align="center">Yes ☐   No ☐</div>

If yes, when and for how long?   _____

<div align="center">Months and Years</div>

If yes, was this therapy focused on your thoughts of suicide?

<div align="center">Yes ☐   No ☐</div>

15. Have you been in a Dialectical Behavior Therapy (DBT) group in the past?

<div align="center">Yes ☐   No ☐</div>

If yes, when were you in this group and for how long? _____

<div align="center">Months and Years</div>

The following questions refer to your military service:

16. What branch (or branches) of the military have you served and what were your dates of service in the active military or Reserves/ Guard?

	Active Dates (mm/yy – mm/yy)	**Reserve Dates** (mm/yy – mm/yy)
Air Force		
Army		
Coast Guard		
Marines		
Navy		

17. Have you been deployed in support of any of the wars or conflicts listed below?

	1st Deployment Dates (mm/yy)	**2nd Deployment**	**3rd Deployment**
OEF			
OIF/OND			
Gulf War I			
Vietnam			
Other _____			
Other _____			

Appendix C: Beck Scale for Suicidal Ideation

BSS®

Date: _____

Name: _____ Marital Status: _____ Age: _____ Sex: _____

Occupation: _____ Education: _____

Directions: Please carefully read each group of statements below. Circle the one statement in each group that **best** describes how you have been feeling for the **past week, including today**. Be sure to read all of the statements in each group before making a choice.

Part 1

1 0 I have a moderate to strong wish to live.
   1 I have a weak wish to live.
   2 I have no wish to live.

2 0 I have no wish to die.
   1 I have a weak wish to die.
   2 I have a moderate to strong wish to die.

3 0 My reasons for living outweigh my reasons for dying.
   1 My reasons for living or dying are about equal.
   2 My reasons for dying outweigh my reasons for living.

4 0 I have no desire to kill myself.
   1 I have a weak desire to kill myself.
   2 I have a moderate to strong desire to kill myself.

5 0 I would try to save my life if I found myself in a life-threatening situation.
   1 I would take a chance on life or death if I found myself in a life-threatening situation.
   2 I would not take the steps necessary to avoid death if I found myself in a life-threatening situation.

If you have circled the zero statements in both Groups 4 and 5 above, then skip down to Group 20. If you have marked a 1 or 2 in either Group 4 or 5, then open here and go to Group 6.

_____ **Subtotal Part 1**

Part 2

6 0 I have brief periods of thinking about killing myself which pass quickly.

1 I have periods of thinking about killing myself which last for moderate amounts of time.

2 I have long periods of thinking about killing myself.

7 0 I rarely or only occasionally think about killing myself.

1 I have frequent thoughts about killing myself.

2 I continuously think about killing myself.

8 0 I do not accept the idea of killing myself.

1 I *neither* accept nor reject the idea of killing myself.

2 I accept the idea of killing myself.

9 0 I can keep myself from committing suicide.

1 I am unsure that I can keep myself from committing suicide.

2 I cannot keep myself from committing suicide.

10 0 I would not kill myself because of my family, friends, religion, possible injury from an unsuccessful attempt, etc.

1 I am somewhat concerned about killing myself because of my family, friends, religion, possible injury from an unsuccessful attempt, etc.

2 I am not or only a little concerned about killing myself because of my family, friends, religion, possible injury from an unsuccessful attempt, etc.

11 0 My reasons for wanting to commit suicide are primarily aimed at influencing other people, such as getting even with people, making people happier, making people pay attention to me, etc.

1 My reasons for wanting to commit suicide are not only aimed at influencing other people, but also represent a way of solving my problems.

2 My reasons for wanting to commit suicide are primarily based upon escaping from my problems.

12 0 I have no specific plan about how to kill myself.

1 I have considered ways of killing myself, but have not worked out the details.

2 I have a specific plan for killing myself.

13 0 I do not have access to a method or an opportunity to kill myself.

1 The method that I would use for committing suicide takes time, and I really do not have a good opportunity to use this method.

2 I have access or anticipate having access to the method that I would choose for killing myself and also have or shall have the opportunity to use it.

14 0 I do not have the courage or the ability to commit suicide.

1 I am unsure that I have the courage or the ability to commit suicide.

2 I have the courage and the ability to commit suicide.

15 0 I do not expect to make a suicide attempt.

1 I am unsure that I shall make a suicide attempt.

2 I am sure that I shall make a suicide attempt.

16 0 I have made no preparations for committing suicide.

1 I have made some preparations for committing suicide.

2 I have almost finished or completed my preparations for committing suicide.

17 0 I have not written a suicide note.

1 I have thought about writing a suicide note or have started to write one, but have not completed it.

2 I have completed a suicide note.

18 0 I have made no arrangements for what will happen after I have committed suicide.

1 I have thought about making some arrangements for what will happen after I have committed suicide.

2 I have made definite arrangements for what will happen after I have committed suicide.

19 0 I have not hidden my desire to kill myself from people.

1 I have held back telling people about wanting to kill myself.

2 I have attempted to hide, conceal, or lie about wanting to commit suicide.

Go to Group 20.

20 0 I have never attempted suicide.

1 I have attempted suicide once.

2 I have attempted suicide two or more times.

If you have previously attempted suicide, please continue with the next statement group.

21 0 My wish to die during the last suicide attempt was low.

1 My wish to die during the last suicide attempt was moderate.

2 My wish to die during the last suicide attempt was high.

_____ **Subtotal Part 2**

_____ **Total Score**

PEARSON **PsychCorp**

Appendix D: Treatment Feedback Questionnaire

Treatment Feedback Questionnaire
Thank you for participating in this research study. Because the intervention is fresh in your mind, we would like to get your candid feedback on your experience with it. This will help us determine if, and how, we need to modify this intervention for other Veterans. If you have additional feedback not covered by the questions we have asked, please feel free to use the reverse side of this form.

1. What is your overall impression of the intervention as a whole?

2. What is your overall impression of the workbook?

3. What, if anything, would you <u>add</u> to the:
    a. Intervention? Why?

    b. Workbook? Why?

4. What, if anything, would you <u>delete</u> from the:
    a. Intervention? Why?

    b. Workbook? Why?

5. Have you followed up with any of the following during the course of the intervention (please circle all that apply):

    a. Pharmacy referral (started medication for mental health)
    b. (VA) Group Therapy
    c. Group Therapy somewhere else
    d. (VA) 1-on-1 Therapy
    e. 1-on-1 Therapy somewhere else
    f. Other: _____

Mindfulness

Rater:
Study Therapist:
Date:
Duration of Session (min):
Notes:

		Please check the corresponding box as each step is completed [✔]
1.	**Check-In** ❖ Briefly assess the Veteran's current suicidal ideation and discuss any obstacles faced during the week. If Veteran is at imminent risk for suicide, seek clinical backup. ❖ Take a moment to check in with the Veteran to ask how self-monitoring is proceeding using the IVR system.	
2	**Introduction:** *The skills and approach to life advocated as part of the mindfulness module is about practicing a more effective way of moving through the world. The goal is the development of a lifestyle where you participate with a fuller awareness while avoiding behavior that is impulsive or dependent on your mood.* *Drawing from Eastern spiritual practices and Zen, the mindfulness skills that follow will help in your effort to balance your different states of mind (emotional mind, reasonable mind, and wise mind). When we are mindful of our emotions, thoughts, and feelings, we are better able to balance and incorporate that information and allow ourselves to make the most effective and mindful decisions possible.*	
3.	**Psychoeducation:** ***States of Mind (Wise Mind, Reasonable Mind, Emotional Mind)*** *It sometimes helps to think about the mind as divided up into three parts. Reasonable Mind the rational, thinking, logical mind. It is the part of you that plans and evaluates things logically. It is the cool and calculating part of your mind. Emotional Mind in contrast is when your emotions seem to be in greater control; when emotions heavily influence your thinking and behavior. Both Reasonable Mind and Emotional Mind have their uses and contribute to problem solving, happiness, and decision making.*	

However, if either Reasonable or Emotional Mind is more in control than the other we can become out of balance. On the one hand, Emotional mind may become too difficult to manage when problems occur and we may find ourselves over-reacting, possibly leading to arguments over small problems. On the other hand, using Reasonable Mind all of the time may make us too distant from those we care about and unnecessarily shut out positive emotional experiences. ***Can you recall a time you were using Reasonable Mind? Emotional Mind?***

The area where Emotional Mind and Reasonable Mind overlap is called Wise Mind. Neither Reasonable Mind nor Emotional Mind is sufficient for a balanced lifestyle. People are in Wise Mind when they can be both planning and logical, while at the same time taking into account their emotional needs and interpreting what their bodies are telling them. Wise Mind is like the calm in the middle of the storm, where we can take in information from all parts of the self. Using the mindfulness skills that follow can help you to navigate the stressors of daily life and more frequently achieve Wise Mind. ***Can you recall a time that you have felt that you were experiencing Wise Mind?***

What Skills (Observe, Describe, Participate) – **Mindfulness Handout #2**
People can often experience mindfulness by tapping into the skills of observation, description, and participation. Let's take a moment to go through these skills on Mindfulness Handout #2.

<u>Key Points</u>
Observe:
- ❖ *Awareness in the moment*
- ❖ *Attend to events and emotions without necessarily trying to change or label them*
- ❖ *Observing is not "zoning out". It is an active state of mind. You are actively taking in your environment*

Describe:
- ❖ *Labeling what has been observed*
- ❖ *Describing something as a thought is different than describing something as a fact*

	Participate: ❖ *Participating is about entering wholly into an activity and becoming one with the activity.* ❖ *Often referred to in sports terminology as "The Zone"* ❖ ***Can you think of a time in your life when you have been fully participating in an activity? (e.g. – driving)***	
4.	**Instruction:** *What Skills (Observe, Describe, Participate):* Describe Mindfully *One activity that can sometimes help in achieving a more mindful state is to observe and describe mindfully the things around us. One way to do this is to begin by taking a few deep breaths to steady oneself and quiet your mind. You next identify three things that you see, followed by three things that you hear, and lastly by three things that you feel. When doing this try to focus on small, specific objects or sensations. The more minute and detailed the better. When you have completed observing and describing three things that you see, hear, and feel; you begin another round. This time observing and describing two new objects that you see, hear, and feel. This in turn is followed by a final round of naming yet again one more new object from each category.*	
5.	**Modeling:** *What Skills (Observe, Describe, Participate):* Describe Mindfully [Therapist next models this activity for the Veteran, identifying something that he/she sees, hears, and feels.]	
6.	**Participant Practice:** What Skills (Observe, Describe, Participate): Describe Mindfully [Veteran and therapist then take turns, alternating observations on what they see, hear, and feel.] *Now that you have seen how it is done, let's take a moment to practice. Start by settling into a comfortable position and taking 2 to 3 deep, centering*	

	breaths. Let your mind clear and begin to observe the world around you. [Allow a minute for Veteran to observe the room and themselves.] *Now that you have taken some time to observe, describe three things that you see. Now three things that you heard. Now three things that you felt.* *Taking a couple of more breaths, try to find two new things that you have not noticed before. Pay attention to small details, like the glare of light, or an imperfection in the paint. What were the new things that you saw? That you heard? That you felt?*	
7.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** What Skills (Observe, Describe, Participate): Describe Mindfully [Provide reinforcement for portions of the activity that the Veteran successfully completes.] Sample Statements/Questions ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *This was a great start, but remember that with all of these skills practice is very important. The more you practice a given skill the better you will become at it.*	
8.	**Psychoeducation:** How Skills (Non-Judgmentally, One-Mindfully, Effectively) *Lastly today we are going to talk about the "How Skills" of mindfulness. To help with this we are going to briefly look over Mindfulness Handout #3.* Key Points Non-Judgmentally: ❖ *Try to use non-evaluative responses* ❖ *Describe the consequences of a particular thing or behavior as opposed to labeling it* ❖ *Don't judge the fact that you catch yourself judging* One-Mindfully: ❖ *Focus on the task at hand, letting everything else go* ❖ *Concentrate your mind on just one thing at a time*	

	Effectively: ❖ *Do what is needed and try not to get hung up on what is "right" or "wrong"* ❖ *Being EFFECTIVE over being RIGHT is a skillful response* ❖ *Be mindful of your goal or objective when considering a given behavior.* o *Example: If you want a raise at work but don't ask because you think your supervisor should know without being told; you are putting being "right" over achieving your goal*	
9.	**Instruction:** How Skills (Non-Judgmentally, One-Mindfully, Effectively): Diaphragmatic Breathing & Breath Observation *One way that people use How Skills to be mindful is through the practice of diaphragmatic breathing and breath observation. Often when we become anxious we breathe rapidly from our chests. In contrast, diaphragmatic breathing uses the diaphragm muscle to help bring about relaxation and awareness by taking fuller breaths. As you inhale, the diaphragm muscle drops and allows air to fill the lungs. Watching someone breath in this way can seem as if their stomach is filling with air. Breathing in this way can decrease heart rate, blood pressure, and muscle tension. Following your breath while breathing diaphragmatically can also lead to a more mindful existence.* *Adding counting or breath observation, for example counting each inhale and exhale as it occurs, can further help with encouraging relaxation. You can give yourself a pre-set number of breaths to count up to or continue the activity as long as you feel comfortable. Breath one-mindfully, completely focused on following your breath and being non-judgmental of yourself during this exercise.*	
10.	**Modeling:** How Skills (Non-Judgmentally, One-Mindfully, Effectively): Diaphragmatic Breathing & Breath Observation [Demonstrate diaphragmatic breathing and the counting of breaths for the Veteran and then ask them to join you in practice.]	

11.	**Participant Practice:** How Skills (Non-Judgmentally, One-Mindfully, Effectively): Diaphragmatic Breathing & Breath Observation *Hold your hand on your stomach and take two to three breaths. Each time feel your stomach rise and fall, breathing from your diaphragm and filling your belly up with air. As you inhale a long, deep breath count "one". As you exhale this breath count "one" again. Inhale two. Exhale two. Inhale three. Exhale three. Continue to count your breath at a slow, yet comfortable pace up to ten.*	
12.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** How Skills (Non-Judgmentally, One-Mindfully, Effectively): Diaphragmatic Breathing & Breath Observation [Provide reinforcement for portions of the activity that the Veteran successfully completes.] <u>Sample Statements/Questions</u> ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *Use diaphragmatic breathing frequently, as practice will make you much more skilled.* ❖ *As you continue to exercise find the number and pace of breaths that is right for you.* ❖ *Observe your breathing and take deep breaths at the first signs of anxiety, stress, or tension. However, this is an exercise that is best practiced frequently, and in multiple situations. Perhaps you would even schedule a time for relaxation and to practice breathing exercises?*	
13.	**Check Out & Homework** ❖ Ask if the Veteran has any questions about what to expect between sessions. ❖ Remind the Veteran that the crisis hotline is available 24-hours a day. ❖ Remind the Veteran to practice skills in between sessions.	
Total number of steps completed:		

Emotion Regulation

Rater:	
Study Therapist:	
Date:	
Duration of Session (min):	
Notes:	

		Please check the corresponding box as each step is completed [✔]
1.	**Check-In** ❖ Briefly assess the Veteran's current suicidal ideation and discuss any obstacles faced during the week. If Veteran is at imminent risk for suicide, seek clinical backup. ❖ Take a moment to check in with the Veteran to ask how self-monitoring is proceeding using the IVR system.	
2	**Introduction:** *Emotions can be both useful and destructive forces in our lives. For example, for some people, anxiety over not having completed a task can drive them to get a lot accomplished. For others, not having completed a task leads to feelings of shame and guilt and avoiding the task entirely because they do not want to experience those emotions.* *Difficulties with emotion can range anywhere from emotions that change rapidly from one to another, chronic feelings of emptiness, to intense anger that feels uncontrollable.* *The goal of emotion regulation is <u>not</u> to get rid of emotions, but rather to reduce the suffering that we experience from them. Practicing emotion regulation skills should help you to better understand and identify the emotions you are experiencing, decrease your vulnerability to negative emotions, and help to decrease the suffering that you experience during these times. This in turn may help your ability to weather your pain and/or express it to others in a constructive way, enriching your relationships.*	
3.	**Psychoeducation:** Observing & Describing Emotion Reducing Vulnerability to Negative Emotion – "PLEASE Master" Challenging Myths about Emotions	

Emotions are more than just a single word or feeling. An emotion is a complex patterned reaction that involves interpretations of events, physical changes to the body and brain, and urges to action. It is important to remember though that emotions are TEMPORARY and that they are self-perpetuating (meaning sadness is its own best friend and begets more sadness, etc.).

Emotions can be a good thing. They can be quite useful in communicating with others or motivating us to act quickly. Strong emotions can help push us to overcome obstacles in both the environment and our mind. Our emotional reactions to others or events can also give us information about the situation. However, we can get in trouble when we let this go to the extreme and treat emotions as facts. For example, feeling that you are right about something doesn't necessarily mean that it IS right, though that is often how people translate that feeling. Emotion regulation skills allow you to achieve a degree of separation from your emotions so that you have space to exercise control over them.

Observe your emotion, step back and get unstuck from it and allow yourself to experience the emotion if the time is appropriate. Feel the emotion come and go as a temporary wave and do not try to block the emotion from occurring or push it away. Also, don't try to hold onto an emotion or amplify it. Remember, emotions are their own best friends and do not need our help to stick around. Accept the emotion for what it is, without judgment, remembering that you do not have to act on your emotion and that you have felt differently at other times in your life.

A classic example is that of the horse and the rider. In this case, the emotion is the horse, and you are the rider. You have three options:
1) you can be separate from the horse, fight it, and have it fight back;
2) you can be mindless, hang on, and go wherever the emotion/horse takes you; or
3) you can be ONE with the horse, identify that your emotions are a part of you, not outside of you, but do not act as a mindless rider, work in harmony with the horse

*We can work towards reducing our vulnerability to negative emotion and not letting emotional mind (horse) take over by engaging in a form of self-care. One set of skills that help to this end can be remembered by the acronym "PLEASE Master". Let's take a moment to look at Emotion Regulation Handout #6. The six target areas include: treating **P**hysica**L** illness, balanced **E**ating, avoiding mood-**A**ltering drugs, balanced **S**leep, **E**xercise,*

	and building __MASTER__y. The more that these areas of one's life are properly looked after the less likely they are to be vulnerable to the effects of negative emotions. For example, have you ever noticed that it is a lot easier to be irritable or angry when you are hungry, tired, or sick? *Another trap that we can fall into is buying into the several myths that exist about emotion. This colors the way that we look at emotion and our experience of it. For example, if you believe that all anger is bad and destructive, this affects the way you interpret this negative emotion and you become much more likely to feel guilt or shame following anger.*	
4.	**Instruction:** Challenging Myths about Emotions *The trick in dealing with these myths becomes challenging them both before and as they occur. If we can observe ourselves making assumptions or buying into myths, in that moment we can challenge our thoughts. To look over this further let's take a look at Emotion Regulation Handout #2. There are several incorrect assumptions about emotion listed on this handout.*	
5.	**Modeling:** Challenging Myths about Emotions *For example, let's take the statement: "There is a right way to feel in every situation". If I were to challenge this I could say something to the effect of: "Each situation is different and deserves to be evaluated on its own merits". An alternative challenge could be to simply state the opposite of the myth: "There is NOT a right way to feel in every situation". You just find what works for you.*	
6.	**Participant Practice:** Challenging Myths about Emotions *Take a moment and let's develop challenges for a couple of these myths together. Go ahead and pick one to start and brainstorm a potential challenge to this myth.* [Work through 3 or four of the available myths and assign the rest as homework for the Veteran to practice.]	

| 7. | **Corrective Feedback/Reinforcement of Correct Skill Usage:**
Challenging Myths about Emotions

[Provide reinforcement for portions of the activity that the Veteran successfully completes.]

<u>Sample Statements/Questions</u>
❖ *What did it feel like to complete this exercise?*
❖ *Were any portions of the exercise difficult?*
❖ *This exercise may seem silly or trivial at first, but the more you practice this skill the better you will be able to challenge thoughts that you are having. This also applies to thoughts about depression, death, and suicide.*
❖ *As you get better at challenging thoughts and feelings you will get more and more in touch with what myths you are buying into and what is appropriate emotion.* | |
| 8. | **Psychoeducation:**
Opposite Action

When experiencing negative emotions one way to change them is through Opposite Action. So often when we feel afraid, ashamed, or guilty about something we avoid it. This avoidance serves to reinforce the fear or negative feeling. Opposite action means going towards this fear or situation where you experience unjustified shame or guilt. The more you face the feared situation, the greater your eventual feelings of control and mastery will be. If feeling sad or depressed, engage in activities that create the opposite emotion and give you a feeling of self-confidence. If angry, instead of attacking, engage in the opposite action of avoiding this person or imagining sympathy or empathy for this other person.

Opposite Action can be somewhat like paddling a canoe in a rushing river. Your goal is to make it to the other bank, but the current is very swift and pulls your canoe downstream. Your first instinct might be to paddle directly towards the shore, fighting the current (your unacknowledged emotion) the entire way, and causing you to be exhausted by the time you reach it. However, if you are mindful of the current and accept that it is very strong you can choose instead to engage in opposite action by padding downstream with the current. Gradually guiding your canoe to the opposite shore with | |

	less of a fight.	
9.	**Instruction:** Opposite Action *Let's take a second to brainstorm how we would engage in opposite action. What we will do is run through a couple of scenarios where we have felt the effects of negative emotion during the week. Then we will talk about what we could have done differently to counter this emotion or approach instead of avoid. This is a process that you will be able to use during the week whenever you catch yourself experiencing a negative emotion or avoiding situations that evoke shame or guilt.*	
10.	**Modeling:** Opposite Action [Provide a personal example that works for you and illustrates the principles of radical acceptance and opposite action. Below is an example that you can feel free to use.] *For example, I am consistently behind on my work and become anxious about when I will complete it. I judge this state of affairs to be very bad and it evokes feelings of guilt and shame. Instead of doing my work, often distract myself with other activities so that I can escape the feelings of guilt and shame that I am experiencing. That works for a while, but the problems never get fixed and my guilt and shame is waiting for me when my distraction is over. This also prevents me from fully enjoying any leisure activities that I engage in.* *For me, I would first acknowledge the feelings of guilt and shame that I am experiencing over not having my work done. I would accept them as feelings, but not as a judgment of myself. "I feel bad that I have not completed my work, but that does not mean that I am a bad person." Next, I could engage in opposite action by starting on my work a little bit at a time. You don't have to change the world the first time you use opposite action. It is about nibbling away at your problems a small piece at a time. Again for me, when I feel anxious about behind on work, a good opposite action might to create a list of things to do and then start on the smallest one.*	

11.	**Participant Practice:** Opposite Action *Now you try to imagine a situation during the past week when you felt angry, sad, or worried.* [If the Veteran is unable to come up with something that occurred during the last week allow them to expand the exercise to the last time they felt this way or another period of negative mood that sticks out to them.] *Okay, what was your situation and how did you react? If you were using opposite action what might you have done differently?*	
12.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** Opposite Action [Provide reinforcement for portions of the activity that the Veteran successfully completes.] <u>Sample Statements/Questions</u> ❖ *That is a good start but can you think of any other alternative strategies or directions you could have gone in your situation?* ❖ *What would it have looked like to have done the exact opposite of what you did in your situation?* ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *Remember, opposite action is not a "one and done" activity. Continue to approach what you fear or avoid again and again until it no longer has that power over you.*	

13.	**Check Out & Homework**
	 ❖ Ask if the Veteran has any questions about what to expect between sessions.
	 ❖ Remind the Veteran that the crisis hotline is available 24-hours a day.
	 ❖ Remind the Veteran to practice skills in between sessions.
	     o Challenge myths about emotions and negative thoughts when they occur
	     o Pay attention to your self-care (PLEASE Master acronym)
	     o Practice Opposite Action	

Total number of steps completed:		

Distress Tolerance

Rater:	
Study Therapist:	
Date:	
Duration of Session (min):	
Notes:	

	Please check the corresponding box as each step is completed [✔]	
1.	**Check-In** ❖ Briefly assess the Veteran's current suicidal ideation and discuss any obstacles faced during the week. If Veteran is at imminent risk for suicide, seek clinical backup. ❖ Take a moment to check in with the Veteran to ask how self-monitoring is proceeding using the IVR system.	
2	**Introduction:** *From time to time we are faced with situations or feelings that are difficult to manage, unpleasant, and simply upsetting. However, there are just some times when either the pain is too intense or the situation prevents us from addressing what is hurting us then and there. Take the example of attending the wedding of a friend and running into your ex-wife or ex-husband with whom the relationship ended particularly badly. You may have a strong emotional response to this person. However, you may also want to avoid making a scene at a friend's wedding, or realize that you will not be as effective in that moment because of how angry you are. This is where distress tolerance skills come into play.* *Distress tolerance skills are designed to help you to handle being in a stressful situation until you can address it later from a position of emotional strength. These skills are also useful for addressing thoughts of suicide and self-harm. By using the alternative skills and strategies below you may be able to better weather a stressful and upsetting period. It is important to note that these strategies are not about avoiding something that upsets you, but, rather, gaining the time and space from which you can act more effectively and resolve what is bothering you.*	
3.	**Psychoeducation:** Radical Acceptance Distract with "Wise Mind ACCEPTS"	

	Distress tolerance skills give us some tools to accept the moment as it is. It is impossible to completely avoid pain or stress, but we may be able to navigate those periods of stress more effectively. By practicing distress tolerance we acknowledge the current situation without putting additional demands on it to be different or change. Combined with being mindful, we are better able to observe our thoughts and feelings for what they are without trying to control them. *Another approach to regulating our emotion is through radical acceptance Essentially, radical acceptance helps us to let go of our emotional suffering and be mindful of our current thoughts and feelings. Making the choice to tolerate a moment and acknowledge "what is" is acceptance. Sometimes the more we struggle against an unacknowledged situation or emotion the more pain it creates. It is important however to recognize that acceptance does NOT equal approval. You may not approve of a given situation, but you may choose to accept it for what it is in that moment.* *An example that is sometimes helpful is thinking about chronic pain. If someone has chronic pain they can allow it to consume them, focus all of their time, attention, and energy on the pain, but that isn't going to change the pain.* *Radical acceptance would involve turning the mind and making a decision to accept that the pain will always be there, but there are other things in life that one would like to focus their time, attention, and energy on instead of the pain. Radical acceptance DOES NOT mean that the pain goes away. Radical acceptance DOES NOT mean that you like (or approve of) the pain* *Once we have acknowledged and accepted a situation we may still feel stressed and we want tools to ride out that distress. Wise Mind ACCEPTS is an acronym that lays out seven strategies that you can use to help you weather tough times and includes: **A**ctivities, **C**ontributing, **C**omparisons, **E**motions, **P**ushing away, **T**houghts, and **S**ensations.*	
4.	**Instruction:** Distract with "Wise Mind ACCEPTS" *I want you to list a couple of potentially distressing situations that you have faced in the past few months. Periods of high stress that you had to tolerate for one reason or another. They will work even better as an example if it is something that you are likely to encounter again.*	

	[It is ok here to model what you are looking for and prompt the Veteran with examples of stressful situations that other Veterans or the therapist have encountered. For example: arguments with a spouse over bills, seeing a friend that you have fallen out with, disagreements at work, etc.] *Now, let's take a moment to look over Distress Tolerance Handout #2. Each of these seven categories is a suggested strategy for you to weather stressful situations. Let's read through them and see if any strategies make more or less sense to you and we can try to apply them to the stressful situations that you mentioned.*	
5.	**Modeling:** Distract with "Wise Mind ACCEPTS" [Here it is ok to prompt the Veteran with additional examples when applicable. Modeling and Participant Practice in this module will be more fluid and have much more overlap than other modules]	
6.	**Participant Practice:** Distract with "Wise Mind ACCEPTS" [Ask the Veteran to come up with individual strategies that they have used or can use from each of the Wise Mind ACCEPTS categories. Encourage the Veteran to write down strategies that he/she plans to use or that have worked particularly well for them.]	
7.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** Distract with "Wise Mind ACCEPTS" [Provide reinforcement for portions of the activity that the Veteran successfully completes.] Sample Statements/Questions ❧ *This is great, it sounds as if you are already using some of the skills* ❧ *What did it feel like to complete this exercise?* ❧ *Were any portions of the exercise difficult?* ❧ *Which of these strategies do you see yourself enacting during the week? During which stressful situations?* ❧ *What are some potential barriers to you using these strategies?*	

8.	**Psychoeducation:** IMPROVE the Moment *People experiencing distress also sometimes turn to another set of skills that we can remember using the acronym "IMPROVE the Moment". This involves adding one of seven strategies to a distressing situation including: **I**magery, **M**eaning, **P**rayer, **R**elaxation, doing **O**ne thing in the moment, brief **V**acations, and **E**ncouragement. You can choose to use any or all of these strategies during periods of stress. Let's take a moment to go over descriptions of each using Distress Tolerance Handout #1.*	
9.	**Instruction:** IMPROVE the Moment: Progressive Muscle Relaxation *Now let's take some extra time to focus on the "R" in improve, Relaxation. A strategy that is frequently employed to encourage relaxation during both high and low stress times is Progressive Muscle Relaxation (PMR). In PMR you purposefully apply tension to a given muscle group, focusing on the tension as it builds in the muscle, and then releasing that tension and watching it flow away from the body. This strategy works great at improving your ability to recognize stress and tension within the body. Typically individuals start with the hands, working their way up through the arms and through the rest of the body, ending with the face and neck. Although there is no set way to proceed through the muscle groups. Each person finds what works best for them though repeated use and practice.*	
10.	**Modeling:** IMPROVE the Moment: Progressive Muscle Relaxation [Model the behavior while describing it to the Veteran.] *Essentially you begin by finding a relaxing position and focusing your attention on the muscle group that you are targeting. For example, if we started with the hands you would begin by inhaling and squeezing the muscles of your hand as hard as you can, holding it to a count of 5.* *When you hit 5 exhale and gently release the tension in your fist…paying attention to the muscles relax. Imagining the pain and tension leave your fingertips as you exhale. You want to focus on the change and difference*	

	between tension/pain and relaxation. Relax for 10-15 seconds and then repeat. *Following this you move onto other muscle groups which may include: hands, arms, shoulders, feet, front of legs (toe points), back of legs (flexing feet upwards/heels down), thighs, buttocks, stomach, chest, neck, eyes, forehead, and face.*	
11.	**Participant Practice:** IMPROVE the Moment: Progressive Muscle Relaxation *Now, let us take a moment to practice this together. I will lead you through the exercise as we hit on several of the muscle groups mentioned.* [Therapist should proceed through the muscle groups with the Veteran; we are more effective when we practice what we preach!] ❖ *Start by finding a comfortable position.* ❖ *If it is helpful, you may close your eyes to minimize any distraction that you may feel.* ❖ *Take a few deep breaths to begin, inhaling and exhaling slowly.* ❖ *Noticing the pressure build in your lungs as you inhale and release as you exhale.* ❖ *Continue to breathe in an out at your own pace.* ❖ *Now shift your focus to your hands.* ❖ *Make your hands into fists and squeeze them…feeling the tensions build…for 3, 4, 5…and release…noticing the tension flow out your fingertips.* ❖ *Rest…still focused on your hands and your breathing…* ❖ *Now clench your hands again, feel the tension build…4, 5…and release* ❖ *Next notice your biceps and forearms* ❖ *Without squeezing your fists, flex your bicep and forearms…holding that tension for 2, 3, 4, 5…and releasing it on the exhale.* ❖ *Apply tension on the inhales…and release it on the exhales at your own pace. The counting is just a suggestion.* ❖ *Again, flex the arms for 2, 3, 4, 5….and release…noticing the tension flow away.* ❖ *Paying particular attention to the difference between tension and relaxation in the muscles. Monitoring your breath as it flows in and out*	

	❖ *Now we will apply tension to the shoulders. Raise your shoulders as if they could touch your ears.* ❖ *Let the pain and tension build, perhaps noticing a trembling of the muscle…and release on the exhale…* ❖ *Shoulders inhale….2, 3, 4, 5, … and exhale* ❖ *Now focusing on your legs, flexing your toes upward and stretching your heels down. Feeling the tension build…and releasing that tension…noticing it flow out through the tips of your toes.* ❖ *Again flex your legs for 2, 3, 4, 5… and exhale.* ❖ *Lastly focus on the muscles of the face. On the inhale, scrunch up the muscles of the face holding tension throughout.* ❖ *Feel the tension build…and release…Feel the muscles go limp and relax* ❖ *Flex the face again….and on the exhale…release* ❖ *Relax your eyes for a few seconds and pay attention to your breathing. Be mindful of the sensations of the breath as it flows in and out. When you are ready, you may open your eyes.*	
12.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** IMPROVE the Moment: Progressive Muscle Relaxation [Provide reinforcement for portions of the activity that the Veteran successfully completes.] Sample Statements/Questions ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *The beauty of this strategy is that most times you can use it without other's even noticing.* ❖ *Remember to practice PMR multiple times per day and in a variety of situations. Like any other skill, the more you practice the better you will become.* ❖ *The goal of PMR is not to fall asleep or completely clear your mind* ❖ *If you notice thoughts intruding, acknowledge them, let them pass through and then move back to focusing on the tension and relaxation of your muscles.* ❖ *It will help in the beginning to practice this in a quiet place without distractions*	

13.	**Check Out & Homework** ❖ Ask if the Veteran has any questions about what to expect between sessions. ❖ Remind the Veteran that the crisis hotline is available 24-hours a day. ❖ Remind the Veteran to practice skills in between sessions.	
Total number of steps completed:		

Interpersonal Effectiveness

Rater:	
Study Therapist:	
Date:	
Duration of Session (min):	
Notes:	

		Please check the corresponding box as each step is completed [✔]
1.	**Check-In** ❖ Briefly assess the Veteran's current suicidal ideation and discuss any obstacles faced during the week. If Veteran is at imminent risk for suicide, seek clinical backup. ❖ Take a moment to check in with the Veteran to ask how self-monitoring is proceeding using the IVR system.	
2	**Introduction:** *Interpersonal effectiveness is about improving our interactions with others. Sometimes, those interactions do not proceed as planned, or we become so upset we lose sight of what we wanted to accomplish in the first place.* *The skills that you will learn and practice during the course of this module focus on putting you in a position to be <u>effective</u> and get what you want from in a given situation, as opposed to being "right" or "wrong". For example, if an unreliable friend asks to borrow your car and you are inclined to say "no", could you do it? Would you be able to maintain the relationship while still being able to assert yourself? If you were going through a particularly rough patch where you were having an increase in suicidal thoughts would you be able to effectively communicate to others how you felt and how they could help you without damaging the relationship?* *Learning and practicing the interpersonal effectiveness skills that follow will help you communicate your needs to others while maintaining your relationships and your self-respect.*	
3.	**Psychoeducation:** Situations for Interpersonal Effectiveness Goals of Interpersonal Effectiveness Factors Reducing Interpersonal Effectiveness Intensity of Asking/Saying No Interpersonal Effectiveness - "DEAR MAN"	

Let's start by taking a look at Interpersonal Effectiveness Handout #1. What we have here are several situations in which interpersonal effectiveness skills are likely to be useful. This includes attending to your relationships by not letting problems build up and resolving conflicts before they become overwhelming. It also includes balancing your priorities versus demands put on you. If you are overwhelmed it is ok to reduce or put-off some of your low priority demands. It is also okay to ask others for help and to say NO when necessary. Interpersonal effectiveness strategies might also help you begin to balance the "wants" and "shoulds" in your life. This may include having to say NO to unwanted requests, or getting others to help you do things. Lastly, the interpersonal effectiveness skills will help you interact with others in a way that allows you to feel competent and effective, while still maintaining your self-respect and following your wise mind.

One of the first things to do when approaching any interpersonal situation is to ask ourselves what our goals are for the encounter. Take a look at Interpersonal Effectiveness Handout #2. Here we have divided goals up into three broad categories: Objectives Effectiveness, Relationship Effectiveness, and Self-Respect Effectiveness. The first is all about meeting your objective, whether it is refusing an unreasonable request, getting your point across, or obtaining your legitimate rights. It can be as simple as wanting your car repaired for a fair price.

The second category of goals concerns maintaining or starting a relationship with another person. Essentially, your goal in a given encounter may be to act in such a way that you maintain your friendship with this person in the long term. Continuing with the car repair example; what if the mechanic is a long-time friend of yours? How hard do you negotiate the price down? Do you prioritize your objective of getting a fair price over maintaining the relationship or do you settle on a higher price so you don't upset your friend?

The third goal of interpersonal effectiveness is keeping or improving your self-respect. How do you want to feel about yourself after this encounter? What do you have to do to feel that way? Being interpersonally effective involves taking a moment to decide what it is you want to get out of a given encounter and prioritizing your goals. It is okay to have multiple goals, but the ones that you prioritize will influence the way you act in a situation. It is also very important to know about the factors that can reduce our interpersonal effectiveness. Taking a look at Interpersonal Effectiveness

Handout #3 you can see that many things can interfere with our ability to navigate encounters effectively. Worrying about the bad consequences of your actions, whether you deserve what you are asking for, or worrying about not being effective can all interfere with your ability to be a good negotiator. Also, strong emotions or indecision can get in the way of our ability to be effective. Finally, it is very important to recognize that even the most interpersonally skilled person cannot succeed in all environments. Skillful behavior simply may not work in some situations. For example, if the person literally cannot give you what you want, no amount of skill and strategy will see your objectives met.

However, when the person can give us what we want, then we must consider the intensity with which we ask for it. This also applies to how intensely we allow ourselves to say NO to a given request. Flip to Interpersonal Effectiveness Handout #6 to take a look at the intensity scale provided. Intensity on this scale can range from a 6 (Asking firmly and not giving in at all) to a 0 (Not even asking). There are several factors to consider when deciding how intensely to say no or request something.

First, look at your priorities. How will this request affect your relationship, self-respect, or other objectives? Which are you prioritizing over the others? Next consider whether the person has the ability to give you what you want and the timeliness of your request. Is this a good time to ask the person for a favor? Are they more or less likely to say yes at this time? Homework, do you have all the information you need to support your request and are you clear about what you want? Authority & Rights, who has the power in the relationship? For example, is this person your boss? Is it within his or her right to make request "X" of you? In terms of the Relationship, is what you want appropriate for your current relationship? What have you done for this person lately or do you owe them a favor? One must also consider both the short and long-term effects of their decision. Are you sacrificing in the long run to keep peace in the short term? Lastly, don't forget to consider your self-respect in this situation and how you will feel about yourself afterwards.

4.	**Instruction:** Interpersonal Effectiveness - "DEAR MAN" *Alright, now let's learn a little more about interpersonal effectiveness skills and look at some guidelines that might help you get what want out of a*

situation. We are going to be working off of Interpersonal Effectiveness Handout #8. "DEAR MAN" is the commonly used acronym for remembering these strategies. Once we have identified a situation in which we have difficulty saying no or are asking for something, these can be some good guidelines for approaching that conversation.

These requested changes are all focused on ACTION, not feelings or attitudes. Sometimes we can control our emotions and feelings, sometimes we are less effective at that. We may like certain things and not like others, both of which is ok. The easier thing to change is our behavior surrounding feelings and attitudes. This means that when we ask for something the focus needs to be on something concrete, a behavior change that is explicit and that the other person is capable of doing.

To start, you want to describe the situation to the other person. Sticking to the facts, tell them exactly what you are reacting to. It is best here to be concrete and detailed.

Next, express your feelings or opinions on the situation. We shouldn't assume that others know how we feel or that are opinions should be self-evident. Giving a brief rationale, be clear on exactly what you want.

Assert – Be clear about your position by asking for what you want or saying NO clearly. Do not beat around the bush. People cannot read our minds so we should not expect them to know what we want or to know how hard it is for us to directly ask for something.

Take time to reinforce or reward the other person ahead of time by explaining the consequences (good or bad) of their decision. This may make the decision easier for them by making them feel good ahead of time for saying yes. For example: "If you help me do the dishes I will help you rake leaves later."

*During this interpersonal encounter remember these three things to be effective: be **M**indful, **A**ppear confident, and **N**egotiate. Keep your focus on your objectives and be mindful of your priorities in the encounter. If necessary, keep asking or saying no. Be a broken record and express your opinion over and over again. Another aspect of mindfulness is ignoring or not reacting to the other person's attacks, threats, or attempts to change the subject. Stay on point!*

	Try to __A__ppear effective and competent during the encounter. Use a confident tone of voice and physical manner. If you stammer, whisper, or otherwise waffle you can undermine your position. *Lastly, be ready to __N__egotiate! You have to be willing to give and get in a situation. You may have to change or reduce your request or find an alternative solution that works for both parties. One effective strategy to this end is "turning the tables". Sometimes just asking the other person for an alternative solution is highly productive. For example phrases such as: "What do you think we should do?" or "How can we solve this problem" can serve to move the other person from a defensive position to a problem solving one.*	
5.	**Modeling:** Interpersonal Effectiveness - "DEAR MAN" *Now let's take an example and work with it. Let's say that I have a co-worker that lives 20 minutes out of my way and has asked for a ride home for the third time this week. I really want to say NO, but I also value my relationship with my co-worker. Please play the part of the co-worker asking for a ride. Follow along on Interpersonal Effectiveness Handout #8 and we'll see how many points I hit on and you can help pick out where I could have done better.* *Veteran: "Hey, can I get a ride home from work today?"* [Therapist - use the DEAR MAN skills on Handout #8 to say NO, a sample script is provided below. Be prepared for the Veteran to throw some twists into the request.] *Therapist: "Well, I actually would rather not give you a ride home today. You see, I have already given you a ride home twice this week and both nights it has had a real effect on my family's routine. We have a small window when I get home where I can make dinner and get the kids off to practice."* *"Since round trip it is about 40 minutes out of the way, taking you home these last two nights has left me feeling a little frazzled and overwhelmed when I get back. I wish that there was an easier fix for you, but I don't want to have our work relationship impacted by this. Could you take the bus home today?*	

	Who else could you ask for a ride today?" *Were you able to pick out any of the "DEAR MAN" skills? Okay, so which of these did we do a good job on and where could we have done more? What could I have done if you kept asking for a ride despite my saying no?* *[broken record strategy]*	
6.	**Participant Practice:** Interpersonal Effectiveness - "DEAR MAN" *Alright, now it is your turn to try. Get a situation in mind where you have to say no or are asking for something.* [Allow the Veteran the opportunity to come up with their own example, as this will be more salient and applicable in their own life. If Veteran is unable to come up with an example you can re-use the car ride example or any number of others including: someone asking to borrow money, boss asking you to work overtime, you asking your boss for a raise, asking a partner to change a certain behavior at home, negotiating with children to do chores or schoolwork] *Great! Now that you have an example in mind let's try this role play again, only switching sides.* [Don't make this process too hard or too easy on the Veteran. With this first exposure to DEAR MAN the point is to impart the skill.]	
7.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** Interpersonal Effectiveness - "DEAR MAN" [Provide reinforcement for portions of the activity that the Veteran successfully completes. Also, present the Veteran with alternative scenarios such as: "what could you have done if I said X,Y, or Z"] Sample Statements/Questions ❖ *That was a great job, especially for your first time using this skill* ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *What do you feel like you could have done differently to be more effective in this situation?* ❖ *How do you think you appeared during this encounter? Confident?*	

	Nervous? ❖ *What was your priority (relationship, objective, or self-respect)?* ❖ *How might this have been different if you had a different priority?* ❖ *What barriers might you expect when having this same conversation for real?* ❖ *Remember, this is all about being EFFECTIVE. Let go of being RIGHT and embrace getting your priorities met.*	
8.	**Psychoeducation:** Interpersonal Effectiveness – "GIVE FAST" *The GIVE FAST skills can be extremely useful when maintaining a relationship or keeping your self-respect is part of your priorities. It doesn't have to be your primary objective, but if it is on your radar, consider the GIVE FAST skills. These will help you approach your goals, while at the same time lessening potential damage to your relationship with the other person.*	
9.	**Instruction:** Interpersonal Effectiveness – "GIVE FAST" *You can remember this skill set by the acronym GIVE: be **G**entle, act **I**nterested, **V**alidate, and use an **E**asy manner. Let's turn to Interpersonal Effectiveness Handout #9. When the relationship is a consideration remember to be GENTLE with the other person; minimizing attacks, threats, and judgment. Act INTERESTED in what the other person has to say and listen to their point of view. Use humor, smile, and ease the person along. A little patience, not interrupting, and sensitivity goes a long way in preserving the relationship with the other person and creating the environment where they are more likely to listen to YOUR requests.* *In order to effectively preserve your self-respect also consider the FAST skills: be **F**air, give no **A**pologies, **S**tick to your values, and be **T**ruthful. Check out the FAST skills on Handout #10. During the encounter be fair to both yourself and to the other person. Taking advantage of others or allowing yourself to be taken advantage of may decrease feelings of self-respect. It is okay to apologize when you are factually wrong or have done something worthy of apology, but do not be overly apologetic Do NOT apologize for having an opinion, making a request, or disagreeing with the other person.*	

	Stick to your Values. Don't sell out if you believe something is truly important or reasons that are not important. That is not to say you won't have some very hard decisions when values conflict…but you will end up choosing what is most important to you. Lastly, be Truthful. Don't lie, exaggerate, or act helpless when you are not. These things can all damage our self-respect.	
10.	**Modeling:** Interpersonal Effectiveness – "GIVE FAST" *Using the example from before, let's take a look at how we could have incorporated some of the GIVE FAST strategies into our car ride example. There are some things that I did previously that I would not change. First, I would remain courteous and gentle in my approach. Using an aggressive tone of voice and being disrespectful to the person asking for a ride is sure to damage our relationship. One thing that I could have done in addition to the statement above would be to validate my co-worker's experience. Perhaps I could say something to the effect of: "I really appreciate the fix you are in here…" or "I see that this is a rough time for you and that you could really use the ride, but…"* *Essentially you want to communicate sympathy and/or empathy for their situation, but stick to your assertion or request. Switching this up to talk about asking for a raise you might say: "I realize that finances are always tight at the company and that there is little money for raises, but this is why I think that I am deserving of a raise now…"*	
11.	**Participant Practice:** Interpersonal Effectiveness – "GIVE FAST" *In the situation that you identified, how might you use the GIVE FAST skills to be more effective and better maintain your relationships and self-respect? Now let's try to discuss your scenario again, only this time I am going to be more assertive and aggressive. Your job is to still negotiate what you want or say not, but you use the GIVE FAST skills to maintain the relationship to the best of your ability.* [Therapist: As you take the opposite position in the argument, challenge the Veteran slightly more during this role play by being more insistent on what it	

	is you want. Try not to overwhelm the Veteran, but push them enough so that they try to employ their GIVE FAST Skills.]	
12.	**Corrective Feedback/Reinforcement of Correct Skill Usage:** Interpersonal Effectiveness – "GIVE FAST" [Provide reinforcement for portions of the activity that the Veteran successfully completes.] Sample Statements/Questions ❖ *That was a great job, it can be very difficult to stay strong in the face of someone who is insistent* ❖ *What did it feel like to complete this exercise?* ❖ *Were any portions of the exercise difficult?* ❖ *Is there anything that you could change to be gentler or appear more interested?* ❖ *What are some ways in which you could provide validation to the other person in your example?* ❖ *Was your approach fair?* ❖ *Did you find yourself over apologizing*	
13.	**Check Out & Homework** ❖ Ask if the Veteran has any questions about what to expect between sessions. ❖ Remind the Veteran that the crisis hotline is available 24-hours a day. ❖ Remind the Veteran to practice skills in between sessions.	
Total number of steps completed:		

Appendix F: Recruitment Script & Provider Resource Sheet

Protocol Title: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting
Primary Investigator: Stephen A. Maisto, Ph.D.
Co-Investigator: Todd M. Bishop, M.S.

Abstract

OBJECTIVES:
Primary care represents a unique opportunity with which to engage those Veterans who are experiencing suicidal ideation. Veterans who are not at imminent risk often fall into a treatment gap and must await the onset of specialty mental health care. An efficacious intervention introduced into this gap in services may reduce suicidal ideation among Veterans and increase rates of follow-up with specialty care. One therapeutic intervention that has been identified as being efficacious in the reduction of suicidal ideation and suicidal self-directed violence is dialectical behavior therapy (DBT). Predominantly used in either specialty or inpatient care, in its present form DBT is too protracted an intervention to be implemented in a primary care setting. The proposed study would draw from elements of DBT to examine the effectiveness of a brief intervention aimed at reducing suicidal ideation among a sample of Veterans enrolled in primary care at a Department of Veterans Affairs (VA) medical center.

RESEARCH DESIGN:
This study will use single case experimental design methodology. Specifically, a combined interaction and multi-element design will be implemented, allowing the effects of each component of the intervention to be differentiated from one another.

METHODOLOGY:
Veterans (n = 8) who have reported suicidal ideation to their primary care provider will be assessed at baseline and then daily for a 6 to 8-week period using Interactive Voice Recording (IVR) technology. During this 6 to 8-week EMA data collection period, five 30-minute individual intervention sessions will be carried out in the Veteran's primary care setting. IVR calls, which will last approximately 3-5 minutes, will occur three times per day and assess the participant's self-reported level of suicidal ideation, use of intervention skills, as well as alcohol, tobacco, and drug use. A post-monitoring interview will be completed immediately after the daily monitoring portion of the study.

Inclusion Criteria:
1) Veteran of the United States military
2) At least 18 years of age
3) English speaking
4) Currently enrolled in VA primary care in the VA Upstate Healthcare Network
5) Elevated risk for suicide (research will confirm using the Beck Scale for Suicidal Ideation (BSS; Beck & Steel, 1991)

Exclusion Criteria:
1) Active psychotic symptoms/thought disorder
2) Significant DBT treatment history (more than three months of weekly sessions)
3) <u>Imminent</u> risk for suicide (report of intent, active plan, <u>and</u> means)
4) Severe impairment in functioning, such as inability to take care of self or homelessness
5) Gross intellectual impairment

Please read the following to introduce the study to the Veteran:
Since you report that you are experiencing thoughts of suicide you may be eligible to participate in a new program being offered to a handful of Veterans. The program involves four brief, 30-minute one-one-one sessions held here in primary care. You would meet with a member of the study team individually to cover strategies for dealing with stress, emotion, and other people.

As this is a fairly new approach to addressing suicidal thoughts, the team involved wants to follow how you're feeling over the course of 6-8 weeks. If eligible, you would be given a study cell phone and asked to enter daily ratings of how you are coping. You would also be asked to meet for two brief interviews in order to make sure you are eligible and to find out how the program worked for you. In total, you would meet with the study staff six times.

If you choose to participate, there is no financial benefit or cost to you, just the chance to learn some new coping strategies and help inform future care for Veterans. The program is not intended to replace our recommendations for you here today and you should still continue with the course of care decided upon by you and your providers.

If you do not wish to be contacted by the study team you will continue on with care as usual. If you are open to hearing more about this program, I have a list of times that the study staff is available and we could set up a time for the two of you to meet. Is this something you might be interested in?

YES
- Offer to contact the study staff over the phone in order to attempt a warm handoff.
- If staff is unavailable, leave a message, and tell the Veteran that he/she should expect to be contacted within 24 hours.

UNSURE
- Please offer Veteran a copy of the informed consent document that I have provided.
- Offer to have the study staff to contact them if he/she would like more information.

NO
- Please thank the Veteran for listening to the description of the study

Contact Information	**Availability**
Todd Bishop, M.S.	BHOC: M, W, & Th (8am – 430pm)
VA Ext: x53892	Primary Care: T & F (8am – 12pm)
Cell: 646-352-2271	
todd.bishop@va.gov	
tmbishop@syr.edu	

Appendix G: Informed Consent

VADepartment of Veterans Affairs	VA RESEARCH CONSENT FORM
	(Page 1 of 6)

Participant Name: _____ **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D. **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

You are being asked to take part in a research study at the Syracuse Department of Veterans Affairs Medical Center (VAMC) because you are a veteran and are enrolled in VA primary care and have expressed that you have recently experienced thoughts of suicide. Research is different from medical or mental health treatment. Research looks for answers to questions that may eventually help others. Medical or mental health treatment provides specific care for your illness. Research studies only include participants who choose to take part. While it is our express hope that you benefit from the intervention we have designed, it is not guaranteed. This brief intervention is not intended to replace, but rather to supplement, other forms of treatment recommended by your healthcare providers. The completion of your participation in the study may not mark the end of your current course of treatment and you are encouraged to continue with the course of treatment recommended by your current healthcare providers.

Why is this study being done? Dr. Stephen Maisto of the Syracuse VA Medical Center is conducting this study. The main purpose is to understand how veterans experiencing suicidal ideation may benefit from a brief intervention delivered within primary care.

How many people will take part in the study? About 8 veterans will participate in the study.

What is involved in the study? If you agree to participate in this research study, you will complete two brief interviews about your background, alcohol and other drug use, and suicidal thoughts. You will also be asked to meet one-on-one with a member of the research staff five times for 30-minutes apiece within your primary care setting. These meetings will focus on strategies for coping with strong emotions, tolerating distress, and being more interpersonally effective with others. As part of the study, you will be assigned a cell-phone so that you can report how the intervention is working and whether your suicidal thoughts change throughout the day. This will help you to keep track of your thoughts, feelings, and behaviors and serve as a reminder to practice the skills that you will be learning during the individual sessions. As further described below, we will ask that you continue to use the cell phone to report your thoughts and feelings throughout the course of your 6-8 week involvement with the study. We will also review your medical chart to document your health status and service use. Completing all phases of this research study will take approximately 6 to 8 weeks.

During the initial interview, which will last approximately 30 minutes to one hour, you will be asked a series of questions about suicide and suicidal thoughts. There will also be a brief demographics and military service questionnaire. Lastly, if after the interviews you are eligible to participate, we will cover how to operate the study cell phone.

Subsequent meetings will be scheduled by one of our trained study staff. Signing this consent form indicates your willingness to participate in both the initial interview and subsequent intervention sessions. If you do not wish to participate in this study, there will be no negative impact on your health care. There is no cost to you for participating in this study.

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NOV 11 2013   AUG 19 2014

SYRACUSE VAMC
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APPROVED: SEPTEMBER 30, 2013

VADepartment of Veterans Affairs	VA RESEARCH CONSENT FORM (Page 2 of 6)

Participant Name: _____   **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D.   **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

Your interview may be recorded by audiotape. The audiotape will be scored by a different researcher so that we can examine the consistency of the intervention delivered.

If you are eligible to continue based on the interviews and choose to do so, you will receive training in how to use a cell phone to respond to daily interviews about suicidal thoughts and alcohol/other drug use. You will be given a cell phone that will call you three (3) times a day. You will then be asked to respond by calling into a computerized system that will ask you very briefly about your thoughts of suicide and substance use in the moment. You will be asked to respond to these daily interviews for a six to eight (6-8) week period.

You will be given a cell phone that can only call into the study interview, call the study team, the VA suicide hotline or 911. In addition, the cell phone will only receive calls from the study protocol or the study team. All other incoming or outgoing phone calls will be blocked.

At the end of the cell phone monitoring part of the project, we will ask you to complete an in-person follow-up interview (about 30 minutes to 1 hour). This interview will consist of questions about suicidal thoughts and a questionnaire regarding your experience with the research study including your feedback about how you liked participating in the study and how it may have affected your behavior. During this time we will also collect the study issued cell phone and charger. While losing the cell phone and/or returning it damaged will not cause you any financial losses or be held against you, it will impact our future ability to collect research and help other Veterans.

Your decision whether or not to participate will not affect you or your medical care. In fact, you are encouraged to continue to seek whatever level of care is recommended by your healthcare providers. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without affecting your medical care. You will certainly be told if any new information is learned which may affect your condition or influence your willingness to continue in this study. If it is deemed necessary we may contact your Behavioral Health Provider or your Primary Care Provider to assure that it is appropriate for you to participate in this study. Finally, at the discretion of the protocol director, participants may taken out of this study due to unanticipated circumstances such as extreme distress. In other words, we may withdraw you from the study, should we judge your participation not to be in your best interest.

There is no cost to you for participating in this study.

What are the risks of the study? Responding to the questions may produce distress. Examples of distress include anxiety symptoms (e.g., shortness of breath, fear) or feeling down. If you experience distress during the interview, please discuss this with your interviewer. You may decide to stop the

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VADepartment of Veterans Affairs	VA RESEARCH CONSENT FORM
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Participant Name: _____ **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D. **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

interview or talk to the on-call clinician. The interviewer will discuss with you what to do if you experience distress after the interview, which will include calling the on-call clinician.

We deeply respect your privacy. However, although rarely encountered, if you report during the course of your involvement with us any strong intentions to harm yourself or others, we would need to share such information with appropriate clinicians/individuals out of an obligation to ensure your safety and/or that of others. Additionally, if strong suspicions of ongoing child abuse arise, we are mandated by state law to report.

Are there benefits to taking part in the study? Although the results of this study may help us to better understand suicidal thoughts and how this brief intervention may affect them, we cannot and do not guarantee or promise that you will receive any benefit from this study. If you agree to take part in this study, with your permission, we can release the information we learn about you to your treatment provider. This information can possibly aid in treatment planning. We hope that the information learned from this study will benefit veterans struggling with suicidal thoughts in the future. We also hope that this research will aid in the development of new treatment approaches.

Alternatives to Participation: You may choose not to participate in this study and continue with treatment as usual. You may stop participation at any time during the study. If you choose, you may receive mental health or chemical dependency counseling at the VA.

CONFIDENTIALITY: Any information obtained about you in this study will be treated as confidential and will be safeguarded in accordance with the Privacy Act of 1974. Information published or presented about the results of this study will be in a form that does not identify any particular participant. In order to monitor compliance with federal regulations and for purposes of monitoring the accuracy and completeness of the research data, records identifying you may be inspected by representatives of the sponsor of this study (The Center for Integrated Healthcare), the Syracuse VA Medical Center Institutional Review Board (Syracuse IRB), the Office for Human Research Protections (OHRP), Veterans Affairs contracted agency for accrediting VA Human Research Protection Programs, VA Office of Research Oversight (ORO), and the Dept. of Health and Human Services (DHHS). If this study involves articles regulated by the Food and Drug Administration (FDA), the FDA may choose to inspect records identifying you as a subject in this investigation. By signing this document, you consent to such inspection. The results of this study may be published but your identity and records will not be revealed unless required by law. The researcher is not immune from legal subpoena regarding illegal activities. Although it is very unlikely, if law enforcement officials subpoenaed me for the data, I would have to give it to them. Syracuse University IRB Approved

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APPROVED: SEPTEMBER 30, 2013

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VADepartment of Veterans Affairs	VA RESEARCH CONSENT FORM
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Participant Name: _____ **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D.   **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

RESEARCH SUBJECT'S RIGHTS: You have read or have had read to you all the above. Dr. Stephen Maisto or a member of his research team has explained the study to you and has answered all your questions concerning this study. You understand the description of this research investigation, the procedures involved, and your rights as a research subject as explained in this consent form. You have been told of the risks or discomforts and possible benefits of the study. You have been told of other choices for treatment available to you. You do not have to take part in this study and your refusal to participate will involve no penalty or loss of rights to which you are entitled. You may withdraw from this study at any time without penalty or loss of VA or other benefits to which you are entitled.

You may withdraw consent and discontinue participation at any time, without prejudice to your care, by informing Dr. Stephen Maisto or the study team of your decision to withdraw. Your participation also may be stopped by the study sponsor (The Center for Integrated Healthcare), study doctor, FDA, OHRP, ORO, or the Syracuse IRB *without your consent.* If any important new information is found during this study that may affect your wanting to continue on this study, you will be told about it right away.

You will receive medical care and treatment for injuries suffered as a result of participating in a VA research program, in accordance with Federal law* (see below). You will incur no additional charges for additional medical care and treatment that may result from injury or complications that are a direct result of your participation in this study. Money has not been set aside for pain and suffering.

In case there are any medical problems or questions, or in the event of illness or injury that you believe to be related to the study, you can call Dr. Stephen Maisto at (315) 443-2334 during the day and the on-call psychiatry resident at (315) 425-4400 after hours. If you have any questions about your rights as a research subject you can contact the Syracuse VAMC Institutional Review Board, at (315) 425-4400 x 53607.

*Federal Law Advisory - VA Disability Compensation Benefits: As a veteran-participant, you may be entitled to VA disability compensation benefits for "additional disability" incurred or aggravated as a direct result of your participation in this study (see 38 U.S.C. Sec. 1151; 38 C.F.R. Sec. 3.358). If you believe you have incurred additional disability as a result of your participation in this study, please contact your Veterans Service Officer for more information regarding your right to file for VA disability benefits.

RESEARCH RESULTS
In the event new information becomes available that may affect the risks and/or benefits associated with this study or your willingness to participate in it, you and your physician will be notified so you can make a decision whether or not to continue your participation in this study.

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Participant Name: _____   **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D.   **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

Only research staff permitted to work on this research protocol will have access to interview materials, questionnaires, and audio recordings. Data collected from your interview will be assigned a number and stored in a locked filing cabinet. A list will link your participant number with your identifying information; this list will be kept separately from the data in a locked filing cabinet or a password protected computer file.

If results of this study are reported in medical journals or at meetings, you will not be identified by name or by any other means without your specific consent.

SPONSOR OF THIS RESEARCH
This research is sponsored the Center for Integrated Healthcare (CIH). The Center for Integrated Healthcare supports research that explores the integration of primary care and mental health services and seeks to enhance the care received by veterans.

CONTACT INFORMATION
If you have questions about this study or to report a research-related injury, you can contact: Stephen Maisto, PhD at 315-443-2334 or Todd Bishop, M.S. at 315-425-4400 x53892.

If you have general questions about giving consent or your rights as a participant in this study or you would like to speak with an individual who is unaffiliated to this specific research study to discuss problems, concerns, and questions; obtain information or offer input you may call the Chairman of the Syracuse VAMC Institutional Review Board or the Human Research Protection Program Administrator, at (315) 425-4400 x 53607or the Syracuse VA Patient Advocate at (315) 425-4345, or the Syracuse University Institutional Review Board at 315-443-3013.

STATEMENT OF PERSON AGREEING TO PARTICIPATE IN THIS RESEARCH STUDY

I have read (___) this consent form or have had it read to me (___). (Check one).

_____ has explained the study to me and all of my questions have been answered. I have been told of the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I have been told my rights as a research subject, and I voluntarily consent to participate in this study. I have been told what the study is about and how and why it is being done. All my questions have been answered. If I do not take part in this study, my refusal to participate will involve no penalty or loss of rights to which I am entitled.   Syracuse University IRB Approved

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Participant Name: _____ **Date:** _____

Title of Study: Development and Delivery of a Brief Intervention to Reduce Suicidal Ideation among Veterans in a Primary Care Setting

Principal Investigator: Stephen Maisto, Ph.D.   **VAMC:** Syracuse

Consent Version Date: (08/27/2013)

I have been told that I may withdraw from this study at any time without penalty or loss of VA or other benefits to which I am entitled. **I may withdraw consent and discontinue participation at any time, without prejudice to my care, by informing Dr. Stephen Maisto or study staff of my decision to withdraw.** I also have been told that my participation also may be stopped by the study sponsor (The Center for Integrated Healthcare, study doctor, FDA, OHRP, ORO, or the Syracuse IRB, *without my consent*. If any important information is found during this study that may affect your wanting to continue your participation in this study, you will be told about it right away.

You will receive a copy of this consent form and the original will be placed in the investigator's research files. Additional copies will be filed in your medical chart and in the Syracuse VAMC's IRB Office.

SUBJECT'S STATEMENT: I, the undersigned, hereby agree to participate as a subject in this research study.

Subject's Signature	Subject's Social Security Number		
Subject's Name (Printed)	Telephone Number	Date	Time

INVESTIGATOR'S STATEMENT: I have explained this consent form and the research study described in it to [_____] (*insert name of subject/surrogate*). I have answered the questions he/she has asked about the research study and have offered to answer any such questions that may arise in the future.

Signature of Person Obtaining Consent	Person Obtaining Consent (print name)	Date
Signature of Principal Investigator*	Principal Investigator (print name)	Date

*(Indicates review and approval of subject for participation on protocol)
*(Important: <u>Principal Investigator must sign within 24 hours of participant signature</u>)

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