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Collaborative Assessment and Management of Suicidality (CAMS):
Adherence to a Flexible Clinical Framework

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Collaborative Assessment and Management of Suicidality (CAMS):
Adherence to a Flexible Clinical Framework

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The Collaborative Assessment and Management of Suicidality framework (CAMS; Jobes, 2006) has amassed more consistent empirical support to date than most other suicide-focused psychosocial approaches for actively treating adult patients. This support has led to multiple variations of CAMS training being delivered to mental health practitioners across several settings. However, no research has examined the extent to which such training impacts participants' self-reported adherence to the CAMS therapeutic philosophy and recommended CAMS practice behaviors, or whether adherence varies as a function of contextual variables (i.e., the type of training received, therapist factors, and primary work setting/agency support). The present study was designed to address this gap, using an online survey of 120 practitioners who completed some form of CAMS training or read the CAMS manual with the intention of applying it in clinical practice. Results indicated moderate to high adherence to the CAMS therapeutic philosophy, which is comparable to other studies gauging the impact of suicide-focused training. Similarly, participants reported relatively high adherence to CAMS practice, in line with other suicide-focused training studies and, in fact, higher than findings on adherence to interventions for other psychiatric issues. Older and more experienced clinicians, those with doctoral degrees, and those whose work was guided more from a CBT perspective had higher adherence to the CAMS therapeutic approach. Additionally, adherence to CAMS philosophy as measured by comfort using CAMS-consistent statements was higher for men, those with more of

a CBT orientation, clinicians who received more intensive training, and those working in outpatient or Veterans Administration medical centers as opposed to counseling centers. Finally, therapist confidence in using CAMS with patients was positively related to both adherence types. On the whole, adherence to philosophy and practice did not vary consistently as a function of any contextual variable, which suggests that practitioners receiving CAMS training can successfully subscribe to the CAMS therapeutic philosophy and implement CAMS-specific practices regardless of their broader contexts. Future investigations of CAMS training should assess self-reported CAMS-related attitudes and beliefs before and immediately after training, as well as actual behavior change in clinical practice.

This dissertation by Kevin J. Crowley fulfills the dissertation requirement for the doctoral degree in clinical psychology approved by Carol R. Glass, Ph.D., as Co-Director, Diane B. Arnkoff, Ph.D., as Co-Director, and by David A. Jobes, Ph.D., as Reader.

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CHAPTER 1

Suicide-Focused Psychosocial Approaches for Adults: A Critical Review

Evidence generally indicates that mental health practitioners do not provide effective, competent treatment for suicidal patients (Jobes, Rudd, Overholser, & Joiner, 2008). To facilitate better care for this population, several variations of clinical practice guidelines for assessing and managing suicide risk have been developed and disseminated. The most recent set of guidelines was created by the U.S. Departments of Veterans Affairs and Defense (VA/DoD, 2013), who concluded that psychotherapy and other psychosocial interventions can reduce patients' risk for suicide regardless of whether they target comorbid disorders known to be associated with increased risk (e.g., major depressive disorder; borderline personality disorder) or suicide as a primary focus (described as "suicide-focused" approaches). However, they also suggest that suicide-focused psychotherapies should be considered secondary treatment options, to be used when targeting an underlying condition does not alleviate a patient's risk for suicide.

Such a conclusion reflects the historical emphasis on treatment for comorbid disorders and the relative lack of emphasis on suicide-focused approaches in clinical research to date. Yet, evidence consistently indicates that suicide is a unique process not tied to any specific disorder, and that it should be treated as a *primary* focus of clinical care (e.g., Jobes, 2000). For example, specific cognitive style characteristics such as hopelessness can distinguish suicidal and nonsuicidal individuals who fall within the same diagnostic categories (Ellis & Rutherford, 2008; Matthews, 2013). In addition, Oquendo and Currier (2009) observed that the nosological trend in editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) has been to classify suicide as occurring exclusively within the context of major depressive episodes or borderline personality disorder, despite established links between suicidal behaviors and other

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forms of psychopathology (e.g., Erlangsen, Eaton, Mortensen, & Conwell, 2012). The current version of the DSM (DSM-5; American Psychiatric Association, 2013) continues to classify suicidal ideation and behaviors as symptoms of psychiatric disorders, although the authors of this edition took initial steps to acknowledge the transdiagnostic nature of suicide (e.g., suggesting that a distinct diagnosis of "suicidal behavior disorder" is worthy of future consideration).

Further evidence of the uniqueness of suicide comes from reviews of psychotherapy for alleviating suicide risk, which generally indicate that addressing suicide as a secondary concern is not effective. For example, a systematic review of cognitive and behavioral therapies (CBT) concluded that CBT is not effective for reducing suicidal behaviors in adults when treatment addresses related symptomatology (e.g., symptoms of depression or feelings of distress) with the goal of indirectly reducing patients' risk for suicide (Tarrier, Taylor, & Gooding, 2008). In addition, a recent systematic review of the effects of depression-focused psychotherapy on hopelessness and suicide risk (Cuijpers et al., 2013) observed that such therapy could significantly affect levels of hopelessness but not suicidal ideation or suicide risk.

Taken together, the evidence strongly suggests that suicide-focused approaches should be considered first-line treatments for suicidal patients. However, these approaches have never been reviewed or discussed comprehensively outside of the VA/DoD guidelines (2013), and this set of guidelines only included treatments that had amassed support through at least one randomized controlled trial (RCT). Because few RCTs have been conducted in this area, several approaches worthy of consideration were not included in these guidelines.

Thus, the primary intent of this chapter is to organize and critically evaluate the research to date on suicide-focused psychosocial approaches for actively treating adult patients, and to

provide concrete recommendations for future research. Approaches were included if they: a) were intended to treat a patient's suicide risk as a primary concern; b) employed a method that involved interaction between the patient and clinician; c) could be applied in a transdiagnostic manner and were not designed to primarily treat the symptoms of a specific disorder; d) were intended for use with adults or tested using a primarily or exclusively adult sample, and e) had obtained empirical support or been described in literature published in English. Identified treatments were organized into three broad categories: psychotherapies, frameworks for risk assessment and management, and interventions that can be implemented within a single session.

Follow-up contacts, which are a class of suicide-focused approaches shown to reduce rates of subsequent suicidal behaviors (Luxton, June, & Comtois, 2013), were not included because they did not meet the second criterion. Despite their suicide-specific rationales and empirical support as independent interventions for suicidal behavior, follow-up contacts represent a passive form of treatment on the part of the patient. Specifically, these contacts are often delivered in such a way as to require no action or return information from the patient. In addition, they can be implemented without any interaction between the clinical dyad, and are delivered regardless of patients' levels of effort or interest (Luxton et al., 2013).

Each class of suicide-focused approaches included in this review is described and evaluated using the stage model of behavioral therapies research criteria (Onken, Blaine, & Battjes, 1997; Rounsaville, Carroll, & Onken, 2001), a useful framework for guiding psychotherapy research. This model specifically suggests that such research should follow three distinct stages. In Stage I, factors that facilitate pilot and feasibility studies are developed, such as a treatment manual and measures for assessing intervention adherence, competence, and

treatment-specific outcomes. Once these materials are created, initial pilot testing can then evaluate clinically significant patient improvement as well as patient acceptability of the new intervention. Rounsaville et al. (2001) suggest a delineation of Stage I research guidelines, specifically proposing two sub-stages. In Stage Ia, an intervention's treatment manual is developed in accordance with its overarching treatment rationale, and variables of interest are highlighted and measured in at least one open trial. Support in open trials can then justify broader pilot testing using some form of comparison group (Stage Ib). Onken et al. (1997) suggest that once Stage I objectives have been achieved, research can then shift to Stage II, which establishes the efficacy of the intervention or psychotherapy through at least two RCTs and (potentially) investigations of relevant mechanisms of action. Finally, Stage III consists of effectiveness studies targeting the treatment's transportability to clinic settings and specific patient populations.

Suicide-Focused Psychotherapies

Two general classes of suicide-focused psychotherapies were identified, consistent with those delineated in the VA/DoD guidelines (2013). One is cognitive therapy for suicidal patients (e.g., Wenzel, Brown, & Beck, 2009), and the other involves clinical applications of problem-solving training (D'Zurilla & Goldfried, 1971) referred to collectively as problem-solving therapy (e.g., Bannan, 2010; Salkovskis, Atha, & Storer, 1990). Other forms of psychotherapy that have previously been investigated for treating suicidal patients, such as dialectical behavioral therapy (Linehan, 1993) and interpersonal psychotherapy (Klerman, Weissman, Rounsaville, & Chevron, 1984), were not included because they either do not focus on suicide as a primary treatment target or because they were originally designed to treat a specific disorder

(and thus were not intended to apply to all suicidal patients in a transdiagnostic manner).

Cognitive Therapy for Suicidal Patients

Since its inception, cognitive therapy has emphasized suicide prevention as an explicit goal in depression treatment protocols (e.g., Beck, Rush, Shaw, & Emery, 1979). Recently, an extension of cognitive therapy called cognitive therapy for suicidal patients (CTSP; Wenzel et al., 2009) was developed as a suicide-specific adjunct to ongoing psychotherapy. CTSP begins when a patient's suicide risk becomes an acute concern and ends when his or her risk has successfully abated. In addition, it emphasizes cognitive and behavioral techniques patients can apply during current and future suicidal crises. Specifically, in the first (early) phase of treatment, patients receive psychoeducation about the cognitive model; complete a comprehensive assessment targeting their history of suicidal ideation and suicide behaviors, general risk factors, and unique warning signs; and develop a safety plan. These tasks are generally accomplished within three sessions, after which patients transition to the second (middle) phase and learn specific cognitive restructuring and coping strategies. The final (late) phase then emphasizes relapse prevention, as patients are asked to think about their index suicide attempt and a future crisis while imagining themselves applying the skills learned in treatment.

The results of an extensive RCT suggested that patients who received treatment as usual (TAU) were approximately 50% more likely to attempt suicide throughout an 18-month follow-up period than participants who received CTSP (Brown et al., 2005). In addition, participants receiving CTSP reported significantly less depression and hopelessness, but there were no differences between the two treatment conditions with respect to rates of suicidal ideation. The authors suggested that CTSP might directly impact depression and hopelessness, which, in turn,

could account for a subsequent reduction in suicide attempt rates. It may also be the case that the specific cognitive and behavioral skills that patients learn allow them to feel more in control of suicidal ideation when it does emerge, which may reduce the number of future attempts even if ideation rates do not change. As a result of these positive findings, CTSP has been tested in and adapted for various patient populations and health care settings.

Extensions of CTSP for different patient populations. Wei et al. (2013) conducted the first cross-cultural investigation of CTSP by comparing its effects to those of a telephone intervention and a control group (no intervention) in a sample of Chinese patients. Of the 82 participants randomly assigned to CTSP, 82.9% refused to move forward with treatment. In contrast, only 11.3% refused to receive the telephone intervention. The authors observe that many patients approached about CTSP did not understand what it was, believing that it was "talking" or "chatting" therapy and that such services could be obtained from relatives. In addition, they suggest that suicide is considered a culturally acceptable option in China for alleviating suffering or for reducing the burdens placed on families (e.g., Pearson & Liu, 2002), and that as such, patients may not have perceived a reason to address their suicide risk. Such observations suggest that, although a suicide-focused approach like CTSP may be efficacious, significant work is needed to determine if and how it can feasibly be applied cross-culturally.

One extension of CTSP, the suicide prevention protocol for older adults, was developed to treat this particularly high-risk group for suicide, and it incorporates adaptations to maximize its effectiveness for the patient population (Bhar & Brown, 2012). For example, core concepts are written down, in-session summaries are given often, and audio recordings or written descriptions of the session are provided to facilitate greater recall of concepts for patients with

memory impairment. Research investigating this protocol's effectiveness is ongoing (Bhar &

Brown, 2012), although significant difficulties in recruiting participants have caused delays in

subsequent data analysis (Bhar et al., 2013).

Extensions of CTSP for different health care settings. There are some clinical

settings, like emergency departments, where extended psychotherapy cannot feasibly be

implemented, given that many patients who present after engaging in suicidal behaviors refuse

outpatient care or do not attend scheduled follow-up visits (Larkin & Beautrais, 2010).

Catanese, John, Battista, and Clarke (2009) provided initial evidence for acute cognitive therapy

(ACT), a variation of suicide-focused cognitive therapy adapted for emergency departments.

Patients receiving ACT receive at least three psychotherapy sessions in the month following their

attempt that focus on four topics: a) initial assessment and crisis management, b)

psychoeducation, c) skill development (self-validation, cognitive restructuring, and developing

awareness of existing coping skills), and d) relapse prevention. The authors described results

from an open trial of ACT, which suggested that patients who completed at least the minimum

recommended three sessions reported significant reductions in demoralization and psychological

distress and significant increases in quality of life when compared to their pretreatment scores.

Inpatient hospitalization is required when patients present to settings like emergency

departments with an imminent suicidal crisis but are unable or unwilling to commit to outpatient

safety. In general, the average length of stay on an inpatient psychiatric unit is 6 to 7 days

(Ghahramanlou-Holloway, Cox, & Greene, 2012), which suggests that treatment may primarily

focus on immediate stabilization and discharge planning as opposed to directly addressing

factors that preceded suicidal crises. In fact, few suicide-focused approaches have been designed

for use on inpatient units, which is particularly problematic given patients' notably increased suicide risk following discharge from inpatient care (Deisenhammer, Huber, Kemmler, Weiss, & Hinterhuber, 2007). Ghahramanlou-Holloway et al. (2012) thus proposed an extension of CTSP for inpatient units called post-admission cognitive therapy (PACT) that is designed to decrease the likelihood of suicide attempt reoccurrence post-discharge. Given the previously noted time constraints in inpatient care, PACT is intended to occur during six sessions over the course of 3 consecutive days, during which time treatment is delivered using the same phases as outpatient CTSP. Although this CTSP variation addresses a clear treatment need and outcome studies are in progress (Neely et al., 2013), results are not yet available.

Brief cognitive behavioral therapy (BCBT; Rudd, 2012) is a variation of outpatient CTSP that maintains CTSP's core phase-based structure but differs in specific skills emphasized and the way that patients' readiness for each phase is determined. Specifically, BCBT adopts a skills competency approach for defining treatment completion, meaning that patients proceed to a new phase after demonstrating competency at their current level (Bryan et al., 2012). Because patients need to master skill sets in this way before proceeding to the next treatment phase, Rudd (2012) suggests that patients who complete BCBT may be more adept with self-management and emotion regulation than patients who receive treatment via another suicide-focused approach, and that as such, they may also be better prepared for subsequent, ongoing psychotherapy. Outcome research on BCBT is underway but results are still unpublished (C. J. Bryan, personal communication, February 24, 2014), so its degree of efficacy is currently unknown.

Finally, future-oriented group training (FOGT; van Beek, Kerkhof, & Beekman, 2009) is another variation of outpatient CTSP that differs in the extent to which it emphasizes problem-

solving strategies. Although CTSP and its extensions suggest that problem-solving strategies should be emphasized and implemented as needed, future-focused goals are the primary outcome of interest in FOGT. As such, patients are taught to consider their cognitive and behavioral patterns within the context of their future goals, and to apply learned strategies as appropriate to facilitate goal completion. This unique emphasis reflects the research to date connecting problem-solving deficits with suicidal behaviors (Eskin, 2013), and raises questions about the ideal combination of cognitive and behavioral skills that should be emphasized in suicide-focused treatment protocols. However, data supporting FOGT are not yet available.

Problem-Solving Therapy

As noted previously, suicidal behaviors have consistently been linked with a variety of problem-solving deficits (Eskin, 2013), including cognitive rigidity and the inability to generate alternative solutions. Such deficits often manifest as suicidal patients' concluding that crises are unsolvable and that suicide represents the only option for escaping danger and ending their pain. Given this link between suicidal behaviors and poor problem solving, several variations of problem-solving training and problem-solving therapy (PST) have been developed and studied as suicide-focused approaches. These variations tend to be consistent in their application of some or all of D'Zurilla and Goldfried's (1971) problem-solving training stages: a) adopting a problem solving orientation, through which people realize that problems inevitably occur and that they have the capacity to deal with most problems effectively; b) defining the problem concretely; c) generating several possible solutions or alternatives for the defined problem; d) choosing the best solution(s); and e) enacting and evaluating the consequences of the chosen decision.

Meta-analytic reviews of the effect of PST (broadly defined) on suicide risk have not

yielded conclusive results. Hawton et al. (1999) found that, although PST was associated with reduced repetition of deliberate self-harm, this result was not statistically significant. Similarly, Townsend et al.'s (2001) review indicated that PST was associated with a significant reduction in depression and hopelessness (variables related to suicide risk), yet they were not able to determine whether these changes were associated with a subsequent change in rates of self-harm behaviors. The conclusions in these reviews accurately reflect the diverse findings observed across individual PST studies, which tend to be inconsistent when considered together for any suicide-specific or related variables of interest. For example, although there is some evidence that PST is associated with a significantly greater reduction in suicidal ideation than TAU (Salkovskis et al., 1990), methodological issues make it difficult to draw conclusions, and other studies have found no significant differences in the reduction of suicidal ideation between PST and TAU or supportive control groups (Bannan, 2010; Lerner & Clum, 1990; Rudd et al., 1996). Similarly, although PST has been associated with a greater reduction of subsequent suicidal behaviors than a control treatment (McLeavey, Daly, Ludgate, & Murray, 1994), Gibbons, Butler, Urwin, and Gibbons (1978) and Rudd et al. (1996) did not find such differences. Finally, PST has been shown in some cases to significantly reduce levels of depression and hopelessness (Bannan, 2010; Lerner & Clum, 1990; Salkovskis et al., 1990) and significantly increase problem-solving ability (Lerner & Clum, 1990; McLeavey et al., 1994) when compared to control treatments. However, there is also evidence to the contrary for all of these variables (McLeavey et al., 1994; Rudd et al., 1996).

Reinecke (2006) suggested that focusing exclusively on problem-solving deficits might not be sufficient for addressing suicide risk in clinical practice, given the complexity of

suicide and the range of issues beyond these deficits that suicidal patients may have. To facilitate further research in this area, he recommended investigations of both specific patient characteristics for which PST might be appropriate and also the additive impact PST strategies have when integrated into comprehensive suicide-focused treatment packages. No studies to date have been conducted that directly investigate this latter suggestion. However, preliminary results have emerged that suggest patient populations for whom PST might be especially appropriate.

Specifically, Wingate, Van Orden, Joiner, Williams, and Rudd (2005) found that participants who rated their problem-solving ability lower prior to PST improved to a significantly greater extent following treatment than did participants with higher self-reported ratings. In contrast, participants with higher baseline self-reported ratings of problem-solving ability benefitted more from TAU than participants with lower self-reported ratings. Similarly, Hatcher, Sharon, Parag, and Collins (2011) observed that patients receiving PST who had engaged in self-harm behaviors on more than one occasion reported significantly greater problem-solving deficits than those who had only made one suicide attempt. Yet, the patients receiving PST who engaged in more than one self-harm behavior were significantly less likely to present to the hospital again in the year following the study than were those in TAU with previous self-harm. Taken together, these results seem to suggest that PST may be particularly appropriate for suicidal patients with extended histories of engaging in self-harm behaviors and/or who report low problem-solving abilities prior to treatment.

Nevertheless, it might be the case that these conclusions are premature given methodological concerns with suicide-focused PST research (Reinecke, 2006). For example,

PST is not employed consistently across trials; instead, there is considerable variability in both the number of D'Zurilla and Goldfried's (1971) stages that are emphasized and the manner in which PST is delivered (ranging from individual and group psychotherapy sessions to a day-hospital treatment format). In fact, one prominent study did not use PST consistently *within* the trial (Salkovskis et al., 1990). Such variability is not surprising given the lack of a consistently used treatment manual detailing the application of PST to suicidal behaviors (as opposed to self-harm more broadly). Other methodological concerns of note include the small sample sizes employed in these studies and occasional inconsistency in comparison groups. For example, one study (Bannan, 2010) compared group sessions of PST to individual TAU sessions. Finally, outcome variables in PST studies have not been consistent. Each study has included a different combination of primary and related variables of interest, which complicates conclusions that can be drawn.

Evaluating CTSP and PST as Suicide-Focused Psychotherapies

CTSP would likely be categorized in Stage II at this time according to the stage model of behavioral therapies research (Onken et al., 1997; Rounsaville et al., 2001; see Table 1). The CTSP protocol has only been supported in only one randomized trial (Brown et al., 2005), although another RCT successfully employed a variation of CTSP designed to address self-harm behaviors more broadly (Slee, Garnefski, van der Leeden, Arensman, & Spinhoven, 2008). A second randomized trial in which the CTSP protocol was specifically tested and supported would provide further justification for ongoing Stage III endeavors.

At this time, extensions of CTSP (such as ACT, PACT, and BCBT) would be categorized in Stage I. Only BCBT has been suggested to have been evaluated in an RCT (C. J. Bryan,

Table 1

Classification of Suicide-Focused Approaches Using the Stage Model of Behavioral Therapies Research Guidelines

Suicide-Focused Approaches	Stage of Research			
	Stage Ia	Stage Ib	Stage II	Stage III
Psychotherapies				
Cognitive Therapy for Suicidal Patients	X	X	x	y
Suicide Prevention Protocol for Older Adults	x			
Acute Cognitive Therapy	X			
Post-Admission Cognitive Therapy	x			
Brief Cognitive Behavioral Therapy	x			
Future-Oriented Group Training	x			
Problem Solving Therapy	x	y	y	y
Frameworks for Risk Assessment and Management				
Collaborative Assessment and Management of Suicidality	X	X	x	y
University of Washington Risk Assessment Protocol	x			
University of Washington Risk Assessment and Management Protocol	x			
Single-Session Interventions				
Psychoeducation				
Safety Planning/Crisis Response Planning	X	x		y
Means Restriction Counseling				
Reasons for Living List	x			
Coping Cards	x			
Virtual Hope Box (Hope Kit/Survival Kit)	x			
Motivational Interviewing to Address Suicidal Ideation	X	X		
Problem-Solving and Comprehensive Contact Interview	x			

Note. Stage 1a = Developing a treatment manual and conducting open trial testing; Stage 1b = Conducting pilot testing using a control group; Stage II = Amassing support in least 2 RCTs; Stage III = Conducting effectiveness trials. X = an approach has successfully

completed all recommended components for a given stage; x = an approach has completed some recommended components of a stage, but not all; y = an approach has begun to address a stage's research objective before successfully completing all recommended components of the preceding stage; No letter = an approach has not yet met any objectives in a given stage.

personal communication, February 24, 2014), but results substantiating this are not yet available. In fact, although each extension of CTSP includes a consistently used treatment manual that reflects an overarching theoretical rationale, only ACT has generated any form of available open or pilot study data (Catanese et al., 2009). Researchers conducting future comparisons of ACT with control groups should consider including additional outcome variables of interest beyond visits to an emergency department, such as direct measures of suicidal ideation and intent.

Given that several RCTs have been conducted on variations of PST, and that there have also been studies investigating specific patient populations for whom PST might be particularly effective, it might initially seem that PST should be classified as a Stage III psychotherapy using Onken et al. 's (1997) criteria. However, as noted previously, a consistently used treatment manual describing the application of PST for reducing suicide risk has not been developed or utilized. Rounsaville et al. (2001) suggest that developing a consistent treatment manual is a primary Stage Ia research objective, and that further research should not proceed until this step has successfully been completed. Given this observation, it may be the case that the apparent Stage II and III research studies conducted on PST have been premature, and that greater consistency in the treatment protocol for PST represents a fundamental next step for research.

No studies to date have directly compared the effectiveness of CTSP (or its extensions) and PST for reducing suicide risk or related factors, and very few have compared PST with other forms of CBT. Patsiokas and Clum (1985) directly compared PST and cognitive restructuring, but they did not find significant differences between the treatments on changes in either suicidal ideation or hopelessness. Stewart, Quinn, Pelver, and Emmerson (2009) also found no

significant differences between PST and CBT, but they elected to compare the active treatment conditions only on a test of improvement in problem-solving ability. Such findings, especially when considered along with the small sample sizes used in these studies and differences in methodology, make it difficult to draw comparative conclusions.

Nevertheless, comparison studies of CTSP (and its extensions) and PST may be unwarranted given the increasing emphasis on problem-solving skills in CTSP-based protocols. Focusing exclusively on problem-solving deficits is likely insufficient for addressing suicide risk (Reinicke, 2006), and patients may vary widely with respect to the problems and skill deficits that contribute to their suicidal states. As such, Matthews (2013) suggests that practitioners should consider using comprehensive treatment protocols that include a wide variety of skills when working with suicidal patients. To that end, CTSP and its extensions have explicitly included problem-solving strategies in their protocols and emphasized these skills in trainings for mental health professionals. Because CTSP provides a broad range of skills that individual patients could find helpful, and because it has amassed a more consistent degree of empirical support as suggested by stage model criteria, it may be a better first-line treatment option at this time than PST in cases where suicide-focused psychotherapy is indicated.

Suicide-Focused Frameworks for Risk Assessment and Management

Despite the unique benefits of suicide-focused psychotherapies (VA/DoD, 2013), routine use of either suicide-focused psychotherapies or empirically supported psychotherapies targeting comorbid disorders is not common in clinical practice (Jobes et al., 2008). As such, two suicide-focused approaches have been proposed that do not dictate the therapeutic intervention clinicians should employ; instead, they are intended for flexible use. In this way, they are more accurately

defined as "frameworks" for assessing and managing risk.

Collaborative Assessment and Management of Suicidality

The collaborative assessment and management of suicidality framework (CAMS; Jobes, 2006) was designed to guide clinicians in quickly engaging suicidal clients, comprehensively and collaboratively assessing risk, and effectively planning subsequent treatment (Jobes, 2006, 2012). In an initial CAMS session, the clinical dyad works together to complete the Suicide Status Form (SSF; Jobes, Jacoby, Cimbolic, & Hustead, 1997), an assessment tool that gauges empirically supported suicide risk factors (Jobes, 2006) and has demonstrated good psychometric properties in multiple clinical settings (Conrad et al., 2009; Jobes et al., 1997). The SSF is unique among suicide-focused assessments in that it contains both qualitative and quantitative measures of patients' distress (Jobes, 2006). Such questions highlight factors that "drive" a patient's suicidality, and these factors are specifically targeted in subsequent treatment. Practitioners are free to address these drivers in a flexible manner, using strategies based on their own theoretical orientation and clinical judgment. Specific treatment interventions are not prescribed beyond developing a crisis response plan and restricting access to lethal means.

Open-trial studies of CAMS have generally yielded significant reductions in patients' SSF ratings of psychological pain, stress, agitation, hopelessness, self-hate, and overall suicide risk when compared to their pretreatment scores (Jobes et al., 1997; Nielsen, Alberdi, & Rosenbaum, 2011), and there is initial evidence that CAMS-M, a version of CAMS developed to meet structural needs of inpatient units, also yields reductions in depressive symptomatology, hopelessness, suicidal ideation, and suicidal cognitions (Ellis, Green, Allen, Jobes, & Nadorff, 2012). Similar results have been found in archival and feasibility studies. For example, Jobes,

Wong, Conrad, Drozd, and Neal-Walden (2005) compared archival data (therapy outcomes and medical records) for patients in an Air Force medical group who previously received CAMS or TAU. Results indicated no significant differences between the two conditions with respect to the number of patients who made a suicide attempt or needed to be hospitalized during treatment, or the number of patients who met criteria for suicide resolution at the end of treatment. However, patients receiving CAMS reached this resolution in significantly fewer sessions, and they had significantly fewer emergency room and general medical visits following treatment than did patients receiving TAU. Comtois et al. (2011) assigned patients to receive either CAMS or enhanced care as usual (E-CAU) in a small feasibility study, and results indicated that patients receiving CAMS reported significantly lower suicidal ideation and global psychopathology and significantly higher feelings of hope following treatment than did patients receiving E-CAU.

University of Washington Risk Assessment Protocol and Risk Assessment and Management Protocol

Like CAMS, both the University of Washington's Risk Assessment Protocol (UWRAP) and Risk Assessment and Management Protocol (UWRAMP) were developed to facilitate evidence-based risk assessment and management for suicidal patients in research (UWRAP) and clinical settings (UWRAMP) (Linehan, Comtois, & Ward-Ciesielski, 2012). These protocols are also unique among suicide assessments in their explicit emphasis on mood improvement following the interview. Specifically, Linehan et al. (2012) suggested that urges to hurt or kill oneself or use substances might increase during an assessment if that assessment highlights life areas with which a respondent is struggling or unsatisfied. As such, clinicians preemptively ask patients to assume that the risk-assessment will be stressful and to brainstorm strategies to

manage stress or improve their mood. The extent to which these techniques are utilized depends on whether or not participants' reported ratings of stress, urges to self-harm, suicidal intent, and urges to use alcohol or drugs remain high after the assessment has ended. In addition, a list of strategies is provided for patients at high acute suicide risk, and appropriate documentation forms are included for facilitators or therapists to track if and why these interventions were (or were not) employed. The UWRAP has been included in several clinical studies at the University of Washington (Linehan et al., 2012). However, no research to date has established its psychometric properties or determined its unique contribution for reducing patients' suicide risk.

Evaluating the Suicide-Focused Frameworks for Risk Assessment and Management

Research on CAMS has generally progressed according to Rounsaville et al. (2001)'s suggestions for Stage I research and Onken et al. 's (1997) stage model criteria more broadly (see Table 1). The support it has amassed in a range of open and pilot studies has justified its testing in a RCT, and in fact, three RCTs are currently underway in diverse settings (D. A. Jobes, personal communication, February 22, 2014). However, as CAMS has not yet amassed empirical support through a randomized trial, extending and modifying it for different settings (e.g., CAMS-M; Ellis et al., 2012) might reflect a premature transition to Stage III research objectives. The UWRAP/UWRAMP frameworks are somewhat harder to classify; while there are manualized instructions for their use and they have been included in empirical studies, neither has established psychometric properties or been shown to have an independent effect on patients' level of suicide risk. The best current classification for the UWRAP/UWRAMP is likely Stage Ia, given each protocol's theoretically based manualized instructions.

It might be helpful for future research to compare practitioner use of manualized interventions and these flexible frameworks to gauge the factors that influence practitioners' choosing one or another, and to determine whether this selection results in differences in patient outcomes and/or therapist satisfaction.

Single-Session Interventions

As noted previously, suicide-focused psychotherapies and frameworks for risk-assessment and management cannot feasibly be implemented in some clinical settings, given that a sizable number of patients who present after engaging in suicidal behaviors refuse outpatient care or do not attend scheduled follow-up visits (Larkin & Beautrais, 2010). In such settings, effective suicide-focused interventions that can be employed and understood within a single contact are essential. To that end, several interventions have been proposed, some of which have been incorporated within other suicide-focused approaches.

Psychoeducation

Patients receiving care immediately following a suicide attempt may not receive adequate education about available treatments and risks for future crises (Cerel, Currier, & Conwell, 2006). For example, those authors noted that fewer than 40% of participants in a survey study who received emergency department care following a suicide attempt reported receiving any information about the nature of available treatment options. To overcome this barrier and ensure that practitioners are aware of relevant information to provide to patients, the VA/DoD (2013) recommended specific domains to emphasize in suicide-focused psychoeducation. These include: a) risk factors for suicide that apply for an individual patient; b) patient-specific internal (e.g., cognitions, emotions, behaviors) and external warning signs (e.g., interpersonal

relationships, social situations), and how these warning signs contribute to suicidal crises; c)

the role that alcohol and drug use/abuse can play in exacerbating suicide risk; d) the importance

of engaging in subsequent follow-up care; e) information about specific evidence based

treatment options, and the risks/benefits of pursuing each; and f) options for accessing

professional care, community support, and emergency services as needed during future crises.

The VA/DoD (2013) recommend that this information be delivered in a manner that

respects the needs and cognitive capacity of each patient, and that it also be offered to family

members, caregivers, and other social supports that adult patients elect to include in the treatment

process. No research has been reported specifically on the efficacy of psychoeducation for

suicidal adults, and future studies should examine the extent to which it independently affects a

patient's suicide risk and subsequent motivation for treatment. In addition, research should also

assess the ideal ordering of topics to maximize patient acceptability and the extent to which each

suggested topic above is needed in an initial contact.

Safety Planning/Crisis Response Planning

Another important educational domain with which patients are often unfamiliar involves

the nature of suicidal crises, and the fact that they tend to emerge and abate quickly in an ebb-

and-flow pattern (Stanley & Brown, 2012). Given this, variations of safety planning or crisis

response planning have been proposed to help patients cope with suicidal urges until their crises

abate (e.g., Rudd, Joiner, & Rajab, 2001; Stanley & Brown, 2012). Some form of safety

planning has been included as a core component of several suicide-focused approaches,

including CTSP (Wenzel et al., 2009), PACT (Ghahramanlou-Holloway et al., 2012), BCBT

(Rudd, 2012), and CAMS (Jobes, 2006). In addition, these interventions have been employed as

stand-alone strategies for both civilian and Veteran populations (Knox et al., 2012; Stanley & Brown, 2012), and one specific form of safety planning (the safety planning intervention; Stanley & Brown, 2008) is currently used systematically throughout the VA health care system.

Variations of safety planning differ slightly in the specific steps they emphasize for patients to apply when experiencing a suicidal crisis. For example, crisis response planning (Rudd et al., 2001) as employed in BCBT emphasizes a series of four steps to help patients identify personal "warning signs" that necessitate using the plan, develop coping strategies to implement independently, and list social support and professional resources they can contact for help in the event that no skills are effective. The safety planning intervention (Stanley & Brown, 2008) emphasizes these same steps, but suggests that social supports should be differentiated into people who can provide distraction and people whom patients can specifically ask for help. Yet, despite such differences, variations of safety planning are consistent in their active emphasis on what patients *can do* in suicidal crises. This active focus stands in sharp contrast to historically used no-suicide contracts, which continue to be discussed as appropriate interventions for suicidal patients (e.g., Schneider, 2012) despite evidence that they are not effective and that they are not protective against malpractice lawsuits (e.g., Rudd, Mandrusiak, & Joiner, 2006; VA/DoD, 2013). Data describing the efficacy of safety or crisis response planning as stand-alone interventions are not yet available (e.g., Stanley & Brown, 2012), so conclusions about their efficacy as independent interventions cannot be made at this time.

Means Restriction

The final step of the safety planning intervention involves reducing or removing a patient's access to lethal means (Stanley & Brown, 2012). Means restriction has been shown to

reduce rates of death by suicide at a global level across several countries (Mann et al., 2005).

Additionally, despite practitioner concerns that means restriction simply leads to method

substitution (e.g., Betz, Barber, & Miller, 2010), evidence suggests that suicidal individuals tend

to have a preference for a specific lethal method, and that the risk of method substitution is small

(Daigle, 2005). These findings, taken together, support means restriction as an important area

for suicide prevention.

Like safety planning, means restriction is emphasized explicitly in several suicide-

focused approaches, including CTSP (Wenzel et al., 2009), BCBT (Rudd, 2012), and CAMS

(Jobes, 2006). In addition, it has garnered some empirical support; evidence has demonstrated

that educating parents of suicidal children about means restriction can significantly impact their

willingness to restrict means (e.g., McManus et al., 1997). However, the degree of external

restriction provided by parents of suicidal children may not be possible for suicidal adults, and

there are certain adult populations for whom means restriction may seem threatening. For

example, restricting suicidal Veterans' access to firearms may seem an appropriate immediate

intervention, given evidence that Veterans are significantly more likely to use firearms as a lethal

method than members of the general population (Liu, Kraines, Puzia, Massing-Schaffer, &

Kleiman, 2013). However, Veterans may be unwilling to limit their access to firearms (Bryan,

Stone, & Rudd, 2011), and clinician insistence could lead to an adversarial relationship that

limits future treatment. As such, there is a clear need for forms of means restriction that can be

easily learned by practitioners and applied in a non-adversarial, patient-focused manner.

To that end, Bryan et al. (2011) suggest strategies for providing collaborative means

restriction counseling. They specifically recommend that practitioners provide education for

patients and supportive others (if indicated) about the need for restricting means, and that they develop a plan collaboratively with all involved parties about how such restriction will occur. In addition, they specifically suggest that giving patients a variety of options for means restriction can ensure that their preferences are not overlooked and that their motivation for adhering to this plan is maximized. Data about means restriction as a stand-alone intervention for suicidal adults is lacking, and there are no results to date investigating how collaborative means restriction counseling as described above (Bryan et al., 2011) might improve patient outcomes above and beyond means restriction as emphasized in other suicide-focused treatment protocols.

Taken together, psychoeducation, safety/crisis response planning, and means restriction represent the core interventions that should always be implemented during an initial contact with suicidal patents, especially when these patients do not require hospitalization (VA/DoD, 2013). Other single-session interventions described below target suicidal patients' protective factors, motivation for living, and motivation for ongoing care.

Reasons for Living List

During an acute crisis, suicidal patients can easily identify reasons to die and struggle to list reasons to live (Wenzel et al., 2009), and this difficulty with identifying reasons for living has been shown to differentiate patients who have made at least one suicide attempt from others who have never engaged in suicidal behaviors (e.g., Malone et al., 2000). Gauging the extent to which patients can identify reasons for living has historically been an essential component of suicide-focused risk assessment and risk determination (Jobes, 2006; Linehan, Goodstein, Nielsen, & Chiles, 1983; Rudd et al., 2001), and this assessment can naturally facilitate a brief intervention (Bryan & Rudd, 2010; Wenzel et al., 2009). Specifically, patients can be

encouraged to comprehensively list their reasons for living and protective factors across several broad categories (e.g., meaningful people and places, enjoyable activities, future-focused goals and plans, and significant dreams and values) in their own words on a format they can carry and refer back to as necessary during crises. One specific format that has been suggested for this list is a 3x5 coping card.

Coping Cards

Coping cards have often been recommended in cognitive therapy treatment protocols (e.g., Beck et al., 1979), and they hold considerable promise for suicidal patients as strategies that can be used immediately during crises. This intervention specifically involves creating a small card (or series of cards) that can be carried at all times and viewed when necessary. Wenzel et al. (2009) suggest three separate types of information that suicide-focused coping cards can include: a) evidence for refuting automatic thoughts or underlying core beliefs, b) behavioral coping strategies to employ or social supports to contact when in crisis, and c) statements that foster motivation for practicing suicide-focused skills or approaching a problem in a more adaptive manner. However, many other variations of coping cards have also been suggested, including a card detailing reasons for living (as noted previously).

Concrete suggestions have been proposed for how to create a reasons for living list (e.g., Bryan & Rudd, 2010) and coping cards with suicidal patients (e.g., Wenzel et al., 2009). However, there is significant variability in how these interventions can be (and generally are) implemented in clinical practice, which allows practitioners to apply them using significant clinical innovation and creativity. This variability can lead to difficulties in establishing manualized guidelines for using these interventions, which may in part reflect why they have

not been empirically investigated as independent interventions to date.

Virtual Hope Box (Hope Kit/Survival Kit)

Patients who find reasons for living lists and coping cards insufficient for managing crises may notice additional benefit from having these techniques included in a broader "hope kit" (Wenzel et al., 2009) or "survival kit" (Bryan & Rudd, 2010). When creating a hope kit, patients are encouraged to find some form of container within which they can store personally significant materials that trigger positive emotions and embody reasons for living. Such materials could be anything a patient wishes, including (but not limited to) pictures, music, spiritual passages, poems, or jokes. Bryan and Rudd (2010) encourage practitioners to discuss each chosen item with patients once items are assembled to ensure that nothing is included that may trigger or fuel negative thoughts or emotions. Once the kit is finalized, patients are encouraged to actively go through these materials when in crisis.

Because the implementation of hope kits generally necessitates multiple sessions (as patients are encouraged to obtain materials and review them with their providers), this technique has not historically been suggested for or employed in settings that emphasize single-session interventions. However, given the considerable value it can have for patients even following an initial consultation, a digital hope kit was developed that can be downloaded as an application for smartphones and tablets. This "virtual hope box" (Bush, 2012) contains pre-loaded games for distraction, relaxation exercises, and inspirational quotes, and it allows patients to create personal coping cards that can be accessed through the app. Patients can also upload personally significant pictures, music, sound clips, and other media as desired. With this format, a hope kit can be initiated, reviewed, and completed with patients in a single session. Although empirical

investigations of the virtual hope box are ongoing, no research to date has explored the

efficacy of any hope kit variation as an independent intervention.

Increasing Motivation

Two hypotheses that have been suggested to explain patients' poor engagement in

subsequent treatment following a suicide attempt each involve motivation (Britton, Patrick,

Wenzel, & Williams, 2011). Suicidal patients are often ambivalent about living, and this lack of

motivation to live may affect their motivation for subsequent treatment. Additionally, suicidal

patients may lack motivation to engage in treatment due to logistical barriers, including

insufficient funding for or access to transportation to get to hospitals/care centers for sessions.

Assessing and addressing these motivational concerns may positively impact patients'

subsequent care, and single-session protocols have been developed for each.

Motivational interviewing to address suicidal ideation. Motivational interviewing to

address suicidal ideation (MI-SI; Britton, Williams, & Conner, 2008) was developed to enhance

suicidal patients' motivation to live and engage in life-enhancing activities. In a manner

consistent with general motivational interviewing (e.g., Miller & Rollnick, 2013), practitioners

using MI-SI delve into both sides of patients' ambivalence (Britton et al., 2008), specifically

beginning with a discussion of patients' reasons for *dying.* Britton et al. (2008) suggest that once

ambivalent patients first discuss their reasons for dying, they will likely counter their own points

by beginning to discuss their reasons for living. When this happens, practitioners shift to the

second stage of the intervention, during which they apply MI strategies like reflective listening

and open-ended questions to strengthen and elaborate on the reasons for living that patients have

begun to describe, and to plan the changes or subsequent treatment options patients believe could

help make their lives worth living. Open trials of MI-SI suggest that clinicians and patients each find this intervention satisfying and effective (Britton, Conner, & Maisto, 2012; Britton et al., 2011) and that it may successfully increase the likelihood of patients engaging in follow-up care following discharge from inpatient treatment (Britton et al., 2012). Although these studies had small sample sizes and no control groups, results tentatively suggest that directly focusing on patients' reasons for dying and living in an initial contact might be helpful both for alleviating immediate crises and promoting subsequent follow-up care.

Problem-solving and comprehensive contact intervention. Alonzo and Stanley (2013) developed the problem-solving and comprehensive contact intervention (PS-CCI) to increase suicidal patients' motivation for treatment. The PS-CCI begins with an interview, during which patients are guided in identifying barriers that have either impeded their treatment in the past or become so problematic that they might interfere with future treatment. Once this is completed, patients are provided with psychoeducation about future treatment options and asked to complete two decisional balance worksheets: one listing their reasons for and against resisting suicidal urges, and one listing reasons for and against engaging in future outpatient care. Then the clinical dyad discusses the pros and cons listed for each, and sets future outpatient care visits as necessary based on the patient's motivation. Alonzo and Stanley (2013) report that most patients who did the PS-CCI completed a follow-up and that a greater number of reminder contacts was needed than planned. However, they did not describe additional outcomes.

Evaluating the Single-Session Interventions for Suicide

At this point, all single-session suicide-focused interventions would be classified in Stage I using Onken et al. (1997)'s criteria, as few have been investigated independently and none has

been tested in an RCT (see Table 1). In fact, most would likely be best classified in Stage Ia (Rounsaville et al., 2001). Psychoeducation and means restriction counseling, for example, are not manualized approaches; instead, each currently reflects recommendations for maximizing patient care and acceptability. Similarly, although guidelines are available for creating reasons for living lists and coping cards with patients, significant variability in implementation is possible. Greater consistency with respect to manualized guidelines for each intervention could facilitate future empirical studies. In contrast, safety planning, crisis response planning, and the PS-CCI are each implemented using consistent treatment guidelines, and the virtual hope box is a standard app available for download and distribution. However, data on safety planning, crisis response planning, and the virtual hope box as individual interventions and data describing the effects of PS-CCI are not yet available. Such data would be necessary for Stage II or III research to be justified (Onken et al., 1997). Because of this, the stage model criteria would suggest that recent extensions of the safety planning intervention to inpatient units (Rings, Alexander, Silvers, & Gutierrez, 2012) might reflect a premature transition to Stage III objectives. Finally, MI-SI is the single-session intervention with the most support to date, with promising findings from two open trials. This support justifies future Stage Ib investigations comparing MI-SI to a control group, and future research should consider including variables of interest beyond subsequent treatment engagement, such as direct measures of suicidal ideation and intent.

Conclusions and Future Directions

The range of available suicide-focused psychosocial approaches for actively treating adult patients reflects significant clinical innovation and creativity, particularly given that most of this research has been conducted within the last decade. With the single exception of CTSP,

every suicide-focused approach discussed would most accurately be classified as a Stage I intervention using the stage model criteria, as none has yet amassed support through a randomized trial. Variations of PST have been investigated in several randomized trials (Stage II research objectives), and empirical investigations of the utility of PST for specific patient populations have been conducted (Stage III research objectives). However, the inconsistency with which PST has been empirically implemented and the lack of a consistently used suicide-specific treatment manual suggest that further Stage II/III research should be de-emphasized until the outstanding Stage I issues are addressed.

The stage model's emphasis on clinical rigor and fostering future research makes it an appropriate initial benchmark for classifying suicide-focused approaches, as additional empirical investigations are warranted for all. However, limitations of this model have been observed and should be noted. Kazdin (2001), for example, suggested that the ideal progression described in the stage model was specifically intended to facilitate research, and that as such, it likely did not represent the best way to yield treatments that effectively translate into clinical practice. To clarify, he noted that the overarching focus of Stages I and II involves preparing a psychotherapy or intervention for highly structured testing in an RCT, despite documented gaps between controlled testing environments and clinical practice settings (e.g., poor treatment attendance, extensive comorbidity, and overarching systemic demands). Instead, he suggested that the successful development and implementation of an approach for clinical settings necessitates a clear theoretical understanding of that approach's mechanisms of action, as understanding *why* the approach is effective can guide practitioners in suggesting changes for specific settings or patient populations.

To date, such mechanisms of action in suicide-focused approaches have not represented a primary research objective. On the contrary, Matthews' (2013) has suggested that comprehensive treatment packages that include varied cognitive and behavioral skills represent the most appropriate care for suicidal patients, as it is unclear which treatment components drive therapeutic outcomes. Future research examining suicide-focused approaches might also consider clarifying mechanisms of action, as this information could facilitate an easier and more efficient implementation of these approaches into practice.

Another limitation of the stage model is the fact that some classifications may more accurately reflect the way in which stage criteria are interpreted than the objective state of an intervention's development and support. For example, safety planning is currently being studied as an independent intervention, but it has not yet been supported through a randomized trial. Onken et al.'s criteria (1997) would thus classify safety planning as a Stage I approach, and suggest that modifications for different clinical settings (e.g., inpatient units; Rings et al., 2012) should not occur until Stage II objectives are met. However, another equally valid interpretation of stage model criteria could classify this inpatient extension of safety planning as a brand new suicide-focused approach, which would mean that research on its effectiveness involves Stage I research objectives in a manner consistent with recommended guidelines (Onken et al., 1997; Rounsaville et al., 2001). These divergent (but equally accurate) interpretations of criteria could also apply to CTSP and its extensions, and to CAMS and its extension to inpatient units.

Yet, despite the limitations of the stage model, recommendations derived from its classifications should be considered strongly for future research. Because suicide-focused approaches reflect such a recent empirical focus, it is equally important for them to be supported

by strong research as it is to ensure that they are theoretically grounded and clinically relevant. In fact, future research gauging both efficacy in controlled studies and sound theoretically-based mechanisms of action will likely be needed to elevate the prominence of suicide-focused approaches and justify their use as first line treatments for suicidal patients.

CHAPTER 2

Collaborative Assessment and Management of Suicidality (CAMS):

Adherence to a Flexible Clinical Framework

In 2010, suicide was the tenth leading cause of death for American adults across the

lifespan (Centers for Disease Control and Prevention, 2013). Yet, the U.S. Departments of

Veterans Affairs and Defense (2013) note that 50-75% of acutely suicidal patients receive

inadequate treatment, despite the fact that adequate interventions could reduce a significant

number of these deaths by suicide. The fact that mental health practitioners often do not provide

effective suicide-focused treatment has been well documented (e.g., Jobes, Rudd, Overholser, &

Joiner, 2008), and might be attributed in part to their lack of training in suicide risk assessment

and management (Schmitz et al., 2012). There is thus a clear need for effective suicide-focused

training that is accessible for a wide range of practitioners, and also for investigations of how

such training influences self-reported suicide-focused practice and attitudes.

Beidas, Koerner, Weingardt, and Kendall (2011) argue that training that primarily

recommends reading or strictly adhering to a treatment manual might not yield sustainable

behavior change. Instead, they suggest that training should address general skills that clinicians

can learn and foster. Pisani, Cross, and Gould (2011) reviewed popular and scholarly databases

to gauge evidence based workshops in suicide-focused risk-assessment and management that

focus on general skills as suggested. Their review yielded 12 specific types of training, one of

which emphasizes the collaborative assessment and management of suicidality (CAMS)

framework (Jobes, 2006).

Practitioners attending a CAMS training are told that CAMS encompasses both a

therapeutic philosophy and a clinical framework (Jobes, 2012), each of which are designed to foster collaboration between clinicians and patients. Specifically, the CAMS therapeutic philosophy emphasizes involving patients collaboratively when assessing risk, identifying the factors that directly "drive" suicidality, planning treatment, and selecting suicide-focused interventions (Jobes, 2006, 2012). Such collaboration is considered paramount within CAMS, as all types of CAMS training emphasize that no one is more qualified to say what makes a person suicidal than that person himself or herself (Jobes, 2006). Adopting this "patient as expert" model allows clinicians to empathize with patients' suicidal desires as coping strategies that make sense in the context of their distress. This, in turn, can facilitate more meaningful discussions of the factors that directly contribute to patients' suicidality and the interventions that can specifically help them increase hope and meaning.

The explicit focus on collaboration in CAMS can also be seen in the specific strategies emphasized as ideal CAMS practice. For example, in the first session, clinicians and patients work together to complete the Suicide Status Form (SSF; Jobes, Jacoby, Cimbolic, & Hustead, 1997), a multi-purpose clinical tool that is unique among suicide-focused assessments in its content and recommended administration. With respect to content, the SSF emphasizes both quantitative and qualitative assessment of a patient's distress. Information gained from qualitative open-ended queries allows specific targets for treatment to emerge naturally, and clinicians are free to address these treatment targets using strategies consistent with their own theoretical orientation and clinical judgment. In terms of recommended administration, clinicians are taught to administer the SSF while sitting next to patients and asking them to complete specific portions. Such behaviors are thought to engage patients in the risk

assessment and treatment planning processes more deeply, and to subtly convey that the dyad

is aligned and working together for this specific task and any subsequent treatment.

To date, CAMS has been implemented in a variety of inpatient and outpatient settings

(e.g., Arkov, Rosenbaum, Christiansen, Jønsson, & Münchow, 2008; Ellis, Green, Allen, Jobes,

& Nadorff, 2012; Jobes, Wong, Conrad, Drozd, & Neal-Walden, 2005). Investigations of its

implementation have generally suggested that CAMS is associated with a significant reduction in

patients' suicide risk, and that it may accomplish such gains in significantly less time than

treatment as usual (Jobes et al., 2005). However, Pisani et al. (2011) observed that almost no

studies have specifically gauged the effectiveness of CAMS training. In fact, the only CAMS

training study to date has compared provider satisfaction with online and in-person CAMS

training within a Veterans Affairs Medical Center system (Marshall et al., in press); no studies

have broadly examined self-reported adherence to the CAMS therapeutic philosophy or

recommended assessment and risk-management practices.

The present study was thus designed to address this gap, using an online survey of

practitioners who had completed some form of CAMS training or had read the CAMS manual

with the intention of applying it in clinical practice. The investigation centered around whether

adherence varied as a result of several contextual factors suggested by Beidas and Kendall

(2010): type of training, therapist factors, and the primary work setting/organizational support.

Training in CAMS is currently provided in several different formats in addition to the 1-

day workshop discussed in Pisani et al. (2011), including 1-2 hour discussions or lectures,

workshops lasting 2 days or longer, and online e-learning programs that include video

demonstrations. In the present study, training was considered "more intensive" if it was

delivered over the course of 1 day or longer or involved an interactive online program, and

"less intensive" if it was delivered over 1-2 hours or only involved reading the CAMS treatment

manual. Because more intensive CAMS training may provide greater opportunities for

discussing the CAMS therapeutic philosophy and the rationale for recommended practices, it

was hypothesized that participants who reported attending such training would report

significantly higher adherence to both CAMS philosophy and practice than those who did not.

Insufficient research on the role of therapist factors has been conducted to date (Beidas &

Kendall, 2010), possibly due to the range of variables to which this term has been applied. For

example, Beutler and Castonguay (2006) define therapist factors in a way that primarily

emphasizes demographic variables, focusing on characteristics existing within the therapist that

represent qualities outside of psychotherapy. In contrast, Beidas and Kendall (2010) place more

emphasis on variables related to therapists' professional identities, such as theoretical orientation

and attitudes towards evidence-based practice. In the present study, therapist factors were

chosen to broadly reflect both definitions, specifically including therapists' gender, country of

residence, highest degree earned, number of years in practice, number of colleagues known to

use CAMS, primary theoretical orientation, and degree of psychotherapy integration. The survey

also assessed whether participants had ever worked with a patient who made a suicide attempt or

died by suicide while in treatment. Because Jobes (personal communication, May 14, 2012) has

suggested that CAMS can be adopted equally by practitioners regardless of therapist factors, no

significant differences in adherence to the CAMS therapeutic philosophy or CAMS practice were

expected as a function of this class of variables.

Finally, Beidas and Kendall (2010) also suggested that organizational factors can affect

behavior following training. Berke, Rozell, Hogan, Norcross, and Karpiak (2011) observed

significant differences in practitioners' self-reported familiarity with and use of evidence-based

practices based on their primary work setting. Some of this variation may be attributed to the

level of organizational support for a type of clinical practice following training in it (Beidas &

Kendall, 2010), as evidence suggests that ongoing supervision and support are necessary for

subsequent behavior change (e.g., Miller, Sorensen, Selzer, & Brigham, 2006). Given this, it

was hypothesized that self-reported adherence to CAMS practice would differ as a function of

participants' primary work setting and level of support within that agency for practicing CAMS.

Specifically, lower practice adherence was expected to be associated with lower reported agency

support and with working in agencies in which there might not be systemic guidelines (or

support in place) for working with suicidal patients (e.g., private practice). However, no

significant differences were expected in adherence to the CAMS therapeutic philosophy as a

function of these variables.

Method

Participants

Requests for participation in this survey study were sent to individuals who a) worked in

settings that employed CAMS as an institutionalized practice and where at least one CAMS

training had been given ($n = 523$); b) had attended at least one CAMS training through an

independent organization ($n = 420$); or c) were members of the American Association of

Suicidology listserv (AAS) ($n = 637$) or the Association of Behavioral and Cognitive Therapies'

Suicide and Self-Injury Special Interest Group (ABCT SSIG; $n = 143$) listserv. Of the 1723

requests that were sent out, 195 clinicians accessed the online survey, with 120 completing all

measures. This represents an approximate response rate of 7.0%. Additional postings were later placed on general psychotherapy listserves (i.e., the Association for Behavioral and Cognitive Therapies, the Academy of Cognitive Therapy, the Society of Clinical Psychology, the Society for the Exploration of Psychotherapy Integration, and the Society for Psychotherapy Research). However, postings on these listservs appeared to yield a nominal response, possibly because of the likelihood that few members of these listservs met the study's inclusion criteria. As such, postings on these listservs were not included in the calculation of the response rate.

The 40 men and 80 women who completed all survey questions ranged in age from 22 to 68 years old ($M = 42.90$), and had between 0 and 40 years of clinical practice following their terminal degree ($M = 10.99$). The majority of participants were White/Caucasian (86.7%). Five percent identified themselves as Black/African American, 5% as Hispanic/Latino, 1.7% as Asian, 0.8% as American Indian/Alaska Native, and 0.8% as "Other." Additional demographic information about the sample as a whole can be found in Appendix A, Table A1. General information about the types of CAMS training completed, when participants completed their most recent CAMS training, the number of patients with whom they have used CAMS, and the number of colleagues they know who use CAMS can be found in Appendix A, Table A2.

Procedure

An email was sent by David Jobes to contact persons at 16 organizations through which at least one CAMS training had been conducted (see Appendix B), asking if they would be willing to distribute a request for participation in this study to current and past practitioners who had been trained in CAMS. If so, the contacts received a second email from Dr. Jobes that they were asked to forward to these practitioners. This second email included a request for

participation in a study of CAMS and suicide-focused assessment and treatment (see

Appendices C and D). As noted previously, similar requests were also posted on the AAS and

ABCT SSIG listservs in order to reach other clinicians who may have received training in

CAMS or had read the CAMS treatment manual (Jobes, 2006) (see Appendices E and F,

respectively).

All of the above requests stated that participation in the study was voluntary, that

confidentiality was guaranteed, and that participants had the opportunity to enter a raffle for a

$50 Amazon gift card upon completion of the survey. In addition, the requests included a link to

a website that provided further information about the study and its exclusion criteria (see

Appendix G). Those who elected to participate were then asked to complete five online

measures that together took approximately 20-25 minutes to complete.

Measures

Therapist Background Questionnaire (TBQ; Appendix H). The TBQ was modified

from DiGiorgio, Glass, and Arnkoff (2010), and includes items that assess participants' gender,

age, race/ethnicity, country of residence, highest degree earned and field of study, years of

clinical experience, primary work setting, dimensional and categorical ratings of theoretical

orientation, and personal history with respect to having had patients make suicide attempts or die

by suicide while in treatment, or to having been sued for malpractice or wrongful death.

Suicide Training Questionnaire (STQ; Appendix I). The STQ contains items adapted

from Lyhus (2002) as modified by DiGiorgio et al. (2010), along with additional items created

for the present study. Respondents first indicate the specific type(s) of CAMS training(s)

completed, as well as how long ago the most recent training took place. Other questions use 7-

point rating scales to assess both interest and confidence in using CAMS and perceived agency

support for practicing CAMS. Final questions ask about the number of patients with whom

respondents have used CAMS, whether they use CAMS with all suicidal patients, and which

suicide-focused intervention (e.g., CAMS, dialectical behavior therapy [DBT], cognitive therapy

for suicidal patients) would be participants' first choice when working with suicidal patients.

Suicide Beliefs and CAMS Philosophy Questionnaire (SBCPQ; Appendix J). The

SBCPQ was developed for this study to measure the extent to which clinicians agree and are

comfortable with general beliefs about suicide as well as aspects of the CAMS therapeutic

philosophy. The first section includes 17 items that gauge the extent to which participants agree

with general beliefs about suicide, rated on a scale from 1 (Strongly Disagree) to 7 (Strongly

Agree). For example, one item is "Some form of active crisis response planning/safety planning

should always be incorporated into a suicidal person's treatment plan." A second subscale with

four additional items assesses how comfortable respondents would be saying specific statements

to patients that are consistent with the CAMS philosophy and emphasized in training, and these

are rated from 1 (Not at all Comfortable) to 7 (Extremely Comfortable). One example is: "With

everything you've been dealing with, I understand why you feel that suicide makes sense right

now." The 17 questions regarding general suicide beliefs were summed to yield a "suicide

belief" score. However, because of this subscale's low internal consistency ($\alpha = .48$), it was not

included in data analysis. The four items concerning participants' comfort using statements

highlighted in CAMS training were summed to yield a score for comfort using CAMS-consistent

statements with suicidal patients ($\alpha = .71$).

Suicide Assessment and Treatment Questionnaire (SATQ; Appendix K). Created

for this study, the SATQ is a 29-item measure that contains both Likert scale ratings and open-ended questions. All items assess the extent to which the respondent reports using empirically supported assessment tools and intervention strategies in clinical work with suicidal patients. The first section (Risk Assessment) consists of 5 questions that ask about the frequency of use of standardized assessment tools for suicide risk, as well as the degree to which (and how) the respondent's exploration of suicide risk with patients is collaborative and focused on factors that directly contribute to suicidality. The 6-item second section (Treatment Planning) assesses the extent to which clinicians establish a set length of time for treatment with their suicidal patients, the degree to which (and how) they plan treatment in a collaborative manner, the extent to which they address barriers to treatment attendance, and the extent to which they use no-suicide contracts and/or a variation of safety planning with patients. The third section (Interventions) includes a list of 12 strategies for treating suicidal ideation/behavior (e.g., behavioral methods, cognitive methods, DBT skills), and the respondent's frequency of use of each is rated on a scale from 1 (None of the Time) to 5 (All of the Time). Two questions give the option to indicate the use of other interventions and what these are. Additionally, 2 questions ask about the extent to which (and how) the respondent's problem-focused interventions with suicidal patients are collaborative. Finally, the last section (Purpose and Meaning) includes a rating of the extent to which therapists focus on cultivating a sense of purpose and meaning with suicidal clients, on a scale from 1 (Not at all) to 7 (To a Great Degree), along with an open-ended question asking how they develop purpose and meaning.

CAMS Application Questionnaire (CAQ; Appendix L). The CAQ was developed for the present study to assess practitioners' general adherence to the CAMS framework. This 8-

item measure contains 5-point rating scales, open-ended, and yes/no questions. Most of these gauge the use of CAMS-specific behaviors, including self-reports of: a) how often clinicians use the SSF; b) if the SSF is used by itself or within the CAMS framework, if and when they use it; c) whether respondents ever sit next to patients, if and when they use CAMS; d) if they have patients complete certain portions of the SSF; and e) whether clinicians use both the CAMS Tracking and Outcome Forms. The frequency with which these specific behaviors were reported can be found in Appendix M, Table M1. In addition, differences in each of these specific behaviors as a function of categorical contextual factors (e.g., type of CAMS training, therapist factors, and primary work setting) can be found in Appendix M, Tables M2-M7. Two final CAQ questions assess the point at which respondents would stop using CAMS with a patient and the number of colleagues they know personally who use CAMS.

Calculation of Adherence Scores

CAMS therapeutic philosophy. Adherence to the CAMS therapeutic philosophy was assessed in two ways. First, there is a consistent and explicit emphasis in the CAMS therapeutic approach on collaborating with patients throughout the assessment and treatment processes, identifying factors that directly contribute to their suicide risk, and helping them cultivate a sense of hope and meaning. A "CAMS therapeutic approach" score was thus calculated by summing responses to the following five SATQ questions: "To what degree would you characterize your exploration of suicidal risk with patients as being collaborative?"; "To what degree do you typically deconstruct (assess) the factors that make a patient suicidal (or, identify 'drivers')?"; "To what degree would you characterize your treatment planning with suicidal patients as being collaborative?"; "To what degree are your problem-focused interventions with suicidal patients

collaborative?"; and "To what degree do you directly focus on cultivating a sense of purpose and meaning when working with suicidal patients?" Each of these Likert-style questions has responses ranging from 1 (Not at All) to 7 (To a Great Degree), so that scores for adherence to the CAMS therapeutic approach variable could range from 5-35 (see Table 2). Participants who selected "Not Applicable" for these questions, thus indicating that they did not work with suicidal patients, were not included in data analyses for this variable.

A second variable used to measure adherence to the CAMS therapeutic philosophy was the subscale score for comfort using CAMS-consistent statements with patients from the SBCPQ described above (see Table 2).

CAMS practice. Adherence to CAMS practice was measured using eight behaviors emphasized during CAMS training. These include responses to two items from the SATQ: (1) using no suicide contracts "None of the time" and (2) using some form of safety or crisis response planning "All of the time." Additionally, six items from the CAQ were included: (3) using the SSF to assess suicide risk with suicidal patients "All of the time," (4) using the SSF within the CAMS framework, (5) sitting next to patients during portions of assessment and treatment planning, (6) having patients complete certain portions of the SSF, (7) using CAMS tracking forms, and (8) using CAMS outcome forms. For each behavior, if responses met the above criteria, they were given a score of "1," and if not, they were given a score of "0." A total practice adherence variable was obtained by summing scores for each of these eight behaviors. These total scores thus could from 0-8, with higher scores reflecting higher adherence to CAMS practice (see Table 2). Participants who indicated that they did not work with suicidal patients by selecting "Not Applicable" were not included in data analysis for this variable.

Table 2

General Adherence to the CAMS Therapeutic Philosophy and Practice

Adherence	*M*	*SD*	Range	α
CAMS Therapeutic Philosophy				
CAMS Approach (*n* = 108)	30.81	4.07	15 - 35	.75
Statements (*n* = 119)	17.17	5.83	4 - 28	.71
CAMS Practice (*n* = 105)	5.16	2.09	0 - 8	.70

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors. Total scores for the CAMS therapeutic approach score could range from 5-35; Total scores on the comfort using CAMS-consistent statements with suicidal patients score could range from 4-28; Total scores on the adherence to CAMS practice variable could range from 0-8.

Results

Variables Created for Data Analysis

Because of the small number of participants who endorsed certain therapist factor

categories and primary work settings (see Appendix A, Tables A1 and A2), their responses were

combined for later data analysis. Specifically, participant responses to highest degree earned

were collapsed into doctoral ($n = 60$) and master's ($n = 55$). Primary theoretical orientation was

dichotomized as CBT ($n = 67$) and orientations other than CBT ($n = 52$). Primary work settings

were collapsed to university counseling center ($n = 23$), community mental health center ($n =$

35), outpatient medical/VAMC ($n = 27$), psychiatric inpatient/residential ($n = 17$), and private

practice ($n = 13$). Finally, responses to the number of colleagues participants reported knowing

who use CAMS were collapsed to 0-5 ($n = 53$), 6-10 ($n = 31$), and 11 or more ($n = 36$).

An additional variable gauging degree of psychotherapy integration was creating using

participant responses to the Likert-style theoretical orientation questions ("To what extent would

you say that your work with patients is guided by the each of the following theoretical

frameworks?"). Responses could range from 1 (Not at All) to 7 (To a Great Degree).

Participants were categorized as "integrative" ($n = 46$) if they rated two of the five theoretical

orientations as at least a 6 or three different orientations with a 5 or above. They were

categorized as "somewhat integrative" ($n = 58$) if they rated two theoretical orientations as at

least "4" but did not meet criteria for "Integrative." Finally, they were classified as "non-

integrative" ($n = 16$) if they did not rate two different theoretical orientations as at least "4."

General Adherence to the CAMS Therapeutic Philosophy and CAMS Practice

Across the sample, participants reported variable levels of adherence to the CAMS

framework (see Table 2). Specifically, the mean adherence to the CAMS therapeutic

approach was generally high, roughly equivalent to scores of 6 out of 7 across all questions. In

contrast, the mean comfort using CAMS-consistent statements with patients was more moderate,

equivalent to ratings of about 4 out of 7 across all questions. Finally, the mean adherence to

CAMS practice was also relatively high, with therapists on average reporting implementing

slightly over 5 of the 8 behaviors strongly emphasized during training in CAMS.

Correlations Among the Adherence Variables

The extent to which participants reported adhering to the CAMS therapeutic approach

was significantly related to each of the other CAMS adherence variables (see Table 3).

Specifically, a small but significant correlation (Cohen, 1992) was found between higher

adherence with the CAMS therapeutic approach and higher comfort using CAMS-consistent

statements. Similarly, a medium relation was found between higher adherence to the CAMS

therapeutic approach and higher adherence to CAMS practice. However, comfort using CAMS-

consistent statements and adherence to CAMS practice were not significantly related. The level

of overlap observed between these three variables suggests that they are distinct and that they

can be analyzed separately.

Adherence as a Function of Type of CAMS Training

ANOVA analyses were conducted to see if there were differences on each adherence

variable between participants who completed more intensive types of CAMS training and those

who received less intensive training. Consistent with prediction, participants who attended a

more intensive CAMS training reported significantly higher comfort using CAMS-consistent

statements than did those who attended a less intensive training (see Table 4). However,

Table 3

Correlations Between CAMS Adherence Variables and Continuous Therapist Factors

	CAMS Therapeutic Approach	Comfort Using CAMS-Consistent Statements	Adherence to CAMS Practice
CAMS Approach	--	.22*	.33**
Statements	--	--	.11
Age	.22*	.15	.05
Total Years in Practice	.21*	.02	.08
Likert Ratings of Theoretical Orientation			
CBT	.23*	.21*	- .04
Dynamic	.06	- .23*	.04
Humanistic	.07	- .09	- .02
Family Systems	.03	- .03	- .16
Other	.07	- .02	.11
Patient Suicide Attempts	.10	.16	- .16
Patient Deaths by Suicide	- .16	.13	.05
CAMS Confidence	.37***	.34***	.21*

Note. CAMS Approach = Adherence to the CAMS therapeutic approach; Statements = Comfort using CAMS-consistent statements; CAMS Practice = Adherence to CAMS practice; CBT = Behavioral/Cognitive-Behavioral; Dynamic = Psychodynamic/Psychoanalytic; Humanistic = Humanistic/Experiential/Existential; Family Systems = Systems/Family Systems; Other = Another theoretical orientation than those mentioned previously; Patient Suicide Attempts = Number of patients who made a suicide attempt while in treatment with the participant; Patient Deaths by Suicide = Number of patients who died by suicide while in treatment with the participant; CAMS Confidence = "At the end of your most recent CAMS training(s), how confident were you in your ability to use CAMS with patients?"
*p < .05. **p < .01. ***p < .001.

Table 4

Means and Differences in CAMS Adherence as a Function of Categorical Contextual Variables

	CAMS Therapeutic Approach	Comfort Using CAMS-Consistent Statements	Adherence to CAMS Practice
CAMS Training Type			
More Intensive	30.87	18.48	5.11
Less Intensive	30.70	14.93	5.25
F-value	0.04	11.14^{**} (.64)	0.11
Therapist Factors			
Gender			
Male	31.27	19.48	5.42
Female	30.56	16.00	5.01
F-value	0.73	10.16^{**} (.62)	0.92
Highest Degree Earned			
Doctoral	31.66	17.68	5.44
Masters	30.04	16.76	4.88
F-value	4.40^{*} (.41)	0.68	1.82
CAMS Colleagues			
0-5	30.78	18.04	4.52_a
6-10	29.79	15.83	5.32_{ab}
11 or more	31.66	17.00	5.88_b
F-value	1.67	1.40	4.34^{*} (.66)
Primary Work Setting			
UCC	30.73	13.61_a	5.70
CMH	30.87	16.94_{ab}	4.25
OM/VA	31.35	20.54_b	5.54
RES	30.56	17.71_{ab}	5.33
PP	30.33	15.69_{ab}	5.27
F-value	0.16	5.58^{***} (1.34)	2.00

Note. More Intensive = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Less Intensive = Participants did not complete at least 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Doctoral = DSW, MD, PhD, or PsyD; Masters = MA, MEd, MS, or MSW; CAMS Colleagues = The number of colleagues participants reported knowing who use CAMS; UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice. Means with different subscripts are significantly different from each other. Numbers in parentheses are the effect sizes (Cohen's *d*; Cohen, 1992) for the significant analyses.
$^{*}p < .05.$ $^{**}p < .01.$ $^{***}p < .001.$

contrary to prediction, there were no differences as a function of type of training on either

adherence to the CAMS therapeutic approach or adherence to CAMS practice.

Adherence as a Function of Therapist Factors

      Analysis of continuous variables. Correlational analyses were conducted to examine

the relations between continuous therapist factor variables and CAMS adherence (see Table 3).

The therapist factor most strongly and consistently related to measures of CAMS adherence was

confidence about personal ability to use CAMS following training. Specifically, medium-sized

correlations (Cohen, 1992) were observed between higher reported confidence following a

CAMS training and both higher adherence to the CAMS therapeutic approach and greater

comfort using CAMS-consistent statements. Similarly, a small but significant relation was found

between higher reported confidence using CAMS and more adherence to CAMS practice.

      The extent to which participants considered their theoretical orientation to be

behavioral/cognitive behavioral or psychodynamic/psychoanalytic were both significantly

related to CAMS adherence variables. Specifically, small but significant correlations were found

between higher ratings of behavioral or cognitive/behavioral theoretical orientation and both

higher adherence to the CAMS therapeutic approach and greater comfort using CAMS-

consistent statements with suicidal patients. In contrast, a small but significant inverse

association was observed between higher ratings of psychodynamic/psychoanalytic theoretical

orientation and lower comfort using CAMS-consistent statements. Finally, there were small but

significant correlations between higher adherence to the CAMS therapeutic approach and both

participants' ages and their total number of years in practice following the completion of their

terminal degrees. No other continuous therapist factor (i.e., the number of patients who made a

suicide attempt while in treatment, the number of patients who died by suicide while in treatment, and the extent to which participants considered their theoretical orientation to be something other than behavioral, cognitive behavioral, psychodynamic, or psychoanalytic) was significantly related to any CAMS adherence variable.

Analysis of categorical variables. ANOVA analyses were conducted to test differences on CAMS adherence variables as a function of categorical therapist factors. No significant differences on any adherence variable were observed as a function of participants' country of residence (USA or other), when they completed their most recent CAMS training, their primary theoretical orientation, their degree of psychotherapy integration, or whether or not they reported having had a patient make a suicide attempt or die by suicide while in treatment (see Appendix M, Tables M8 to M13). However, significant differences were observed as a function of participants' gender, their highest degree earned, and the number of colleagues whom they reported knowing who use CAMS (see Table 4).

With respect to gender, men reported significantly higher comfort using CAMS-consistent statements than did women (see Table 4). However, consistent with prediction, there were no differences between men and women with respect to adherence to the CAMS therapeutic approach or adherence to CAMS practice. When considering educational background, participants whose highest degree earned was a doctorate reported significantly higher adherence to the CAMS therapeutic approach than participants whose highest degree was a masters. As predicted, there were no differences between participants on comfort using CAMS-consistent statements with patients or adherence to CAMS practice as a function of highest degree earned. Finally, participants who reported knowing 0-5 colleagues who use

CAMS reported significantly lower adherence to CAMS practice than did participants who knew 11 or more. However, no other differences were found as a function of this variable, which was consistent with prediction.

Adherence as a Function of Reported Agency Support and Primary Work Setting

There was no difference in reported level of agency support based on participants' primary work settings (see Appendix M, Table M14). In addition, reported level of agency support was not significantly related to any CAMS adherence variable (see Appendix M, Table M15). With respect to primary work setting, no differences were observed on either adherence to the CAMS therapeutic approach or adherence to CAMS practice (see Table 4). However, participants who reported working in outpatient medical centers/VAMCs reported significantly higher comfort using CAMS-consistent statements than did participants who primarily worked in university counseling centers. No other differences were observed.

Additional Post-Hoc Analysis

An additional post-hoc ANOVA analysis was conducted to determine whether there was a difference in reported level of agency support between participants who knew fewer or many colleagues who use CAMS, given the observed difference between these groups on adherence to CAMS practice (see Table 4). Results indicated that participants who knew 11 or more colleagues who use CAMS did report significantly higher agency support ($M = 6.57$) than participants who knew only 0-5 ($M = 5.63$, $p = .007$; see Appendix M, Table M16).

<div align="center">

Discussion

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Although the CAMS framework has amassed empirical support across several settings (e.g., Ellis et al., 2012; Jobes et al., 2005), no studies to date have investigated the extent to

which therapists trained in CAMS agree with its philosophy and use recommended practices when working with suicidal patients. The present study represents a first step in this direction.

Adherence to CAMS philosophy was operationalized in two ways. First, adherence to the CAMS therapeutic approach was conceptualized as the extent to which therapists reported collaborating with patients throughout the treatment process, targeting factors that "drive" suicidality, and helping suicidal patients cultivate a sense of hope and meaning. Participants across the sample reported generally high scores on this variable, which is consistent with evidence that training can significantly alter clinicians' attitudes towards engaging suicidal patients (e.g., Chagnon, Houle, Marcoux, & Renaud, 2007; Gask, Dixon, Morriss, Appleby, & Green, 2006; Jacobson, Osteen, Jones, & Berman, 2012; Oordt, Jobes, Fonseca, and Schmidt, 2009).

A second, more indirect way of assessing CAMS philosophy adherence involved measuring therapist comfort using CAMS-consistent statements with patients, as participants may be more comfortable using these provocative statements if they understood the underlying CAMS philosophy. In contrast to the stronger adherence observed for the CAMS therapeutic approach, participants across the sample reported a moderate level of comfort making these statements. However, because participants were not asked about the extent to which they *actually say* such things to patients, their behavior in actual clinical practice is unknown. In addition, it may be the case that the level of comfort reported in this sample reflects an *increase* from what participants would have reported prior to their CAMS training, which would match previous evidence that suicide-focused training is associated with increases in practitioner confidence and comfort for working with suicidal patients (e.g., Oordt et al., 2009).

Participants across the sample reported relatively high adherence to CAMS practice, which is consistent with the extent to which therapists generally report engaging in behaviors emphasized during a suicide-focused training (e.g., Gask et al., 2006; Jacobson et al., 2012; Oordt et al., 2009). However, the reported level of practice adherence in the present study stands in contrast to poorer self-reported adherence observed with psychotherapies and interventions designed for other psychiatric conditions, even when such treatments are considered "gold-standard" (e.g., Becker, Zayfert, & Anderson, 2004; Stobie, Taylor, Quigley, Ewing, & Salkovskis, 2007). It may be the case that the higher reported practice adherence in this study reflects an artifact of the sample, as some participants may have completed this survey because of their support for CAMS. On the contrary, it may instead be the case that this level of adherence reflects the professional risks and clinical concerns associated with treating suicidal patients, including the possibility of patients' attempting or dying by suicide and the fear of malpractice lawsuits. Jobes et al. (2008) noted that entire training clinics have elected to not treat patients at elevated risk for suicide in order to avoid these potential outcomes. Practitioners experiencing these fears may be more likely to adhere to specified and recommended practices following training in CAMS, which explicitly targets prevention of patient suicide and thus also protects against malpractice litigation. In addition, despite the high level of clinical severity associated with acute suicidality, few empirically supported suicide-focused approaches are available. As such, therapists who receive CAMS training also may adhere to what they learned because they lack familiarity with and training in other approaches.

Few studies have attempted to examine the extent to which contextual variables like type of training, therapist factors, and work setting factors influence attitudes and behaviors following

a training (Biedas & Kendall, 2010). In the present study, only one contextual factor

(confidence in using CAMS following training) was significantly associated with all adherence

variables. This result is consistent with literature noted previously, which suggests that suicide-

focused training can significantly alter practitioner confidence for working with suicidal patients

(e.g., Oordt et al., 2009). Other findings were not consistent across adherence variables.

Participants in the present study who reported completed a more intensive CAMS

training (lasting at least 1 day or involving an online interactive program) did not differ

significantly from those who had less intensive training on adherence to either the CAMS

therapeutic framework or CAMS practice. This suggests that both levels of training can equally

facilitate CAMS-specific knowledge acquisition and behavioral implementation. However,

participants who attended a more intensive CAMS training did report greater comfort using

CAMS-consistent statements with patients. It is possible that participants completing a more

intensive CAMS training have more opportunities to discuss or reflect upon the CAMS

therapeutic philosophy and the rationale for these statements during training, which may

facilitate greater comfort with using them in practice. Future research should examine this

difference further and consider whether or not it is associated with actual behavior in practice.

No differences on adherence measures were observed as a function of many therapist

factors, including participants' country of residence, the date when they completed their most

recent CAMS training, their primary theoretical orientation, their degree of psychotherapy

integration, or whether they reported having a patient make a suicide attempt or die by suicide

while in treatment. However, men reported significantly greater comfort using CAMS-

consistent statements with patients than did women. Such statements may seem quite

provocative and intrusive, particularly if considered outside the context of the CAMS

therapeutic philosophy. In a survey of practicing clinicians, women tended to rate themselves as

more conservative and less intrusive than men when engaging with patients in psychotherapy

(Wogan & Norcross, 1985), and this tendency could explain the finding in this study.

In a similar manner, therapists whose highest degree was a doctorate reported

significantly higher adherence to the CAMS therapeutic approach than did those whose highest

degree was a master's. This may be attributed to differences in training opportunities for each

program type. Weissman and colleagues' (2006) survey of psychotherapy training indicated that

a higher percentage of training in evidence-based psychotherapies (which are primarily

extensions of CBT) met the gold standard in PhD and PsyD programs than in MSW programs.

A core component of CBT is highly active collaboration between the clinician and patient (Beck,

2012), and practitioners with greater training in CBT may be more comfortable and have more

experience collaborating with patients in the specific active manner suggested during CAMS

training. No other differences were observed as a function of education.

Higher ratings of a cognitive or cognitive-behavioral theoretical orientation were

significantly associated with both greater adherence to the CAMS therapeutic approach and

comfort using CAMS-related statements with patients, which may reflect the explicit emphasis

on highly active collaboration in CBT described previously (Beck, 2012). In contrast, higher

dimensional ratings of a psychodynamic or psychodynamic theoretical orientation were

associated with *lower* ratings of comfort using CAMS-consistent statements. Dynamic

practitioners may consider such statements invasive and confrontational, which could impact

their comfort using them with patients. However, dimensional ratings of a psychodynamic

theoretical orientation were positively associated with both adherence to the CAMS

therapeutic approach and CAMS practice, which suggests that these clinicians do not disagree

with (or feel opposed to) the overarching CAMS philosophy or the recommended clinical

behaviors.

Reported adherence to CAMS practice was higher for participants who knew

11 or more colleagues who use CAMS than for those who knew 0-5. It is likely clinicians who

know a large number of colleagues who use CAMS work in settings where CAMS as used as in

institutionalized practice, given the significantly higher agency support these participants

reported than did those who knew few colleagues who use CAMS.

Finally, participants' age and number of years in practice were each positively related to

adherence to the CAMS therapeutic approach, which may be attributed to greater comfort in

clinical work and more experience working with suicidal patients. In fact, a medium correlation

was observed in this sample between more years in clinical practice and a higher number of

patients who made a suicide attempt while in treatment ($r = .30$). Greater experience working

with suicidal patients could facilitate deeper understanding of the CAMS therapeutic approach

and willingness to implement it in clinical practice.

Taken together, the few relations observed between therapist factors and CAMS

adherence variables and the few, inconsistent differences found suggest that therapist factors do

not strongly affect adherence to either the CAMS therapeutic philosophy or CAMS practice.

These results provide initial support for Jobes' suggestion that CAMS can be equally accessed

and implemented by all practitioners (personal communication, May 14, 2012). No other

investigations of suicide-focused training have gauged the effect of therapist factors to the extent

of the present study, but other studies have similarly found that therapist factors do not significantly impact knowledge and reported practice following training. For example, one study assessing clinicians' knowledge, confidence, and ability to effectively conceptualize a patient's suicide risk following a suicide-focused training found that changes in these variables from before to after training did not differ as a function of participants' status as trainees or full staff members (Pisani, Cross, Watts, & Conner, 2012). Other results come from investigations of practitioners trained in DBT. Specifically, Herschell, Lindhiem, Kogan, Celedonia, and Stein (2014) found very few differences following training in the degree of change of confidence in DBT's effectiveness or use of DBT components as a function of participants' professional background variables (e.g., highest degree earned, years of clinical experience). Similarly, DiGiorgio et al. (2010) found very few differences in reported practice as a function of DBT therapists' theoretical orientation, which was the only therapist factor directly tested.

With respect to primary work setting, participants who worked in outpatient medical centers or Veterans Affairs Medical Centers reported significantly higher comfort using CAMS-consistent statements than participants who worked primarily in a university counseling center. This finding may reflect differences in patients' presenting concerns in each of these settings. Although there is evidence that the number of suicidal patients presenting to university counseling centers is increasing (Benton, Robertson, Tseng, Newton, & Benton, 2003), it is likely the case that practitioners working in outpatient medical centers have more experience working with patients for whom suicide is an acute concern. In fact, 76.9% of participants in the present study who worked primarily in an outpatient medical center or VAMC reported having at least one patient make a suicide attempt while in treatment, as opposed to 56.5% of participants

who worked primarily in a university counseling center. Similarly, 11.5% of patients who worked in an outpatient medical center or VAMC reported having a patient die by suicide while in treatment as opposed to 4.3% of practitioners who worked in a university counseling center. Differences in levels of exposure to suicidal patients may account for this difference in comfort using CAMS-consistent statements. However, the fact that no differences were observed on adherence to the CAMS therapeutic approach or CAMS practice as a function of primary work setting strongly suggests that CAMS can in fact be implemented broadly and consistently, regardless of setting.

Limitations to this study should be noted. First, although the sample size for the present study was larger than that of other studies of suicide-focused training (e.g., Oordt et al., 2009) and comparable to another study of therapist adherence (DiGiorgio et al., 2010), the response rate for this study (7.0%) may seem low. It is possible that this rate is actually an underestimation, though, as the total number of AAS and ABCT-SSIG listserv members were included in the calculation even though many listserv members may have been ineligible for the study because of insufficient exposure to CAMS. In addition, some participants who were eligible may have discarded the request for participation because they received it through a listserv. Online requests for participation represent an efficient and effective way to reach a wide variety of practitioners (Fricker & Schonlau, 2002). However, participants may be more willing to complete a survey if the request is sent personally as opposed to disseminated broadly. Despite these concerns, the response rate for this study was comparable to (and in fact slightly higher than) that in the study of contextual factors on adherence most closely related in methodology (DiGiorgio et al., 2010).

A strength of other investigations of types of suicide-focused training is their ability to trace changes in attitudes and beliefs over time (e.g., Jacobson et al., 2012; Oordt et al., 2009). While the present study employed a cross-sectional design, future investigations of the effects of CAMS training should consider measuring aspects of the CAMS therapeutic philosophy (e.g., comfort using CAMS-consistent statements) before and immediately after training. Such information could more directly gauge how information is being conveyed and suggest changes in the training format to facilitate greater adherence to the CAMS therapeutic philosophy.

Finally, the present study, like some investigations of suicide-focused training to date (e.g., Gask et al., 2006; Oordt et al., 2009), measured adherence to CAMS practice using participants' self-report. Self-report represents the only means of measuring adherence to philosophy and confidence. However, Beidas and Kendall (2010) caution that practitioners may endorse self-reported behavior change following training that does not reflect behavior change in clinical practice. Future research on the manner in which CAMS practice behaviors are implemented could augment the findings of the present study by assessing changes in participants' self-reported behaviors over time (e.g., before training, after training, and at follow-up) or by employing an independently scored behavioral task. In addition, future research could also consider utilizing objective measures of adherence.

Despite these limitations, the results of this study provide very positive initial support for training in the CAMS framework. They suggest that practitioners who complete training in CAMS can successfully adhere to the CAMS therapeutic philosophy and implement CAMS-specific practices regardless of the type of training received, therapist factors, level of agency support, and primary work setting. Continued

investigations of CAMS training are warranted, particularly if they emphasize the assessment

of differences in pre-training and post-training attitudes, beliefs, and behaviors.

Appendix A

Descriptive Statistics

Table A1
Demographic Information for All Participants (N = 120)

Demographic Variable	Frequency (*n*)	Percentage (%)
Gender		
Male	40	33.3
Female	80	66.7
Ethnicity		
White/Caucasian	104	86.7
Black/African American	6	5.0
Hispanic/Latino	6	5.0
Asian	2	1.7
American Indian/Alaska Native	1	0.8
Other ("Danish")	1	0.8
Country of Residence		
U.S.A.	103	85.8
Other	17	14.2
Highest Degree Earned		
PhD	44	36.7
PsyD	13	10.8
MD	2	1.7
DSW	1	0.8
MA/MS	36	30.0
MSW	16	13.3
BA/BS	1	0.8
Other	7	5.8
Primary Work Setting		
Community Mental Health Center	35	29.2
University Counseling Center	23	19.2
Psychiatric Hospital/Residential Facility	17	14.2
Private Practice	13	10.8
Outpatient Clinic	13	10.8
General Hospital/Medical Center	6	5.0
VA/Military Medical Center	6	5.0
Correctional Facility	2	1.7
Medical School	2	1.7
Other	3	2.5

Demographic Variable	Frequency (n)	Percentage (%)
Primary Theoretical Orientation		
Behavioral/Cognitive-Behavioral	67	55.8
Psychodynamic/Psychoanalytic	20	16.7
Humanistic/Experiential/Existential	14	11.7
Systems/Family Systems	7	5.8
Other	11	9.2
Missing	1	0.8
Have you ever had a patient make a suicide attempt while you were treating him/her?		
Yes	71	59.2
No	48	40.0
Missing	1	0.8
Have you ever had a patient die by suicide while you were treating him/her?		
Yes	19	15.8
No	100	83.3
Missing	1	0.8
Have you ever been sued for malpractice/wrongful death?		
Yes	2	1.7
No	118	98.3

Table A2

CAMS-Related Information for All Participants (N = 120)

CAMS-related Variables	Frequency (*n*)	Percentage (%)
Which of the following CAMS Trainings have you completed? Choose all that apply.		
Read the CAMS Manual	60	50.0
Attended an informal Presentation	51	42.5
Attended a 1 day workshop	49	40.8
Attended a 1-2 hour lecture/discussion	42	35.0
Completed a multiple-day workshop	31	25.8
Completed an online (e-learning) course	5	4.2
Based on the question above, did participants complete a more intensive CAMS training (i.e., an online training or an in-person training lasting 1 day or longer)?		
Yes	75	62.5
No	45	37.5
When did you complete your most recent CAMS training?		
Less than one year ago	51	42.5
1 – 2 years ago	43	35.8
3 – 5 years ago	21	17.5
Six or more years ago	4	3.3
Missing	1	0.8
How many patients have you used CAMS with throughout your career?		
0	13	10.8
1 – 5	36	30.0
6 – 10	23	19.2
11 – 15	10	8.3
16 – 20	8	6.7
20 – 30	5	4.2
More than 30	25	20.8
Do you use CAMS with all patients for whom suicide is an active concern?		
Yes	71	59.2
No	38	31.7
I have never used CAMS	9	7.5
Missing	2	1.7

CAMS-related Variables	Frequency (*n*)	Percentage (%)
How many clinicians do you know personally who use CAMS?		
0	6	5.0
1 – 5	47	39.2
6 – 10	31	25.8
11 – 20	20	16.7
More than 20	16	13.3

Appendix B

Initial Email for Contacts at Organizations that Provided Some Type of CAMS Training

Hi X. I hope you're doing well!

One of my students at CUA, Kevin Crowley, is conducting a survey study about CAMS for his dissertation. Specifically, he created a series of questionnaires that should take about 20-25 minutes to complete, and we want as many mental health practitioners who have received some form of training in CAMS to fill them out. The more people who fill them out, the more information we will have for refining CAMS trainings and making them more accessible to clinicians from all disciplines.

I'm writing to you, as someone I know works at an institution that uses CAMS, to see whether you would be willing to send a formal request for participation to the people who have in the past and currently now work at your site. If so, we will send you the formal IRB-approved request for participation by the end of the week that includes further instructions and the link to the survey.

Please let me know whenever it is convenient for you. If you have any questions, I'd be happy to put you in contact with Kevin directly.

Thanks,

Dave

David A. Jobes, Ph.D., ABPP
Professor of Psychology
Associate Director of Clinical Training
The Catholic University of America
Department of Psychology
314 O'Boyle Hall
Washington, DC 20064
Ph: 202-319-5761
Fax: 202-319-6263
Email: jobes@cua.edu

Appendix C

Follow-up Email Sent to Contacts Who Agreed to Distribute Our Request for Participation
(Version 1 of 2: For Organizations that Provided CAMS Training for Institutionalized Practice)

Hi X. I hope you're doing well!

About a month ago, I emailed you about a dissertation being conducted at CUA by my student, Kevin Crowley. Specifically, Kevin created a series of 5 questionnaires related to CAMS and suicide-focused assessment and treatments, and these questionnaires should take about 20 minutes to complete. Sorry for the delay in sending the survey to you; we needed to work out some last minute bugs. But, we are finally ready to go!

I am asking you to pass along a request for participation in our study to members of your staff, including graduate students. Specifically, please forward this message to current staff who have had some exposure to CAMS, as well as to any professionals who were on your staff for the CAMS training but have since left your agency (if you have their contact information). Participation in this study is completely voluntary, but the more people who complete this survey, the more information I will have to improve CAMS trainings and make them more clinician-friendly. And, by completing this survey, participants become eligible to enter a drawing for a $50 Amazon gift card.

Of course, you are welcome to complete this survey yourself!

Here is the link, which also provides some more information about the study:
http://edu.surveygizmo.com/s3/1005232/How-are-YOU-using-CAMS. If you or your staff have any questions, please feel free to contact Kevin directly at 62crowley@cardinalmail.cua.edu.

Thanks for all your help.

Dave

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Appendix D

Follow-up Email Sent to Contacts Who Agreed to Distribute Our Request for Participation
(Version 2 of 2: For Organizations that Provided CAMS Training as CE Workshops)

Dear Friends and Colleagues,

I am pleased to report that a research team in the Department of Psychology at The Catholic
University of America (CUA) is conducting an internet-based survey study which investigates
how mental health professionals are using the "Collaborative Assessment and Management of
Suicidality" (CAMS) approach in clinical practice. The purpose of this study is to determine
what practitioners find clinically useful in CAMS, what they find less useful, and how they may
be modifying the framework. This is a dissertation research project that has been reviewed and
approved by CUA's Institutional Review Board, and three CUA faculty members serve on the
dissertation committee.

This email is intended to invite any of you to participate because you previously attended one of
my workshops on CAMS or suicide-focused treatment. Note, if you have already completed this
survey after hearing about it from another source, please do not fill it out again. It should take
about 20 minutes to complete, after which you will be eligible to enter a drawing for a $50
Amazon gift card.

Participation in this study is completely voluntary; we will not be able to tell whether or not you
participated. Obviously the more people who complete this survey, the more information can be
gathered about what practitioners find clinically useful in the CAMS framework and what they
do not, which can help us improve the intervention and CAMS trainings to make the approach
more effective and clinician-friendly. To participate, please click on the following link:
http://edu.surveygizmo.com/s3/1005232/How-are-YOU-using-CAMS.

If you have any questions about this study, please contact the Principal Investigator of this study
who is a CUA Ph.D. candidate named Kevin Crowley. Kevin can be reached at:
62crowley@cardinalmail.cua.edu.

Thank you very much for your help!

David A. Jobes, Ph.D., ABPP

Professor of Psychology
Associate Director of Clinical Training
The Catholic University of America; Department of Psychology
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Washington, DC 20064
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Appendix E

Request for Participation Posted on the American Association of Suicidology Listserv

Dear Friends and Colleagues,

I am pleased to report that a research team in the Department of Psychology at The Catholic University of America (CUA) is conducting an internet-based survey study which investigates how mental health professionals are using the "Collaborative Assessment and Management of Suicidality" (CAMS) approach in clinical practice. The purpose of this study is to determine what practitioners find clinically useful in CAMS, what they find less useful, and how they may be modifying the framework. This is a dissertation research project that has been reviewed and approved by CUA's Institutional Review Board and three CUA faculty members serve on the dissertation committee. The posting of this request was approved by the Suicidology List Administrator, Dr. Tom Ellis.

This email is intended to invite any of you to participate if you have received a structured training in CAMS or if you have read the Guilford Press book about CAMS (*Managing Suicidal Risk: A Collaborative Approach*, D. A. Jobes, 2006) with the intention of using this clinical framework in clinical practice. Note, if you have already completed this survey after hearing about it from another source, please do not fill it out again. It should take about 20 minutes to complete, after which you will be eligible to enter a drawing for a $50 Amazon gift card.

Participation in this study is completely voluntary; we will not be able to tell whether or not you participated. Obviously the more people who complete this survey, the more information can be gathered about what practitioners find clinically useful in the CAMS framework and what they do not, which can help us improve the intervention and CAMS trainings to make the approach more effective and clinician-friendly. To participate, please click on the following link: http://edu.surveygizmo.com/s3/1005232/How-are-YOU-using-CAMS.

If you have any questions about this study, please contact the Principal Investigator of this study who is a CUA Ph.D. candidate named Kevin Crowley. Kevin can be reached at: 62crowley@cardinalmail.cua.edu.

Thank you very much for your help!

Sincerely,

Dave Jobes

David A. Jobes, Ph.D., ABPP; Professor of Psychology
Associate Director of Clinical Training, The Catholic University of America
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Appendix F

Request for Participation Posted on the Association of Behavioral and Cognitive Therapies'
Suicide and Self-Injury Special Interest Group Listserv

Dear Friends and Colleagues,

I am pleased to report that a research team in the Department of Psychology at The Catholic University of America (CUA) is conducting an internet-based survey study which investigates how mental health professionals are using the "Collaborative Assessment and Management of Suicidality" (CAMS) approach in clinical practice. The purpose of this study is to determine what practitioners find clinically useful in CAMS, what they find less useful, and how they may be modifying the framework. This is a dissertation research project that has been reviewed and approved by CUA's Institutional Review Board, and three CUA faculty members serve on the dissertation committee.

This email is intended to invite any of you to participate if you have received a structured training in CAMS or if you have read the Guilford Press book about CAMS (Managing Suicidal Risk: A Collaborative Approach, D. A. Jobes, 2006) with the intention of using this framework in clinical practice. Note, if you have already completed this survey after hearing about it from another source, please do not fill it out again. It should take about 20 minutes to complete, after which you will be eligible to enter a drawing for a $50 Amazon gift card.

Participation in this study is completely voluntary; we will not be able to tell whether or not you participated. Obviously the more people who complete this survey, the more information can be gathered about what practitioners find clinically useful in the CAMS framework and what they do not, which can help us improve the intervention and CAMS trainings to make the approach more effective and clinician-friendly. To participate, please click on the following link: http://edu.surveygizmo.com/s3/1005232/How-are-YOU-using-CAMS.

If you have any questions about this study, please contact the Principal Investigator of this study who is a CUA Ph.D. candidate named Kevin Crowley. Kevin can be reached at: 62crowley@cardinalmail.cua.edu.

Thank you very much for your help!

Sincerely,

Dave Jobes

David A. Jobes, Ph.D., ABPP; Professor of Psychology
Associate Director of Clinical Training, The Catholic University of America
Department of Psychology, 314 O'Boyle Hall; Washington, DC 20064
Ph: 202-319-5761; Fax: 202-319-6263; Email: jobes@cua.edu

Appendix G

Information Participants Viewed Before Beginning the Survey

Thank you for your interest in our survey!

The five questionnaires in this survey make up a dissertation study being conducted at The Catholic University of America (CUA). This study is examining how mental health professionals are using the Collaborative Assessment and Management of Suicidality (CAMS) framework and other suicide-focused assessment and intervention strategies in clinical practice. Because you have participated in a training that emphasized CAMS, or because you have read Dr. David Jobes's primary CAMS text (*Managing Suicidal Risk: A Collaborative Approach;* Jobes, 2006), we would like to invite you to participate.

Regardless of how much training and experience you have with CAMS, your answers to these survey questions will provide invaluable information about how CAMS and these other interventions are being used in actual practice settings.

This research has been approved by CUA's Institutional Review Board, and should take about 20 minutes to complete. Participation in this study is completely voluntary, and Dr. Jobes will have no knowledge of whether or not you participate. Your completing the survey will provide important information, including suggestions about what practitioners find clinically useful in the CAMS framework and what they do not, that in turn can help improve future CAMS trainings. Additionally, when you complete this survey, you will be eligible to enter in a drawing for a $50 Amazon gift card.

To participate, it is **required** that you have done one of the following: a) completed a CAMS-focused training, b) completed a suicide-focused training that emphasized CAMS, or c) read the CAMS treatment manual.

Thank you in advance for your time and effort!

TBQ (Therapist Background Questionnaire)

Please provide the following demographic information about yourself.
1. Gender: ☐ Male ☐ Female

2. Age: _____

3. Ethnicity (Please choose all that apply):
   ☐ I prefer not to answer
   ☐ Black/African American
   ☐ White/Caucasian
   ☐ Asian
   ☐ Hispanic/Latino
   ☐ Native Hawaiian/Other Pacific Islander
   ☐ American Indian/Alaska Native
   ☐ Other _____

4. In what country do you live?
   ☐ USA
   ☐ Other _____

5. What is your highest degree?
   ☐ B.A./B.S.
   ☐ D.S.W. (Dr. social work)
   ☐ Ed.D. (Dr. edu.)
   ☐ L.P.N.
   ☐ M.A./M.S.
   ☐ M.D. (Dr. med.)
   ☐ M.S.W.
   ☐ R.N.
   ☐ Ph.D. (Dr. phil.)
   ☐ Psy.D. (Dr. psy.)
   ☐ Other _____

6. In what field did you receive your highest degree?
   ☐ Clinical Psychology
   ☐ Counseling Psychology
   ☐ Marital and Family Therapy
   ☐ Nursing
   ☐ Pastoral Counseling
   ☐ Psychiatry
   ☐ Social Work
   ☐ Other _____

7. For how many years since you received your highest degree have you been a practicing mental health clinician? _____

8. In what setting do you primarily practice?
☐ College or University Counseling Center
☐ Community Mental Health Center
☐ Correctional Facility
☐ Emergency Room
☐ General Hospital/Medical Center
☐ Health Maintenance Organization
☐ Medical School
☐ Outpatient Clinic
☐ Private Practice
☐ Psychiatric Hospital
☐ School District
☐ Veterans Affairs/Military Medical Center

☐ Other _____

9. To what extent would you say that your work with patients is guided by each of the following theoretical frameworks?
Behavioral/Cognitive-Behavioral

☐	☐	☐	☐	☐	☐	☐
Not at all	2	3	Somewhat	5	6	To a Great Degree

Psychodynamic/Psychoanalytic

☐	☐	☐	☐	☐	☐	☐
Not at all	2	3	Somewhat	5	6	To a Great Degree

Humanistic/Experiential/Existential

☐	☐	☐	☐	☐	☐	☐
Not at all	2	3	Somewhat	5	6	To a Great Degree

Systems/Family Systems

☐	☐	☐	☐	☐	☐	☐
Not at all	2	3	Somewhat	5	6	To a Great Degree

Other _____

☐	☐	☐	☐	☐	☐	☐
Not at all			Somewhat			To a great degree

10. If your work with patients is guided by a theoretical orientation that falls under "Other," what is it?

11. Which of the following would you consider your **primary** theoretical orientation?
 □ Behavioral/Cognitive-Behavioral
 □ Psychodynamic/Psychoanalytic
 □ Humanistic/Experiential/Existential
 □ Systems/Family Systems
 □ Other: _____

12. Have you ever had a patient make a suicide attempt while you were treating him/her?
 □ Yes   □ No
 If yes, how many? _____

13. Have you ever had a patient die by suicide while you were treating him/her?
 □ Yes   □ No
 If yes, how many? _____

14. Have you ever been sued for malpractice/wrongful death?
 □ Yes   □ No

Appendix I

STQ (Suicide Training Questionnaire)

1. I have completed the following Collaborative Assessment and Management of Suicidality (CAMS) training(s) (Choose all that apply):

   ☐ Read the CAMS Book (Managing Suicidal Risk: A Collaborative Approach*;* Jobes, 2006)
   ☐ Attended an Informal Presentation
   ☐ Attended a 1-2 Hour Formal Lecture/Discussion
   ☐ Attended a 1 Day Workshop
   ☐ Attended a Multiple Day Workshop
   ☐ Completed an online (e-learning) course

2. Which CAMS training did you complete most recently?
   ☐ Read the CAMS Book (Managing Suicidal Risk: A Collaborative Approach*;* Jobes, 2006)
   ☐ Attended an Informal Presentation
   ☐ Attended a 1-2 Hour Formal Lecture/Discussion
   ☐ Attended a 1 Day Workshop
   ☐ Attended a Multiple Day Workshop
   ☐ Completed an online (e-learning) course

3. When did you complete that training?
   ☐ Less than 1 year ago
   ☐ 1 – 2 years ago
   ☐ 3 – 5 years ago
   ☐ 6 or more years ago

4. At the end of your most recent CAMS training(s), how confident were you in your ability to use CAMS with patients?

☐	☐	☐	☐	☐	☐	☐
Not at all Confident	2	3	Somewhat Confident	5	6	Extremely Confident

5. How likely are you to pursue additional CAMS training(s)?

☐	☐	☐	☐	☐	☐	☐
Not at all Likely	2	3	Somewhat Likely	5	6	Extremely Likely

6. If you work in an agency or organization, how supportive has your agency been of your *practicing* CAMS? If you do not work in an agency or organization, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at all Supportive	2	3	Somewhat Supportive	5	6	Extremely Supportive	Not Applicable

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7. How many patients have you used CAMS with, throughout your career?
   ☐ 0
   ☐ 1 - 5
   ☐ 6 - 10
   ☐ 11-15
   ☐ 16 - 20
   ☐ 20 - 30
   ☐ More than 30
        If you answered "0," why haven't you used CAMS?

8. If you have used CAMS, do you use it with all patients for whom suicide is an active concern?
   ☐ Yes   ☐ No   ☐ I have never used CAMS
        If "Yes," why?

        If "No," why not?

9. Which of the following suicide-focused interventions/frameworks would be your first choice to use when working with patients for whom suicide is an active concern?

   ☐ Brief Cognitive Behavioral Therapy for Suicide (BCBT)
   ☐ Cognitive Therapy for Suicide (CT)
   ☐ Collaborative Assessment and Management of Suicidality (CAMS)
   ☐ Dialectical Behavioral Therapy (DBT)
   ☐ Problem Solving Therapy (PST) for Suicide
   ☐ Other Suicide-Specific Intervention _____
   ☐ None of the above

10. Why would the intervention/framework you selected be your first choice? If you answered "None of the above," please write "NA."

Appendix J

SBCPQ (Suicide Beliefs and CAMS Philosophy Questionnaire)

How much do you agree with the following sentences?

1. A person who experiences suicidal ideation should be hospitalized whenever possible.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

2. Suicide is never an acceptable choice.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

3. Effective treatment should focus directly on what makes someone suicidal.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

4. Given the extent of their distress, suicide is a coping option that makes sense to suicidal people.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

5. Practitioners should always include something in treatment designed to help suicidal patients develop purpose and meaning in their lives.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

6. Some form of active crisis response planning/safety planning should always be incorporated into a suicidal person's treatment plan.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

7. When therapists and suicidal patients disagree about how treatment should proceed, priority should always be given to the therapist's preferences.

☐ ☐ ☐ ☐ ☐ ☐ ☐
Strongly 2 3 Neither Agree 5 6 Strongly
Disagree Nor Disagree Agree

8. If you primarily focus on treating the symptoms of patients' mental health/psychiatric diagnoses, suicidal thoughts and behaviors will go away.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

9. I worry about working with suicidal patients.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

10. If suicidal patients are not willing to pursue an evidence-based treatment for a specified time period (e.g., 3 months), practitioners should not work with them.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

11. It is important to regularly assess a suicidal patient's access to lethal means.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

12. It is not necessary to directly focus on establishing purpose and meaning with suicidal patients; once suicidal ideation and behaviors are reduced, patients will naturally find more purpose and meaning in life.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

13. If suicidal patients come in to therapy one day, and indicate that they want to talk about something that is not suicide-relevant, practitioners should redirect them to issues related to suicide.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

14. I often worry about legal ramifications of working with suicidal patients (e.g., I worry about being sued).

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

15. A no-suicide contract is an effective intervention.

☐ Strongly Disagree   ☐ 2   ☐ 3   ☐ Neither Agree Nor Disagree   ☐ 5   ☐ 6   ☐ Strongly Agree

16. A no-suicide contract will decrease my risk of being sued for malpractice.

☐   ☐   ☐   ☐   ☐   ☐   ☐

Strongly   2   3   Neither Agree   5   6   Strongly
Disagree   Nor Disagree   Agree

17. Adhering to the CAMS framework will decrease my risk of being sued for malpractice.

☐   ☐   ☐   ☐   ☐   ☐   ☐

Strongly   2   3   Neither Agree   5   6   Strongly
Disagree   Nor Disagree   Agree

How comfortable would you be saying these statements or something similar to one of your patients?

18. "Of course you have the option to kill yourself, but the law prohibits me from allowing you to do so while you're in treatment."

☐   ☐   ☐   ☐   ☐   ☐   ☐

Not at all   2   3   Somewhat   5   6   Extremely
Comfortable   Comfortable   Comfortable

19. "If treatment doesn't work, you always have the option to kill yourself later when you are not in treatment."

☐   ☐   ☐   ☐   ☐   ☐   ☐

Not at all   2   3   Somewhat   5   6   Extremely
Comfortable   Comfortable   Comfortable

20. "With everything you've been dealing with, I understand why you feel that suicide makes sense right now."

☐   ☐   ☐   ☐   ☐   ☐   ☐

Not at all   2   3   Somewhat   5   6   Extremely
Comfortable   Comfortable   Comfortable

21. "If you are not willing to engage in an evidence-based treatment, perhaps you are not a good candidate for outpatient mental health care at this time."

☐   ☐   ☐   ☐   ☐   ☐   ☐

Not at all   2   3   Somewhat   5   6   Extremely
Comfortable   Comfortable   Comfortable

Appendix K

SATQ (Suicide Assessment and Treatment Questionnaire)

Risk Assessment

1. Do you ever use standardized assessment tools to explore suicidality after determining a client is at risk? If you do not work with suicidal patients, please click "Not Applicable."
   ☐ Yes   ☐ No   ☐ Not Applicable

   If "Yes," what percentage of the time do you use standardized assessment tools to explore suicidality?

☐	☐	☐	☐
A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time

   If "Yes," what specific assessment tools do you use?

2. To what degree would you characterize your exploration of suicidal risk with patients as being collaborative? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at All	2	3	Somewhat	5	6	To a Great Degree	Not Applicable

3. What, if anything, do you do to make your assessment/exploration of suicidal risk collaborative?

   If you **do not assess suicidal risk in a collaborative manner,** please write "Nothing."

   If you **do not work with suicidal patients,** please write "NA" or "Not Applicable."

4. To what degree do you typically deconstruct (assess) the factors that make a patient suicidal (or, identify "drivers")? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at All	2	3	Somewhat	5	6	To a Great Degree	Not Applicable

5. What, if anything, do you do to make the process of deconstructing factors that make a patient suicidal (or, identifying "drivers") collaborative?

   If you **do not assess deconstruct factors that make patients suicidal,** please write "Nothing."

If you **do not work with suicidal patients,** please write "NA" or "Not Applicable."

Treatment Planning
6. Do you establish a set timeframe or duration for treatment with suicidal patients? If you do not work with suicidal patients, please click "Not Applicable."
    ☐ Yes   ☐ No   ☐ Not Applicable

    If "Yes," what is the usual timeframe or duration?
    ☐ 1 - 3 weeks
    ☐ 1 month
    ☐ 2 - 3 months
    ☐ 4 - 5 months
    ☐ 6 months
    ☐ 1 year
    ☐ More than 1 year

7. To what degree would you characterize your treatment planning with suicidal patients as being collaborative? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at All	2	3	Somewhat	5	6	To a Great Degree	Not Applicable

8. What, if anything, do you do to make your treatment planning with suicidal patients collaborative?

    If you **do not make treatment planning with suicidal patients a collaborative process,** please write "Nothing."

    If you **do not work with suicidal patients,** please write "NA" or "Not Applicable."

9. When planning treatment with suicidal patients, how often do you spend time addressing barriers to treatment attendance (e.g., transportation, work schedules, childcare issues, etc.)? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

For the next two questions, consider the patients you have had in the past year for whom suicidal ideation or behaviors (or both) were an active concern. If you did not work with any suicidal patients in the past year, please click "Not Applicable."

10. How often did these cases involve the use of a "no-suicide contract" that you created with the patient?

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

11. How often did these cases involve the use of some form of "crisis response plan" (e.g., safety plan, action plan, etc.) that you created with the patient?

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

Interventions
How often do you use the following strategies as part of treatment with suicidal patients? If you do not work with suicidal patients, please click "Not Applicable."

12. Acceptance-based methods (e.g., acceptance of negative thoughts and feelings; identifying and committing to valued actions).

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

13. Behavioral methods (e.g., behavioral activation; chain analysis; relaxation training; sleep hygiene)

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

14. Cognitive methods (e.g., ABC worksheets/thought records/thought logs; cognitive restructuring)

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

15. DBT skills (Distress Tolerance; Emotion Regulation; Interpersonal Effectiveness; Mindfulness)

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

16. Experiential methods (e.g., direct exploration and processing of emotions)

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

17. Mindfulness methods (e.g., mindfulness of the breath; body scan; other formal mindfulness meditation)

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

18. Psychodynamic methods (e.g., interpretation of unconscious material; interpretation of transference; teaching patients to mentalize)

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

19. Hope Kit/Survival Kit

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

20. Making a List of Reasons for Living

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

21. Problem Solving

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

22. Engaging a supportive other (e.g., friend, family member, etc.) as part of the treatment plan.

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

23. Directly identifying the impact of personal behaviors on interpersonal relationships

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

24. Other _____

☐   ☐   ☐   ☐   ☐   ☐
None   A Small Percentage   About Half   Most   All   Not
of the Time   of the Time   of the Time   of the Time   of the Time   Applicable

25. If you use a strategy (or *strategies*) that falls (or *falls*) under "Other," what do you use?

26. To what degree are your problem-focused interventions with suicidal patients collaborative? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at All	2	3	Somewhat	5	6	To a Great Degree	Not Applicable

27. What, if anything, do you do to make your interventions with suicidal patients collaborative?

If you **do not make your interventions with suicidal patients collaborative,** please write "Nothing."

If you **do not work with suicidal patients,** please write "NA" or "Not Applicable."

Purpose and Meaning

28. To what degree do you directly focus on cultivating a sense of purpose and meaning when working with suicidal patients? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐	☐	☐
Not at All	2	3	Somewhat	5	6	To a Great Degree	Not Applicable

29. What, if anything, do you do to cultivate a sense of purpose or meaning when working with suicidal patients?

If you **do not directly cultivate a sense of purpose or meaning when working with suicidal patients,** please write "Nothing."

If you **do not work with suicidal patients,** please write "NA" or "Not Applicable."

Appendix L

CAQ (CAMS Application Questionnaire)

1. How often do you use the Suicide Status Form (SSF) to assess risk with suicidal patients? If you do not work with suicidal patients, please click "Not Applicable."

☐	☐	☐	☐	☐	☐
None of the Time	A Small Percentage of the Time	About Half of the Time	Most of the Time	All of the Time	Not Applicable

2. If you use the SSF to assess risk with suicidal patients, do you typically use it by itself or within the CAMS framework?
   ☐ By itself   ☐ Within the CAMS framework   ☐ I do not use the SSF.

3. In your use of CAMS, is there any point during which you actually sit next to your patients?
   ☐ Yes   ☐ No   ☐ I do not use CAMS.

   If "No," why not?

4. When you typically use the SSF, do you have the patient complete certain portions?
   ☐ Yes   ☐ No   ☐ I do not use the SSF.
    If "Yes," what portions?

5. Do you use the CAMS Tracking Forms?
   ☐ Yes   ☐ No   ☐ I do not use the SSF

   If "No," why not?

6. Do you use the CAMS Outcome Forms?
   ☐ Yes   ☐ No   ☐ I do not use the SSF

   If "No," why not?

7. When would you stop using CAMS with a patient with whom you have been using it? If you do not use CAMS, please write "NA" or "Not Applicable."

8. How many clinicians do you know personally (e.g., friend, colleague, acquaintance, supervisor, student, etc.) who use CAMS?
   ☐ 0
   ☐ 1 - 5
   ☐ 6 - 10
   ☐ 11 – 20
   ☐ More than 20

Appendix M

Additional Tables

Table M1
Frequencies of Specific CAMS Behaviors (N = 120)

CAMS Behavior	Frequency (*n*)	Percentage (%)
How often do you use the SSF to assess risk with suicidal patients?		
None of the time	16	13.3
A small percentage of the time	10	8.3
About half of the time	14	11.7
Most of the time	30	25.0
All of the time	37	30.8
Not applicable	12	10.0
Missing	1	0.8
If you use the SSF, do you typically use it by itself or within the CAMS framework?		
Within the CAMS Framework	71	59.2
By itself	21	17.5
I do not use the SSF	23	19.2
Missing	5	4.2
In your use of CAMS, is there any point during which you actually sit next to your patients?		
Yes	89	74.2
No	12	10.0
I do not use CAMS	15	12.5
Missing	4	3.3
When you typically use the SSF, do you have your patients complete certain portions?		
Yes	80	66.7
No	10	8.3
I do not use the SSF	25	20.8
Missing	5	4.2
Do you use the CAMS Tracking Forms?		
Yes	75	62.5
No	26	21.7
I do not use the SSF	16	13.3
Missing	3	2.5

CAMS Behavior	Frequency (*n*)	Percentage (%)
Do you use the CAMS Outcome Forms?		
Yes	50	41.7
No	50	41.7
I do not use the SSF	17	14.2
Missing	3	2.5

Table M2

Differences in Reported Frequency of SSF Use as a Function of Contextual Variables

Contextual Variables	Mean SSF Use	F
Gender		0.32
Male (*n* = 38)	3.68	
Female (*n* = 69)	3.52	
Country of Residence		0.16
U.S.A. (*n* = 90)	3.56	
Other (*n* = 17)	3.71	
Highest Degree Earned		1.53
Doctoral (*n* = 53)	3.75	
Masters (*n* = 51)	3.41	
When did you complete your most recent CAMS training?		0.76
Less than one year ago (*n* = 48)	3.75	
1 – 2 years ago (*n* = 36)	3.61	
3 – 5 years ago (*n* = 18)	3.17	
Six or more years ago (*n* = 4)	3.75	
Did participants complete an intensive CAMS Training?		1.32
Yes (*n* = 66)	3.45	
No (*n* = 41)	3.78	
How many clinicians do you know personally who use CAMS?		5.52***
0 (*n* = 5)	4.20	
1-5 (*n* = 40)	2.90_a	
6-10 (*n* = 29)	3.62	
11-20 (*n* = 19)	4.05_b	
More than 20 (*n* = 14)	4.57_b	
Primary Theoretical Orientation		0.06
Behavioral/Cognitive-Behavioral (*n* = 60)	3.55	
Other (*n* = 47)	3.62	
Degree of Psychotherapy Integration		0.45
Integrative (*n* = 41)	3.41	
Somewhat Integrative (*n* = 52)	3.69	
Non-Integrative (*n* = 14)	3.64	

Contextual Variables	Mean SSF Use	F
Primary Work Setting		1.05
University Counseling Center (*n* = 23)	3.78	
Community Mental Health Center (*n* = 29)	3.10	
Outpatient Medical/VAMC (*n* = 26)	3.77	
Psychiatric Inpatient/Residential (*n* = 15)	3.60	
Private Practice (*n* = 11)	3.73	
Have you ever had a patient make a suicide attempt while you were treating him/her?		
Yes (*n* = 67)	3.52	0.28
No (*n* = 40)	3.68	
Have you ever had a patient die by suicide while you were treating him/her?		
Yes (*n* = 16)	3.25	1.00
No (*n* = 91)	3.64	

Note. Participants' reports of SSF use frequency were obtained from answers to this question: "How often do you use the SSF to assess risk with suicidal patients?" Responses included "None of the Time" (which earned a score of 1), "A small percentage of the time" (which earned a score of 2), "About half of the time" (which earned a score of 3), "Most of the time" (which earned a score of 4), and "All of the time" (which earned a score of 5). Participants who answered "Not Applicable" to this question were not included in this analysis. Means with different subscripts are significantly different. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat Integrative = Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously.
[***]*p* < .001.

Table M3

Relations Between Using the SSF by Itself or Within the CAMS Framework and Contextual Variables

	Do you administer the SSF by itself or within the CAMS Framework?			
Contextual Variables	By Itself	Within the CAMS Framework	Total	χ^2
Gender				0.30
Male	9	25	34	
Female	12	44	56	
Country of Residence				0.11
U.S.A.	18	57	75	
Other	3	12	15	
Highest Degree Earned				0.01
Doctoral	11	38	49	
Masters	9	30	39	
When did you complete your most recent CAMS training?				4.70
< 1 year ago	9	31	40	
1 – 2 years ago	5	25	30	
3 – 5 years ago	7	10	17	
6 or more years ago	0	3	3	
Did participants complete an intensive CAMS training?				0.09
Yes	12	42	54	
No	9	27	36	
How many clinicians do you know personally who use CAMS?				0.27
0	1	3	4	
1-5	7	22	29	
6-10	5	20	25	
11-20	4	13	17	
More than 20	4	11	15	
Primary Theoretical Orientation				4.53[*]
CBT	15	31	46	
Other	6	38	44	

Contextual Variables	By Itself	Within the CAMS Framework	Total	χ^2
Do you administer the SSF by itself or within the CAMS Framework?				
Degree of Psychotherapy Integration				0.95
Integrative	6	25	31	
Somewhat	11	36	47	
Non-Integrative	4	8	12	
Primary Work Setting				3.65
UCC	3	17	20	
CMH	8	14	22	
OM/VA	4	20	24	
RES	3	8	11	
PP	2	8	10	
Have you ever had a patient make a suicide attempt while in treatment?				1.37
Yes	16	43	59	
No	5	26	31	
Have you ever had a patient die by suicide while in treatment? [1]				5.48*
Yes	7	8	15	
No	14	61	75	

Note. Participants' reports of administering of the SSF by itself or within the CAMS framework were obtained from answers to this question: "If you use the SSF to assess risk with suicidal patients, do you typically use it by itself or within the CAMS framework?" Participants who answered "I do not use the SSF" for this question were not included in this analysis. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously. UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice.
*$p < .05$.

Table M4

Relations Between Whether or Not Participants Sit Next to Patients When Administering the SSF and Contextual Variables

	Do you sit next to patients when administering the SSF?			
Contextual Variables	Yes	No	Total	χ^2
Gender				0.15
Male	32	5	37	
Female	57	7	64	
Country of Residence				0.65
U.S.A.	75	9	84	
Other	14	3	17	
Highest Degree Earned				0.38
Doctoral	42	7	49	
Masters	44	5	49	
When did you complete your most recent CAMS training?				4.02
< 1 year ago	40	5	45	
1 – 2 years ago	32	2	34	
3 – 5 years ago	13	4	17	
6 or more years ago	3	1	4	
Did participants complete an intensive CAMS training?				4.52[*]
Yes	58	4	62	
No	31	8	39	
How many clinicians do you know personally who use CAMS?				3.02
0	5	0	5	
1-5	28	4	32	
6-10	28	2	30	
11-20	15	4	19	
More than 20	13	2	15	
Primary Theoretical Orientation				0.11
CBT	49	6	55	
Other	40	6	46	

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Do you sit next to patients when administering the SSF?				
Contextual Variables	Yes	No	Total	χ^2
Degree of Psychotherapy Integration				1.98
Integrative	36	5	41	
Somewhat	41	7	48	
Non-Integrative	12	0	12	
Primary Work Setting				2.89
UCC	20	2	22	
CMH	24	3	27	
OM/VA	21	3	24	
RES	13	1	14	
PP	8	3	11	
Have you ever had a patient make a suicide attempt while in treatment?				0.06
Yes	56	8	64	
No	33	4	37	
Have you ever had a patient die by suicide while in treatment?				0.01
Yes	14	2	16	
No	75	10	85	

Note. Participants' reports of sitting next to patients when administering the SSF were obtained from answers to this question: "In your use of CAMS, is there any point during which you actually sit next to your patients?" Participants who answered "I do not use CAMS" for this question were not included in this analysis. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously. UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice.
*$p < .05$.

Table M5

Relations Between Asking Patients to Complete Portions of the SSF and Contextual Variables

Contextual Variables	Do you have patients complete certain portions of the SSF?			
	Yes	No	Total	χ^2
Gender				0.22
Male	30	3	33	
Female	50	7	57	
Country of Residence				0.36
U.S.A.	66	9	75	
Other	14	1	15	
Highest Degree Earned				2.74
Doctoral	45	3	48	
Masters	33	7	40	
When did you complete your most recent CAMS training?				1.94
< 1 year ago	38	3	41	
1 – 2 years ago	25	5	30	
3 – 5 years ago	14	2	16	
6 or more years ago	3	0	3	
Did participants complete an intensive CAMS training?				0.47
Yes	47	7	54	
No	33	3	36	
How many clinicians do you know personally who use CAMS?				5.06
0	4	0	4	
1-5	25	4	29	
6-10	20	5	25	
11-20	16	1	17	
More than 20	15	0	15	
Primary Theoretical Orientation				2.01
CBT	43	3	46	
Other	37	7	44	

Contextual Variables	Yes	No	Total	χ^2
Degree of Psychotherapy Integration				3.66
Integrative	26	6	32	
Somewhat	42	4	46	
Non-Integrative	12	0	12	
Primary Work Setting				7.74
UCC	17	3	20	
CMH	18	5	23	
OM/VA	23	0	23	
RES	11	0	11	
PP	8	2	10	
Have you ever had a patient make a suicide attempt while in treatment?				2.93
Yes	54	4	58	
No	26	6	32	
Have you ever had a patient die by suicide while in treatment?				0.36
Yes	14	1	15	
No	66	9	75	

Note. Participants' reports of having patients complete portions of the SSF were obtained from answers to this question: "When you typically use the SSF, do you have the patient complete certain portions?" Participants who answered "I do not use the SSF" for this question were not included in this analysis. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously. UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice.

Table M6

Relations Between Using the CAMS Tracking Forms and Contextual Variables

	Do you use the CAMS Tracking Forms?			
Contextual Variables	Yes	No	Total	χ^2
Gender				2.41
Male	30	6	36	
Female	45	20	65	
Country of Residence				0.14
U.S.A.	63	21	84	
Other	12	5	17	
Highest Degree Earned				0.66
Doctoral	39	11	50	
Masters	34	14	48	
When did you complete your most recent CAMS training?				3.42
< 1 year ago	33	14	47	
1 – 2 years ago	28	6	34	
3 – 5 years ago	11	6	17	
6 or more years ago	3	0	3	
Did participants complete an intensive CAMS training?				0.91
Yes	44	18	62	
No	31	8	39	
How many clinicians do you know personally who use CAMS?				5.28
0	3	3	6	
1-5	21	11	32	
6-10	24	4	28	
11-20	15	5	20	
More than 20	12	3	15	
Primary Theoretical Orientation				0.25
CBT	39	15	54	
Other	36	11	47	

Contextual Variables	Yes	No	Total	χ^2
Degree of Psychotherapy Integration				1.61
Integrative	27	13	40	
Somewhat	38	10	48	
Non-Integrative	10	3	13	
Primary Work Setting				6.78
UCC	18	2	20	
CMH	16	10	26	
OM/VA	16	9	25	
RES	12	3	15	
PP	10	2	12	
Have you ever had a patient make a suicide attempt while in treatment?				0.05
Yes	48	16	64	
No	27	10	37	
Have you ever had a patient die by suicide while in treatment?				0.14
Yes	12	5	17	
No	63	21	84	

Do you use the CAMS Tracking Forms?

Note. Participants' reports of using the CAMS Tracking Forms were obtained from answers to this question: "Do you use the CAMS Tracking Forms?" Participants who answered "I do not use the SSF" for this question were not included in this analysis. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously. UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice.

Table M7

Relations Between Using the CAMS Outcome Forms and Contextual Variables

	Do you use the CAMS Outcome Forms?			
Contextual Variables	Yes	No	Total	χ^2
Gender				0.40
Male	19	16	35	
Female	31	34	65	
Country of Residence				3.47
U.S.A.	45	38	83	
Other	5	12	17	
Highest Degree Earned				1.74
Doctoral	28	21	49	
Masters	21	27	48	
When did you complete your most recent CAMS training?				3.15
< 1 year ago	22	24	46	
1 – 2 years ago	17	17	34	
3 – 5 years ago	8	9	17	
6 or more years ago	3	0	3	
Did participants complete an intensive CAMS training?				0.38
Yes	29	32	61	
No	21	18	39	
How many clinicians do you know personally who use CAMS?				1.30
0	3	2	5	
1-5	14	18	32	
6-10	14	14	28	
11-20	10	10	20	
More than 20	9	6	15	
Primary Theoretical Orientation				0.00
CBT	27	27	54	
Other	23	23	46	

Contextual Variables	Do you use the CAMS Outcome Forms?			
	Yes	No	Total	χ^2
Degree of Psychotherapy Integration				1.47
Integrative	17	22	39	
Somewhat	27	21	48	
Non-Integrative	6	7	13	
Primary Work Setting				5.93
UCC	13	7	20	
CMH	10	16	26	
OM/VA	10	15	25	
RES	10	5	15	
PP	6	5	11	
Have you ever had a patient make a suicide attempt while in treatment?				1.56
Yes	29	35	64	
No	21	15	36	
Have you ever had a patient die by suicide while in treatment?				3.47
Yes	5	12	17	
No	45	38	83	

Note. Participants' reports of using the CAMS Outcomes Forms were obtained from answers to this question: "Do you use the CAMS Outcome Forms?" Participants who answered "I do not use the SSF" for this question were not included in this analysis. "Intensive" CAMS training = Participants completed at least one 1 day workshop, multiple-day workshop, or online (e-learning) CAMS course; Other Primary Theoretical Orientation = Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other"; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously. UCC = University Counseling Center; CMH = Community Mental Health Center; OM/VA = Outpatient Medical Center/VAMC; RES = Psychiatric Inpatient/Residential; PP = Private Practice.

Table M8

Differences in CAMS Adherence Variables as a Function of Country of Residence

	Country of Residence		
Adherence	U.S.A.	Other	F
CAMS Approach	30.86 ($n = 92$)	30.50 ($n = 16$)	0.11
Comfort with Statements	17.23 ($n = 102$)	16.82 ($n = 17$)	0.07
CAMS Practice	5.23 ($n = 89$)	4.69 ($n = 16$)	0.97

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors; Other = Participants reported living in Australia, Austria, Denmark, or Ireland.

Table M9

Differences in CAMS Adherence Variables as a Function of When Participants Completed Their Most Recent CAMS Training

	When did you complete your most recent CAMS Training?				
Adherence	Less than One Year Ago	1 – 2 Years Ago	3 – 5 Years Ago	6 or More Years Ago	*F*
CAMS Approach	30.23 (*n* = 48)	31.05 (*n* = 38)	31.06 (*n* = 18)	34.33 (*n* = 3)	1.14
Statements	18.08 (*n* = 51)	16.31 (*n* = 42)	16.81 (*n* = 21)	16.75 (*n* = 4)	0.74
CAMS Practice	5.21 (*n* = 48)	5.43 (*n* = 35)	4.35 (*n* = 17)	6.25 (*n* = 4)	1.42

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors.

Table M10

Differences in CAMS Adherence Variables as a Function of Primary Theoretical Orientation

	Primary Theoretical Orientation		
Adherence	CBT	Other	*F*
CAMS Approach	30.81 ($n = 62$)	30.80 ($n = 46$)	0.00
Comfort with Statements	17.75 ($n = 67$)	16.42 ($n = 52$)	1.51
CAMS Practice	5.00 ($n = 59$)	5.37 ($n = 46$)	0.81

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors; CBT = Behavioral/Cognitive Behavioral; Other = Participant chose primary theoretical orientation of Psychodynamic/Psychoanalytic, Humanistic/Experiential/Existential, Systems/Family Systems, or "Other."

Table M11

Differences in CAMS Adherence Variables as a Function of Degree of Psychotherapy Integration

	Degree of Psychotherapy Integration			
Adherence	Integrative	Somewhat	Non-Integrative	F
CAMS Approach	31.39 ($n = 41$)	30.60 ($n = 52$)	29.93 ($n = 15$)	0.84
Statements	17.30 ($n = 46$)	16.81 ($n = 57$)	18.06 ($n = 16$)	0.31
CAMS Practice	4.95 ($n = 41$)	5.27 ($n = 51$)	5.38 ($n = 13$)	0.35

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors; Integrative = Participants rated two distinct theoretical orientations as at least "6" or three distinct theoretical orientations as at least "5" on a 7-point scale ("To what extent would you say that your work with patients is guided by the each of the following theoretical frameworks?"); Somewhat = Somewhat Integrative: Participants rated two distinct theoretical orientations as at least "4" using the 7-point noted previously, but did not meet criteria for "Integrative"; Non-integrative = Participants did not rate two distinct theoretical orientations as at least "4" using the 7-point scale noted previously.

Table M12

Differences in CAMS Adherence Variables as a Function of Whether Participants Had a Patient Make a Suicide Attempt While in Treatment

	Have you ever had a patient make a suicide attempt while in treatment?		
Adherence	Yes	No	*F*
CAMS Approach	30.79 ($n = 67$)	30.83 ($n = 41$)	0.00
Comfort with Statements	17.00 ($n = 71$)	17.42 ($n = 48$)	0.15
CAMS Practice	5.09 ($n = 66$)	5.28 ($n = 39$)	0.20

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors.

Table M13

Differences in CAMS Adherence Variables as a Function of Whether Participants Had a Patient Die by Suicide While in Treatment

	Have you ever had a patient die by suicide while in treatment?		
Adherence	Yes	No	*F*
CAMS Approach	31.00 ($n = 18$)	30.77 ($n = 90$)	0.05
Comfort with Statements	17.74 ($n = 19$)	17.06 ($n = 100$)	0.21
CAMS Practice	4.56 ($n = 16$)	5.27 ($n = 89$)	1.56

Note. CAMS Approach = CAMS therapeutic approach score; Statements = Comfort using CAMS-consistent statements with suicidal patients; CAMS Practice = Reported adherence to eight CAMS practice behaviors.

Table M14

Differences in Reported Agency Support for CAMS Practice Based on Primary Work Setting

Primary Work Setting	Mean Agency Support	F
		0.56
University Counseling Center ($n = 21$)	6.38	
Community Mental Health Center ($n = 35$)	6.03	
Outpatient Medical/VAMC ($n = 24$)	5.75	
Psychiatric Inpatient/Residential ($n = 17$)	6.06	
Private Practice ($n = 8$)	6.00	

Note. Participants' reports of agency support for CAMS practice were obtained from answers to this question: "If you work in an agency or organization, how supportive has your agency been of your *practicing* CAMS?" Responses ranged from 1 (Not at All Supportive) to 7 (Extremely Supportive). Participants who answered "Not Applicable" to this question were not included in this analysis.

Table M15

Correlations Between CAMS Adherence Variables and Agency Support

	CAMS Therapeutic Approach	Comfort Using CAMS-Consistent Statements	Adherence to CAMS Practice
Agency Support	.03	.08	.16

Note. Agency Support = "If you work in an agency or organization, how supportive has your agency been of your practicing CAMS?"

Table M16

Differences in Reported Agency Support for CAMS Practice Based on the Number of Colleagues Known Who Also Use CAMS

Number of Colleagues who use CAMS	Mean Agency Support	F
		4.97^{**}
0-5 ($n = 46$)	5.63_a	
6-10 ($n = 27$)	6.15_{ab}	
11 or More ($n = 35$)	6.57_b	

Note. Participants' reports of agency support for CAMS practice were obtained from answers to this question: "If you work in an agency or organization, how supportive has your agency been of your *practicing* CAMS?" Responses ranged from 1 (Not at All Supportive) to 7 (Extremely Supportive). Participants who answered "Not Applicable" to this question were not included in this analysis. Means with different subscripts are significantly different from each other.
$^{**}p < .01.$

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