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Examining Factors Influencing the Differential Reporting of Suicide Attempt History Among Undergraduates at Elevated Suicide Risk

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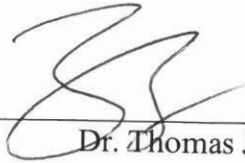
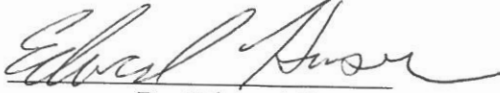Undergraduates at Elevated Suicide Risk

By

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Abstract

Prior studies suggest that individuals may respond inconsistently to different assessments of suicide attempt (SA) history; yet, little is known regarding why inconsistent reporting of SA history may occur. The overarching goal of this study was to examine factors that influence whether individuals consistently respond to different self-report measures designed to assess SA history. Undergraduate students (N = 141) who reported a lifetime history of suicidal ideation completed three different self-report measures of SA history: the (1) Beck Scale for Suicide Ideation (BSS), (2) Suicidal Behaviors Questionnaire—Revised (SBQ-R), and (3) Self-Injurious Thoughts and Behaviors Interview-Short Form (SITBI-SF), as well as indices of clinical severity, personality traits, and impulsivity. All measures were administered in a randomized order to control for potential order effects. Descriptive statistics and one-way ANOVAs were used to test study aims. Of the sample, 75.2% of participants denied an SA history across all three measures, 16.3% reported an SA across all measures ("consistent responders"), and 8.5% responded inconsistently to SA history measures ("inconsistent responders"). One-way ANOVAs did not reveal any statistically significant differences in clinical severity, personality traits, or impulsivity between consistent and inconsistent responders; however, medium effects were observed when comparing consistent and inconsistent responders on levels of conscientiousness, neuroticism/emotional stability, sensation-seeking, and self-reported future likelihood of making an SA. Findings from this study underscore a need for increased efforts to improve SA history assessments and to identify whether personality and clinical characteristics might play a role in inconsistent reporting of SA history among young adults.

Keywords: suicide, suicide attempt, assessment, consistent reporting

Examining Factors Influencing the Differential Reporting of Suicide Attempt History Among

Undergraduates at Elevated Suicide Risk

Suicide is a leading cause of death in the United States (U.S.), accounting for over 47,000 deaths annually, among whom approximately 6,200 are young adults aged 15 to 24 years (Centers for Disease Control and Prevention [CDC], 2019). Moreover, an estimated 1.4 million adults make a suicide attempt (SA) each year (Piscopo, Lipari, Cooney, & Glasheen, 2016). An SA is defined by the CDC (2019) as a "non-fatal, self-directed, potentially injurious behavior with any intent to die as a result of the behavior; might not result in injury." Of concern, in 2015 (the latest year for which nationally representative data are published), young adults aged 18 to 25 years were more likely than other age groups to have made an SA in the past year (Piscopo et al., 2016). Data also suggest that the rate of SAs in this age group is increasing (Piscopo et al., 2016). Thus, increased efforts are needed to identify individuals, particularly young adults, at elevated risk for suicide.

Studies show that individuals with an SA history are at a higher risk for engaging in future suicidal behavior than those without an SA history (Bostwick et al., 2016; Franklin et al., 2016). In fact, the World Health Organization (2015) states that a previous SA is "by far the strongest risk factor for suicide"; therefore, it is important for researchers and clinicians to be able to accurately assess whether someone has an SA history. One way in which SA history is assessed is through the use of self-report measures; that is, having an individual answer a question or series of questions assessing whether they have ever made an SA. Although there are many self-report measures that assess SA history (see Batterham et al., 2015, for review), past research suggests discrepancies in individuals' reporting of suicidal behaviors, including SAs.

For example, Millner et al. (2015) examined responses to a single-item SA assessment among a sample of 1,618 individuals recruited via Craigslist throughout the U.S. They then asked participants follow-up questions in an effort to verify the accuracy of responses provided to the single-item assessment. Because they hypothesized that the misreporting of SAs by participants on single-item measures might be due to a lack of clarity (i.e., individuals not understanding how various suicidal behaviors are defined) and/or lack of coverage (i.e., no room for respondents to report nuanced forms of suicidal behaviors, such as aborted SAs, where an individual begins making an SA but stops before making an actual SA), they included follow-up questions that embedded definitions of various suicidal behaviors within the question itself and included a wider variety of answer choices. Ultimately, they found that single-item SA history assessments did, indeed, yield a fair degree of misclassification; in fact, 10.7% of participants who reported an SA were determined by coders to not actually have made an SA according to established classification schemes. Complementing these findings, Hom, Joiner, and Bernert (2016) compared SA reporting patterns on single- and multi-item self-report surveys, as well as face-to-face clinical interviews, in a sample of 100 high-risk undergraduate students. They found that 40% of individuals who reported an SA on a single-item survey did not meet CDC criteria for an SA during a face-to-face clinical interview in which additional clinical data were collected. When considering these two studies together, it appears that the type and format of SA history measures may be key factors in whether or not individuals report an SA history.

There are several other factors that might contribute to the differential reporting of SA history. One such factor is the time elapsed since the SA occurred. For example, Eikelenboom et al. (2014) found that almost 50% of participants reported a previous SA at their baseline assessment but denied an SA history during a follow-up assessment two years later. This

differential reporting might have occurred because individuals no longer remembered having made an SA at the follow-up assessment. Relatedly, individuals are often asked if they have made an SA in the "past week" (i.e., current), within the "past year," or "ever" (i.e., lifetime), which may result in inconsistent responses if an individual has difficulty remembering when the SA occurred (Klimes-Dougan, 1998). Other factors that might contribute to differential reporting of SA history are denial, reinterpretation, and/or misinterpretation of the study questions or the event itself (Mars et al., 2016). For instance, Velting et al. (1998) used self-report measures to ask 48 adolescents whether they had a lifetime history of various forms of suicidality. The researchers found that individuals were confused by the terminology (i.e., "suicide attempt," "suicidal ideation," and "suicidal intent"); therefore, individuals ultimately minimized ideation and intent (i.e., reinterpreting). Interestingly, participants in that study explained that they denied having made a past SA because they realized that reporting a past SA would lead to more background questions (e.g., age at SA, SA method). In sum, this study identified several factors that might account for the observed discrepancies in the adolescent participants' responses.

Together, these prior studies suggest that multi-item assessments may better capture nuances in previous suicidal thoughts and behaviors than single-item assessments. They also suggest that the time elapsed since an SA as well as confusion regarding terminology (e.g., what behavior comprises an actual SA) may increase chances of inconsistent responses. However, these studies did not examine other factors that might contribute to inconsistent reporting of SA history, such as personality characteristics. Personality characteristics, in particular, are important to examine in this context because studies suggest that there may be a correlation between the NEO-Five Factor Inventory personality types (e.g., conscientiousness, agreeableness) and performance on Integrity Tests (i.e., Personnel Selection Inventory) among

undergraduates. For instance, Horn et al. (2004) found: (1) a strong positive correlation between conscientiousness (i.e., a personality trait that involves following socially prescribed norms, being goal-oriented, and vigilant [see Roberts et al., 2014]) and honesty; and (2) a modest positive correlation between conscientiousness and integrity (i.e., an individuals' attitudes about engaging in counterproductive behaviors, such as theft or lying). These results suggest that individuals scoring higher on indices of conscientiousness might be more likely to respond consistently to measures assessing SA history in an effort to be honest and demonstrate integrity.

Another factor that may lead to inconsistent reporting of SA history is impulsivity. Impulsivity is a multifaceted personality trait involving difficulties resisting temptations, not thinking of consequences before engaging in an event, an inability to remain focused on a task, and a propensity to pursue exciting experiences (Whiteside, Lynam, Miller, & Reynolds, 2005). To illustrate, a study conducted by Zermatten and colleagues (2005) examined the relationship between various facets of impulsivity and decision-making processes using a Gambling Task. They found a significant negative correlation between the facet of impulsivity described as "Lack of Premeditation" and decision-making, as indexed by emotional markers on the Gambling Task (Zermatten et al., 2005). These results suggest that individuals who report elevated levels of impulsivity might be more likely to respond inconsistently across measures assessing SA history because they are probing sensitive information that might evoke strong emotions. Yet another limitation of previous studies on the reporting of SA history is that, other than Velting et al.'s (1998) aforementioned study, prior studies did not directly ask what may have led to differential reporting of SA history across measures. Such probing may reveal other previously unidentified factors that account for inconsistent SA history reporting.

Overall, it is evident that additional research is needed to test theories regarding why differential SA history reporting occurs. Findings from these studies have the potential to inform the development of improved SA history measures for use by clinicians and researchers. To this end, this study aimed to address limitations of previous research by examining how the lengths of measures (e.g., single-item vs. multi-item), wording of answers (e.g., "I have attempted suicide two or more times" versus "I have attempted to kill myself, and really hoped to die"), characteristics of the respondents (e.g., personality), and ways in which SAs are defined for participants, if at all, might influence inconsistent SA history reporting.

The Present Study

The overarching goal of this study was to examine factors that influence whether individuals consistently responded to three different commonly-used self-report measures assessing SA history: the (1) Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1991), (2) Suicidal Behaviors Questionnaire—Revised (SBQ-R; Osman et al., 2001), and (3) Self-Injurious Thoughts and Behaviors Interview-Short Form (SITBI-SF; Nock et al., 2007). Specifically, we aimed to examine: (1) patterns of SA history reporting across SA history measures; (2) participants' self-reported reasons for inconsistently reporting SA history; and (3) whether conscientiousness and impulsivity might be associated with inconsistent reporting.

Due to variations in prior studies' findings, we did not pose any a priori hypothesis regarding the proportion of participants who would respond inconsistently across SA measures. However, we hypothesized that the most common pattern of inconsistent reporting would be reporting an SA history across the SBQ-R and SITBI-SF but denying an SA history on the BSS. This hypothesis was based on the format of these measures; that is, the BSS' assessment of SA occurs later in the measure (i.e., item 20) than the SBQ-R (i.e., item 1) or the SITBI-SF (i.e.,

item 3). Further, we hypothesized that consistent responders would score higher on an index of conscientiousness than inconsistent responders, based on the logic that they might read self-report survey questions more carefully and answer more consistently and with greater honesty. We also hypothesized that inconsistent responders would score higher on an index of impulsivity than consistent responders due to the nature of this personality trait. Finally, we hypothesized that a greater proportion of participants would answer inconsistently on measures of SA history that are presented later in the assessment battery (i.e., be more likely to respond consistently across the first two SA history measures and to provide an inconsistent response on the third SA history measure). This hypothesis is consistent with prior research regarding ordering effects. Prior studies have shown that questions presented at the end of an assessment battery may be processed differently, as demonstrated by quicker response times and lower quality of answers (Galesic & Bosnjak, 2009). Ultimately, this research has the potential to enhance the development and refinement of suicide risk assessment approaches, especially given that we sought to collect data on participants' self-reported reasons for inconsistent responding.

Of note, we tested study aims in a sample of young adults reporting a lifetime history of suicide ideation (SI) because symptoms of depression and/or suicidality are highly prevalent in college student populations in the U.S. (Eisenberg et al., 2013) and suicide is the second leading cause of death in this group (CDC, 2019). This sample was also recruited to increase the probability that participants would have an SA history, while also ensuring enough variability between attempters and non-attempters to observe patterns of inconsistent reporting. Most individuals with a history of SI do not go on to attempt suicide, but a history of SI remains a risk factor for an SA (Franklin et al., 2016).

Method

Participants

A sample of (N = 141) undergraduate students at Florida State University comprised the study sample. Participants ranged in age from 18 to 33 years (M = 19.24, SD = 1.66), and most participants (80.1%) identified as female. The majority of this sample (63.8%) identified as White/Caucasian, followed by 17.7% identifying as Hispanic or Latino/a, 7.1% as Black/African American, 8.5% as Asian/Pacific Islander, and 2.8% as Other. For self-reported sexual orientation, the majority of the sample (70.2%) reported identifying as heterosexual/straight. Regarding self-reported education-level, participants most commonly identified as first-year undergraduates (44.0%). Please see Table 1 for details regarding participants' demographic characteristics. Inclusion criteria for this study were: (a) 18 years or older; (b) current undergraduate student; (c) lifetime history of SI as assessed by the SITBI-SF ("Have you ever had thoughts of killing yourself?"; Nock et al., 2007); and (d) fluent in English. Participants were recruited based on responses to a single question assessing lifetime SI history on a screening survey administered to undergraduates participating in the University's Department of Psychology research subject pool.

Measures

The following self-report measures were presented to participants in a randomized order (to control for order effects) and were used to determine correlates of inconsistent reporting of SA history.

Suicide Attempt History Measures

Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1991). The BSS is a 21-item self-report measure designed to assess individuals' suicidal symptoms over the past week. Respondents are asked to select answer choices ranging from 0 to 2. For example, item 1

includes the response options: 0 ("I have a moderate to strong wish to live"), 1 ("I have a weak

wish to live"), and 2 ("I have no wish to live"). Total scores on the BSS range from 0 to 38, with

higher scores signaling more severe suicidal symptoms. Item 20 of the BSS assesses SA history

without including the word "intent" and includes three statements: 0 ("I have never attempted

suicide"), 1 ("I have attempted suicide once"), and 2 ("I have attempted suicide two or more

times"). For this study, participants who selected statement 1 or 2 on item 20 were categorized as

having reported a past SA on the BSS. The BSS has shown strong psychometric properties

across populations, including satisfactory construct validity (Beck & Steer, 1991). The BSS

demonstrated excellent internal consistency in the present study ($\alpha = .91$).

Self-Injurious Thoughts and Behaviors Interview-Short Form (SITBI-SF; Nock et

al., 2007). The SITBI-SF is a comprehensive assessment designed to measure the nature of

individuals' past suicidal thoughts and behaviors. Questions were modified to assess specific

areas of interest (e.g., past SI and SAs). Consistent with prior research, the SITBI-SF was

adapted for use as a self-report measure (e.g., Stanley et al., 2015). We used the following

SITBI-SF item to assess SA history: "Have you ever made an attempt to kill yourself in which

you had at least some intent to die?", with answer choices of "No" and "Yes." In this study,

participants who answered "Yes" to this item were categorized as having reported an SA history

on the SITBI-SF. The SITBI-SF has demonstrated strong psychometric properties, including

strong internal reliability and test-retest reliability (Nock et al., 2007).

Suicidal Behaviors Questionnaire-Revised (SBQ-R; Osman et al., 2001). The SBQ-R

is a 4-item measure designed to assess individuals' suicide risk potential. Individual items are

scored on varying scales. Item 1 assesses SA history by asking, "Have you ever thought about or

attempted to kill yourself?" Individuals are then instructed to select an answer from the following

options: 1 ("Never"), 2 ("It was just a brief passing thought"), 3a ("I have had a plan at least once to kill myself but did not try to do it"), 3b ("I have had a plan at least once to kill myself and really wanted to die"), 4a ("I have attempted to kill myself, but did not want to die"), and 4b ("I have attempted to kill myself, and really hoped to die"). For this study, if a participant selected responses 4a or 4b, they were categorized as having reported an SA history on the SBQ-R. SBQ-R total scores range from 3 to 18, with higher scores indicating more severe suicide risk. The SBQ-R has shown strong psychometric properties, including strong internal consistency (Osman et al., 2001). Consistent with past research (e.g., Stanley et al., 2017), item 4 of the SBQ-R was utilized as a single-item index of suicide risk for comparison analyses; because a single item was utilized, an internal reliability statistic was not derivable.

Symptom and Personality Measures

  Short Impulsive Behavior Scale (SUPPS-P; Cyders, et al., 2014). The SUPPS-P is a 20-item self-report measure designed to assess various facets of impulsivity. The SUPPS-P has five subscales: Negative Urgency, (lack of) Perseverance, (lack of) Premeditation, Sensation-seeking, and Positive Urgency. Sample statements in the Negative Urgency subscale include: "When I am upset I often act without thinking," and "When I feel rejected, I will often say things I later regret." Items in the (lack of) Perseverance subscale include: "I generally like to see things through to the end" and "Unfinished tasks really bother me." Statements from the (lack of) Premeditation subscale include: "My thinking is usually careful and purposeful" and "I usually think carefully before doing anything." Sample items in the Sensation-seeking subscale include: "I quite enjoy taking risks" and "I would like to learn to fly an airplane." Lastly, sample items in the Positive Urgency subscale include: "I tend to act without thinking when I am very excited" and "I tend to lose control when I am in a great mood." Individuals are asked to indicate how

much they agree with these statements on a scale from 1 ("Agree Strongly") to 4 ("Disagree

Strongly"). Total scores on all SUPPS-P subscales range from 4 to 16, with higher scores

signaling more severe impulsivity subscale symptoms. The SUPPS-P has demonstrated strong

psychometric properties, including strong internal consistency and strong inter-scale correlations

to the full UPPS-P (Cyders, et al., 2014). In this study, the subscales of the SUPPS-P

demonstrated questionable-to-good internal consistency (αs = .68-.81).

Generalized Anxiety Disorder 7-item (GAD-7; **Spitzer et al., 2006).** The GAD-7 is a

7-item self-report assessment measuring anxiety symptom severity. Participants are asked to rate

how frequently they have been bothered by various anxiety symptoms (e.g., Worrying too much

about different things or Trouble relaxing) on a scale from 0 ("Not at all") to 3 ("Nearly every

day"). GAD-7 total scores range from 0 to 21, with higher scores representing more severe

anxiety symptoms. The GAD-7 has demonstrated strong psychometric properties in prior studies

(Spitzer et al., 2006); in the current study, it demonstrated excellent internal consistency (α =

.92). The GAD-7 was included as an index of clinical severity.

Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). The PHQ-9 is a 9-item

self-report assessment used to measure depression symptom severity. Individuals are asked to

rate how often they have been bothered by various depression symptoms over the past two weeks

on a scale from 0 ("Not at all") to 3 ("Nearly every day"). Symptoms assessed by the PHQ-9

include: "Little interest or pleasure in doing things" and "Poor appetite and overeating." Total

scores range from 0 to 27, with higher scores indicating higher depression symptom severity.

The PHQ-9 has been shown to exhibit strong psychometric properties, including strong

reliability and validity (Kroenke et al., 2001). In this sample, the PHQ-9 demonstrated good

internal consistency (α = .88). Similar to the GAD-7, the PHQ-9 was included in this study as an index of clinical severity.

Perceived Stigma Scale (PSS; Britt et al., 2008). The PSS is an 11-item self-report measure designed to assess individuals' reported barriers to seeking mental health care treatment. The first six items on this scale are used to assess perceived stigma associated with seeking care (e.g., "It would hurt my reputation" or "I would be seen as weak"), while the last five items assess structural barriers (e.g., "I don't have adequate transportation" or "Getting treatment costs too much money"). Participants are asked to rate the degree to which each item might impact their decision to seek psychiatric treatment on a scale from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Possible scores on the PSS perceived stigma associated with seeking care subscale range from 6 to 30, and possible scores on the PSS structural barriers subscale range from 5-25. Higher scores signal more perceived stigma and structural barriers to mental health treatment. Both PSS subscales were used to determine if barriers to care might be associated with SA history reporting patterns; both scales demonstrated good-to-excellent internal consistency (αs = .92 and .81) in this present study.

Stigma of Suicide Scale-Short Form (SOSS-SF; Batterham et al., 2013). The SOSS-SF is a 16-item self-report assessment that measures individuals' views of those who die by suicide. There are three separate subscales that measure Stigma associated with suicide, attribution of suicide to Isolation/Depression, and Glorification/Normalization of suicide. Descriptors for the Stigma subscale include: "Shallow," "Immoral," and "Cowardly." Descriptors for the Isolation/Depression subscale include: "Disconnected," "Lonely," and "Isolated." Descriptors for the Glorification/Normalization subscale include: "Brave," "Noble," and "Dedicated." Individuals rated each descriptor on a five-point Likert scale from 1 ("Strongly

Disagree") to 5 ("Strongly Agree"). Possible scores on all SOSS-SF subscales range from 1 to 5, with higher scores signaling more stigma towards individuals who suicide. The SOSS-SF has demonstrated strong internal consistency, convergent validity, and construct validity across samples (Batterham et al., 2013). In this study, the subscales of the SOSS-SF demonstrated good-to-excellent internal consistency (αs = 89-.92). The SOSS-SF was included to examine if inconsistent and consistent responders might differ with regard to their views of those who die by suicide.

Ten Item Personality Measure (TIPI; Gosling et al., 2003). The TIPI is a ten-item measure designed to assess the five personality domains that comprise the five-factor model (FFM). Each item on the TIPI is based on the stem, "I see myself as:" with descriptors such as, "Extraverted, enthusiastic" and "Reserved, quiet" following the stem. Participants are asked to rate each of these descriptors on a 7-point scale ranging from 1 ("Strongly disagree") to 7 ("Agree strongly"). Each subscale of the TIPI have possible ranges from 2 to 14, with higher scores indicating higher severity regarding that personality subscale . The TIPI has been shown to demonstrate strong content validity (Gosling et al., 2003). The subscales of the TIPI demonstrated unacceptable-to-good internal consistency (α = .26-.81) in the current sample.

Other Measures

Demographics and Psychiatric History Overview. A self-report measure was used to assess participants' demographic characteristics and psychiatric history.

Inconsistent Responding Questionnaire. A structured self-report survey was developed to assess participants' reasons for inconsistent SA history responses. This survey was only displayed to participants who inconsistently reported their SA history across measures. This survey included both fixed answer choices and an open-response option (e.g., "There wasn't an

answer choice that fit my situation," "I answered without reading the question carefully," "The definition of the term attempt wasn't clear (e.g., made a plan, told someone, or actually tried to kill myself)," "Other:_____"). These items were developed based on findings from other studies evaluating inconsistent reporting of SA history, consultation of suicide prevention researchers, and pilot testing among undergraduates. For instance, Velting et al.'s (1998) study found that a portion of participants who reported an SA history inconsistently did so because they were confused by the terminology (e.g., the definition of an SA). Thus, we included the answer option: "The definition of the term attempt wasn't clear (e.g., made a plan, told someone, or actually tried to kill myself)." After consultation with other suicide prevention researchers, the possibility emerged that individuals with a more recent SA might have difficulties determining if their actions constituted an SA. Consequently, we included the answer option: "My attempt was very recent, and I haven't quite processed it yet." Also, given that individuals have been shown to be reluctant to report suicidality due to fear of hospitalization (Hom et al., 2017), we included "I did not answer truthfully due to fear of hospitalization" as an answer option. Finally, after being probed about reasons for inconsistent reporting, participants were asked, "Now, upon reflection, have you ever made a suicide attempt?" See Figure 1 for a visual representation of how these questions were displayed. Of note, participants provided reasons for inconsistent reporting for each pair of SA history assessments to which they provided differing responses. For example, if they reported an SA on the SITBI-SF and SBQ-R but not the BSS, they were asked to separately identify why they reported: (1) an SA on the SITBI-SF but not the BSS; as well as (2) an SA on the SBQ-R but not the BSS.

Validity checks. Three validity checks were included throughout the survey to ensure that participants were carefully reading survey items. A sample validity check was: "Please select 'yes' to demonstrate you are reading the questions."

Procedure

Participants determined to be eligible for this study based on their responses to the University's Department of Psychology research subjects screening questionnaire were contacted via email by the Principal Investigator to inquire if they were interested in participating in this study. Interested participants were then emailed a website link to an online survey portal (i.e., Qualtrics, a web-based survey platform). The survey began with an informed consent form, which provided participants with information regarding the study's background, as well as the possible risks and benefits of participating in the study. Before participants electronically provided consent to participate (i.e., by clicking a "BEGIN" button), they were required to answer a series of comprehension questions to demonstrate an understanding of the study procedures. They were also required to provide their phone number in the event that they needed to be contacted by a study clinician for an assessment of suicide risk. Eligibility was then confirmed by re-asking the screening question (i.e., "Have you ever had thoughts of killing yourself?" [SITBI-SF; Nock et al., 2007]).

Eligible participants then completed the main study survey, which consisted of the aforementioned randomized measures (e.g., BSS, SBQ-R, SITBI-SF, TIPI, SUPPS-P). After the main study survey questions were completed, participants who responded inconsistently to SA history measures were then asked to select reasons for their inconsistent reporting. The specific framing of the inconsistent SA reporting questions that were displayed to participants depended on how they responded to the SA history measures (e.g., a participant might be asked to provide

reasons for why they responded with answer choice "1" or "2" on the BSS and "Never" on the

SBQ-R). Once participants completed the survey, they were presented with a debriefing form,

which included a list of local and national mental health resources (e.g., the University

Counseling Center, Psychology Clinic, National Suicide Prevention Lifeline [1-800-273-

TALK]). Finally, participants were given the opportunity to receive a $5 Amazon.com gift card

or 0.5 extra/course credits for full study participation. Participant safety was a priority

throughout the data collection process. Thus, if a participant reported current suicidal symptoms

(i.e., BSS total score > 0), an advanced clinical psychology doctoral student contacted the

participant by phone to conduct a suicide risk assessment (SRA). SRAs were conducted using

the Chu et al. (2015) Decision Tree Framework. The FSU Institutional Review Board (IRB)

approved all proposed study procedures (HSC No. 2018.23867).

Data Analytic Approach

First, descriptive statistics were used to examine the sample's sociodemographic

characteristics (e.g., age, sex), clinical severity (e.g., GAD-7, PHQ-9), and rates of SA history

reported across measures (i.e., BSS, SBQ-R, SITBI-SF). Descriptive statistics were also utilized

to examine the most frequent reasons for inconsistent reporting of SA history observed across

participants. One-way ANOVAs were then employed to examine whether inconsistent

responders differed from consistent responders regarding personality traits (e.g., SUPPS-P

Impulsivity, TIPI Conscientiousness). One-way ANOVAs were also utilized to compare clinical

characteristics and personality traits between participants who: (1) consistently reported an SA

across all measures (i.e., consistent responders), and (2) reported an SA on at least one of the

measures but inconsistently reported an SA across the remaining measures (i.e., inconsistent

responders). Exploratory analyses were also conducted to examine if BSS Suicidal Ideation

Severity, SBQ-R item 4 Suicide Risk, GAD-7 Anxiety Severity, PHQ-9 Depression Symptoms, PSS Stigma/Structural Barriers, SOSS-SF Depression/Isolation, SOSS-SF Glorification/ Normalization, and SOSS-SF Stigmatizing items differed between inconsistent and consistent responders.

Results

Descriptive Statistics

See Table 4 for means, standard deviations, ranges, and zero-order correlations for all self-report study measures. When examining the three validity checks included in the survey, we found that all participants responded to all validity checks appropriately.

Patterns of SA History Reporting

Of the sample, 16.3% (n = 23) reported having an SA history across all SA history measures (i.e., BSS, SBQ-R, and SITBI-SF), and 75.2% (n = 106) denied an SA history across all SA history measures. Overall, 35 (24.8%) of participants reported an SA on at least one measure assessing SA history. However, of these 35 participants, 12 (34.3%) were inconsistent responders (e.g., reported an SA on the BSS and SITBI-SF but not the SBQ-R). Participants most commonly reported an SA on the BSS (n = 33, 23.4%), followed by the SITBI-SF (n = 30, 21.3%), and the SBQ-R (n = 26, 18.4%). The most common pattern of inconsistent reporting was to report an SA on both the BSS and the SITBI-SF but to deny an SA on the SBQ-R (n = 5, 3.5%).

Reasons for Inconsistent SA History Reporting

The most frequently reported reason for inconsistent responding was that the definition of "attempt" was not made clear (n = 5; 41.7%). Other reported reasons for inconsistent responding included the participant not having read the questions carefully (n = 5; 41.7%), not finding an

answer choice that matched their situation (n = 3; 25.0%), and the answer choices provided by

the SBQ-R being "too intense" given how the participant felt at the time of their SA (n = 2;

16.7%). When given the option to write in additional reasons for inconsistent reporting, three

participants (25.0%) reported that they were confused by the differing timeframes assessed by

the BSS, SBQ-R, and SITBI-SF. Two participants (16.7%) reported that they responded

inconsistently because, at the time of their SA, they had no intent to die and therefore did not

consider their behavior to constitute an SA. Interestingly, when these two participants were then

prompted with the follow-up question, "Now, upon reflection, have you attempted suicide?" one

reported an SA history, while the other denied an SA history. Two participants (16.7%)

continued to be inconsistent in their responses to the Inconsistent Responding Questionnaire

itself. That is, they responded inconsistently to the question, "Now, upon reflection, have you

attempted suicide?" by reporting on one set of questions (i.e., examining reasons for differing

responses to the SITBI-SF and SBQ-R) that they had an SA history but denying an SA history

second set of questions (i.e., examining reasons for differing responses to the SITBI-SF and

BSS).

Comparisons Between Inconsistent and Consistent Responders

  Personality characteristics. One-way ANOVAs did not reveal any statistically

significant differences in personality characteristics between inconsistent (n = 12) and consistent

responders (n = 23). Specifically, there were no statistically significant differences with respect

to TIPI Openness, TIPI Conscientiousness, TIPI Extraversion, TIPI Agreeableness, TIPI

Neuroticism/Emotional Stability, SUPPS-P Negative Urgency, SUPPS-P Lack of Perseverance,

SUPPS-P Lack of Premeditation, SUPPS-P Sensation Seeking, or SUPPS-P Positive Urgency,

between the two groups (all ps > .05). Given the relatively small subsample examined in these

ANOVAs, an examination of effect sizes was conducted to reveal if a signal might be present

pending a replication of this study with a larger sample size. The examination of effect sizes

revealed an interesting pattern of results: a medium effect size was observed when comparing

inconsistent and consistent responders on TIPI Conscientiousness (η_p^2 = .069), with inconsistent

responders exhibiting descriptively higher scores (M = 11.00, SD = 1.95) than consistent

responders (M = 9.70, SD = 2.51). A medium effect size was also observed when comparing

inconsistent and consistent responders on TIPI Neuroticism/Emotional Stability (η_p^2 = .060),

with inconsistent responders exhibiting descriptively higher scores (M = 8.00, SD = 3.49) than

consistent responders (M = 6.48, SD = 2.61). A medium effect size was additionally observed

when comparing inconsistent and consistent responders on the SUPPS-P Sensation Seeking (η_p^2

= .056), with inconsistent responders exhibiting descriptively higher scores (M = 11.42, SD =

2.50) than consistent responders (M = 9.96, SD = 3.14).

      Clinical characteristics. One-way ANOVAs did not reveal any statistically significant

differences in clinical characteristics between inconsistent (n = 12) and consistent (n = 23)

responders. Specifically, there were no statistically significant differences with respect to BSS

Suicidal Ideation Severity, SBQ-R item 4 Suicide Risk, GAD-7 Anxiety Symptom Severity, and

PHQ-9 Depression Symptom Severity, between the two groups (all ps > .05). Even so, a medium

effect size was observed when comparing inconsistent and consistent responders on the SBQ-R

item 4 Suicide Risk (η_p^2 = .061), with inconsistent responders exhibiting descriptively lower

scores (M = 0.92, SD = 1.08) than consistent responders (M = 1.52, SD = 1.20).

      Other characteristics. One-way ANOVAs did not reveal any statistically significant

differences in other characteristics between inconsistent (n = 12) and consistent (n = 23)

responders. Specifically, there were no statistically significant differences with respect to PSS

Stigma Barriers, PSS Structural Barriers, SOSS-SF Isolation/Depression, SOSS-SF

Glorification/Normalization, or SOSS-SF Stigmatizing items, between the two groups (all ps >

.05).

Fatigue effects. Fatigue effects were ascertained by examining the order in which the SA

history measures were displayed to participants. Of the inconsistent responders (n = 12), an equal

number of participants provided their inconsistent SA history response on the first measure with

which they were presented (n = 4), the second measure with which they were presented (n = 4),

and the third measure which with they were presented (n = 4). Therefore, the order in which the

measures assessing SA history were displayed did not appear to have an effect on inconsistent

reporting in our sample.

Discussion

This study aimed to examine patterns of SA history reporting across three commonly-

used self-report measures designed to assess SA history: the (1) BSS, (2) SBQ-R, and (3) SITBI-

SF. We also sought to evaluate factors that might influence inconsistent responding to SA history

measures. Specifically, we examined whether personality differences (i.e., conscientiousness and

impulsivity) and clinical characteristics (e.g., anxiety and depression severity) differentiated

consistent from inconsistent responders. Our study revealed that, of participants reporting an SA

history on at least one measure, a nontrivial proportion (34.3%) also denied an SA history on

another measure (i.e., was an inconsistent responder). Although this study did not detect any

personality or clinical characteristics that statistically differentiated consistent from inconsistent

responders, an examination of effect sizes, as will be discussed below, revealed several

intriguing results. Findings have implications for both research and clinical efforts to enhance the

development and refinement of suicide risk assessment approaches.

For one, it is worth commenting on the patterns of differential reporting observed across SA history measures. Although the majority of the sample (75.2%) denied an SA history across all three SA history measures (i.e., BSS, SBQ-R, and SITBI-SF), 16.3% consistently reported an SA history across all measures and 8.5% reported an SA history inconsistently (e.g., reported an SA on the BSS and SBQ-R but not the SITBI-SF). Of the 35 participants who reported an SA history on at least one SA history measure, 34.3% were inconsistent responders. This proportion is descriptively smaller than those that have been found in previous studies. For instance, of the 22 participants in Velting et al.'s (1998) study who reported an SA history on an initial assessment, 12 (54.5%) responded differently on a subsequent assessment. A similar proportion can also be observed in Hom et al.'s (under review) study of SA history reporting patterns among military service members at elevated risk. In their study, they found that, of the participants who reported an SA history on at least one measure (of five separate SA history measures), 63.9% of participants inconsistently reported an SA history. These differences in rates of inconsistent responding may have been observed due to differences in the mean ages and clinical severity between study samples; however, these conjectures require further examination.

In terms of specific reporting patterns, the most common pattern of inconsistent reporting in our study was to report an SA on the BSS and SITBI-SF but to deny an SA on the SBQ-R. This finding did not support our original hypothesis, which was that the most common pattern of inconsistent reporting would be to report an SA on the SBQ-R and SITBI-SF but to deny an SA on the BSS. This finding may have been due to participants not carefully reading response options on the SBQ-R SA history item 1. Unlike the BSS, which has three response options ("I have never attempted suicide," "I have attempted suicide once," and "I have attempted suicide two or more times") and the SITBI-SF which has two response options ("No" and "Yes"), the

SBQ-R's SA history item asks individuals to select one response from six relatively long, response options that are arguably more nuanced and may read as being more similar to each other. For instance, the SBQ-R's item 1 answer choices include: *"I have had a plan at least once to kill myself and really wanted to die"* and *"I have attempted to kill myself, but did not want to die."* Participants who selected the first of those SBQ-R statements would not have been categorized as an SA history reporter; however, participants who selected the latter of the two would have. Thus, it follows that if individuals were not reading all of the SBQ-R response options carefully, they may have selected the inappropriate response and therefore have been categorized incorrectly. Supporting this point, 41.7% of inconsistent responders in this study reported that they responded inconsistently to SA history measures because they were not reading the questions carefully. This issue of careless responding did not appear to impact responses to all measures in this study, however, because all participants (i.e., 100%) responded appropriately to three validity checks presented throughout the assessment battery.

One of the strengths of our study was our use of a survey to probe participants' self-reported reasons for inconsistent reporting of SA history. In examining our inconsistent responders' (n = 12) answers on this survey, we found that the two most commonly reported reasons for inconsistent responding were: (1) that the term "attempt" was not clearly defined (n = 5); and (2) that the participants answered SA history questions without reading carefully (n = 5). These findings are consistent with Millner et al.'s (2015) and Velting et al.'s (1998) studies—both of which identified confusion of terminology and lack of clarity (i.e., individuals not understanding how various suicidal behaviors are defined) as reasons for inconsistent SA history reporting. Other interesting self-reported reasons for inconsistent responding include, "The

answer choices on the SBQ-R seemed too intense for how I felt at the time of my attempt" and "I have attempted to kill myself but did not have an intent to die."

With respect to our aim to compare consistent versus inconsistent responders on various psychological indices, this study ultimately did not detect any statistically significant personality or clinical characteristics that differentiated consistent from inconsistent responders. However, our one-way ANOVAs yielded several medium effect sizes (i.e., $\eta_p^2 \geq 0.06$), which warrant discussion. First, inconsistent responders demonstrated descriptively higher levels of conscientiousness than consistent responders. This pattern of findings contrasts with our hypothesis that consistent responders would be more conscientious than inconsistent responders. Indeed, as noted, prior research suggests that individuals who are more conscientiousness might be more likely to respond consistently to survey measures (Horn et al., 2004). It may be, then, that individuals higher on an index of conscientiousness may have more carefully considered nuanced differences in the wording of questions rather than seeing the term "suicide attempt" and automatically selecting that answer before carefully considering whether their experiences aligned with that specific measure's operationalization of an SA. Thus, it follows that more conscientious individuals might be more likely to provide inconsistent responses to SA history measures.

On average, inconsistent responders also exhibited descriptively higher levels of TIPI Neuroticism/Emotional Stability than consistent responders. At the outset of our study, we did not have any a priori hypotheses regarding whether neuroticism/emotional stability would differ between inconsistent and consistent responders. However, this pattern of findings might be attributable to the nature of neuroticism. Individuals elevated in neuroticism tend to demonstrate an inability to control urges, inefficient ways of coping with stress, and quick arousal to new

ideas with slow inhibition (Widiger et al., 1984). In the case of this study, participants with greater neuroticism might have responded quickly to items assessing SA history without reading the answer choices carefully. They also might have experienced a lack of focus when completing the questionnaires due to the sensitive nature of the information being probed, which may have yielded inconsistent responding. In addition, inconsistent responders, on average, scored higher on the SUPPS-P Sensation Seeking subscale than consistent responders. Higher scores on this subscale indicate that an individual might be "reactive to novel situations, socially dominant, and [have] the willingness to take risks" (Zuckerman et al. 1980). In this study, it is possible, for example, that individuals higher in sensation-seeking were more likely to lose interest when completing somewhat repetitive measure of SA history, resulting in inconsistent reporting. Lastly, on average, inconsistent responders scored descriptively lower on SBQ-R item 4 suicide risk than consistent responders. Consistent with a study examining differential SA history reporting in U.S. military service members, we found that consistent responders exhibited more severe current suicide risk than inconsistent responders ($\eta_P^2 = .061$). As Hom et al. (under review) posit, this pattern of results suggests that lower risk individuals might be less certain that they have made an SA in the past, resulting in inconsistent SA history responding being more likely among those of lower risk. As with our other conjectures, this pattern of results and explanation require further testing.

Finally, and interestingly, although fatigue effects were hypothesized to influence participants' responding on measures later in the assessment battery, fatigue effects did not appear to play a role in this study. Inconsistent responders were just as likely to respond inconsistently to the first measure assessing SA history as they were to the second or third measure presented assessing SA history. The lack of fatigue effects observed in this study might

be a result of the assessment battery not being long enough to produce feelings of fatigue for participants. Previous research indicates that web-based surveys that are 30 minutes or longer yield poorer answer quality for items at the end of the measure (Galesic & Bosnjak, 2009). On the other hand, surveys that are approximately 10 minutes in duration yield better quality data. When excluding outliers (i.e., participants who took longer than an hour to complete the survey), on average, it took participants 19 minutes to complete our survey; thus, is it possible that few, if any, participants in our study experienced fatigue when completing our survey battery. As a result, it appears that participants in our study likely did not respond inconsistently to SA history measures due to fatigue effects.

Clinical Implications

As discussed previously, SA history is an important indicator of future risk (Bostwick et al 2016; Franklin et al., 2016); thus, it is important that clinicians be able to accurately assess SA history. Our study adds to the growing evidence that clinicians may face difficulties accurately assessing SA history if patients do not understand the definition of the term "suicide attempt" (i.e., a "non-fatal, self-directed, potentially injurious behavior with any intent to die as a result of the behavior; might not result in injury" as defined by the CDC [2019]) or if patients do not read SA history measures carefully. Based on our results and findings from previous studies (e.g., Hom et al., 2016), it appears that it may be useful for clinicians to use follow-up clinical interviews when assessing SA history among their patients to more accurately inform suicide risk assessment and management efforts. Such interviews provide an opportunity for clinicians to clarify what behaviors constitute an SA and to determine whether a patient may have made an interrupted or aborted attempt instead of an actual attempt.

Limitations and Future Directions

      This study was challenged by several limitations. First, to assess eligibility for this study, we used a single-item assessment of suicidal ideation from the SITBI-SF ("Have you ever had thoughts of killing yourself?"). However, given that a portion of participants in this sample answered inconsistently to SA history measures, it is possible that they may have answered inaccurately to this measure of suicidal ideation, resulting in the inclusion of participants who did not have a lifetime history of suicidal ideation. It is recommended that future studies include additional eligibility screeners to enhance the inclusion of eligible participants. Second, this study only used three measures to assess SA history, all of which were self-report measures. As noted, previous studies have shown that the use of follow-up clinical interviews after self-report measures might improve the accurate assessment of SA history (Hom et al., 2016). Thus, we recommend that future studies seeking to examine reasons for inconsistent SA history reporting also include clinician interviews. Third, our study was not designed to determine which measure of SA history was able to most accurately assess SA history; thus, we are unable to definitively suggest that any one specific measure is a superior assessment of SA history. Future studies are needed to examine which measure produces the most accurate assessment of SA history. Fourth, the sample consisted of undergraduate students only. This sample also came from a single university with no outside community members included. Replicating this study using a wider range of ages and individuals other than college undergraduates will improve the generalizability of our results to other demographic groups. Fifth, it should be noted that the measures used to assess personality characteristics have notable limitations. For instance, the TIPI is composed of ten double-barreled questions, with only two items assessing each construct—a format which has been shown to lead to poor psychometric properties (Jonason & Webster, 2010; Clark & Watson, 1995). Given these issues associated with the TIPI, it is unsurprising, then, that we observed low

internal validity on the TIPI Openness subscale (i.e., α = .26). In addition to low internal

validity, the personality inventories used in this study examined overarching personality traits

and did not assess the nuanced subfacets of each trait. Future studies seeking to accurately

measure personality characteristics according to the Five Factor Model should consider using

measures with enhanced validity, such as the Revised NEO Personality Inventory, which has

been shown to have strong psychometric properties (Kurtz & Parrish, 2001), as well as measures

designed to assess personality subfacets. Lastly, the number of participants who reported an SA

history on at least one measure was relatively small, which likely hampered our ability to detect

statistically significant effects. To this point, we observed medium effect sizes for several of our

analyses, but these results were not statistically significant, pointing to issues of power. Thus,

this study requires replication in a larger sample size.

Conclusions

Overall, consistent with prior research, this study found that a nontrivial proportion of

young adults with a history of suicidal ideation responded inconsistently to three self-report

measures assessing SA history. Our findings suggest that those who respond inconsistently to SA

history measures may be more conscientious, neurotic, and higher in sensation seeking, while

having lower suicide risk than those who consistently report an SA history across measures.

Further research is needed to better understand how these, and other, characteristics might

contribute to inconsistent reporting of SA history. Ultimately, findings emphasize the need for

increased efforts to enhance the development and refinement of suicide risk assessment

approaches.

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Figures

Figure 1. Example of inconsistent responding prompted question.

On previous surveys, you selected the answer option "I have attempted to kill myself, and really hoped to die" on one survey (SBQ-R), but "No" on another survey (SITBI-SF).

What are some of the reasonings for your differences in your response?

SBQ-R

1. Have you ever thought about or attempted to kill yourself?

○ Never
○ It was just a passing thought
○ I have had a plan at least once to kill myself but did not try to do it
○ I have had a plan at least once to kill myself and really wanted to die
○ I have attempted to kill myself, but did not want to die
● I have attempted to kill myself, and really hoped to die

SITBI-SF
These questions ask about your thoughts and feelings of suicide and self-injurious behaviors.
Please respond as accurately as you can.

3. Have you ever made an actual attempt to kill yourself in which you had some intent to die?

○ Yes
● No

☐ The definition of the term "attempt" wasn't clear (e.g., made a plan, told someone, or actually tried to kill myself).

☐ The answer choices on the SBQ-R seemed too intense for how I felt at the time of my attempt.

☐ The many answer choices for the SBQ-R were overwhelming.

☐ There wasn't an answer choice that fit my situation.

☐ I answered without reading the question carefully.

☐ While reading the SITBI-SF I didn't fully remember my attempt, but the wording of the SBQ-R reminded me.

☐ My attempt was very recent, and I haven't quite processed it yet.

☐ I did not answer truthfully due to fear of hospitalization.

☐ Other:
[   ]

2. Now, upon reflection, have you ever made a suicide attempt?

○ Yes
○ No

Tables

Table 1.

Participant Demographics (N = 141)

	n	Valid %
Age (M = 19.24, SD = 1.66, Range = 18-33)		
Gender		
Male	27	19.1%
Female	113	80.1%
Other	1	0.7%
Race		
White/Caucasian	90	63.8%
Black/African American	10	7.1%
Hispanic or Latino/a	25	17.7%
Asian/Pacific Islander	12	8.5%
Other	4	2.8%
Sexual Orientation		
Heterosexual/straight	99	70.2%
Gay/lesbian/homosexual	4	2.8%
Bisexual	29	20.6%
Not sure	8	5.7%
Decline to state	1	0.7%
Education Level		
First year undergraduate	62	44.0%
Second year undergraduate	42	29.8%
Third year undergraduate	27	19.1%
Fourth year undergraduate	9	6.4%
Fifth year or more undergraduate	1	0.7%

Table 2.

Response Patterns for All Suicide Attempt Measures

Pattern	Self-Report Measures			n	%
	BSS	SBQ-R	SITBI-SF		
1	⬜	⬜	⬜	106	75.2%
2	⬛	⬛	⬛	23	16.3%
3	⬛	⬜	⬛	5	3.5%
4	⬛	⬜	⬜	3	2.1%
5	⬛	⬛	⬜	2	1.4%
6	⬜	⬜	⬛	1	0.7%
7	⬜	⬛	⬛	1	0.7%
8	⬜	⬛	⬜	0	0.0%
n (%) reported SA	33 (23.4%)	26 (18.4%)	30 (21.3%)		

Note. Black Tile = reported a suicide attempt, White Tile = denied a suicide attempt, BSS = Beck Scale for Suicide Ideation, SBQ-R = Suicidal Behaviors Questionnaire-Revised, SITBI-SF = Self-injurious Thoughts and Behaviors Interview-Short Form.

Table 3.

Self-Reported Reasons for Inconsistent Responding Across Suicide Attempt Measures

Reasons	n	%
The definition of the term "attempt" wasn't clear (e.g., made a plan, told someone, or actually tried to kill myself).	5	41.7%
I answered without reading the question carefully.	5	41.7%
There wasn't an answer choice that fit my situation.	3	25.0%
I was confused by the time frame asked in the BSS, SITBI-SF, and SBQ-R.	3	25.0%
The answer choices on the SBQ-R seemed too intense for how I felt at the time of my attempt.	2	16.7%
I have attempted to kill myself but did not have an intent to die.	2	16.7%

Table 4.

Descriptive Statistics and Zero-Order Correlations for Self-Report Measures

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. BSS Suicidal Ideation Severity	--																		
2. SBQ-R Item 4 Suicide Risk	.48**	--																	
3. UPPS Negative Urgency	.13	.23**	--																
4. UPPS Lack of Perseverance	.01	.08	-.02	--															
5. UPPS Lack of Premeditation	.19*	.22**	.29**	.41**	--														
6. UPPS Sensation Seeking	.007	.10	.15	-.01	.18*	--													
7. UPPS Positive Urgency	.11	.12	.43**	.043	.28**	.38**	--												
8. GAD-7 Anxiety Severity	.21*	.122	.24**	-.10	.02	-.15	.19*	--											
9. PHQ-9 Depression Severity	.42**	.32**	.38**	.01	.13	.04	.27**	.72**	--										
10. PSS Stigma Barriers	.16	.06	.22*	.05	.17*	-.11	.11	.12*	.30**	--									
11. PSS Structural Barriers	.03	.16	.10	.05	.18*	-.06	.09	.09	.15	.33**	--								
12. SOSS-SF Isolation/Depression	.096	.091	-.01	-.04	-.04	-.16	-.06	.09	.13	-.00	.07	--							
13. SOSS-SF Glorification/Normalization	.07	.08	-.02	.11	-.02	.04	.12	.07	.04	-.10	-.07	-.21*	--						
14. SOSS-SF Stigmatizing	.04	.07	-.12	.06	.19*	.03	.21*	.02	.16	.38**	.22**	.16	-.16	--					
15. TIPI Openness	.01	-.11	-.12	-.13	.00	.41**	.04	-.18*	-.16	-.26**	-.06	-.01	-.02	-.25**	--				
16. TIPI Conscientiousness	-.12	-.28**	-.38**	-.39**	-.37**	-.04	-.25**	-.13	-.27**	-.29**	-.20*	-.02	-.05	-.24**	.25**	--			
17. TIPI Extraversion	-.24**	-.16	-.03	-.06	.05	.23**	-.03	-.20*	-.168*	-.21*	-.04	.12	.01	.03	.28**	.15**	--		
18. TIPI Agreeableness	-.11	.03	-.13	.12	-.11	.01	-.16	-.13	-.16	-.23**	-.04	-.03	-.02	-.30**	.23**	.13	.09	--	
19. TIPI Neuroticism/Emotional Stability	-.11	-.20*	-.35**	.07	-.14	.27**	-.09	-.50**	-.44**	-.18*	-.14	-.05	.04	.11	.33**	.19*	.26**	.20*	--
M	1.81	1.04	10.04	7.29	6.93	10.04	7.72	8.76	10.73	12.18	12.31	4.09	2.24	1.66	10.37	10.15	7.61	9.99	7.04
SD	3.99	1.08	2.62	2.13	2.13	2.80	2.44	5.66	5.92	6.01	4.81	0.80	0.96	.79	2.02	2.68	3.45	2.27	2.72
Minimum	0	0	4	4	4	4	4	0	2	6	5	1	1	1	6	2	2	4	2
Maximum	21	4	16	14	13	16	15	21	27	28	24	5	5	4.13	14	14	14	14	14
α	.91	--	.68	.77	.81	.68	.76	.92	.88	.92	.81	.89	.89	.92	.26	.65	.81	.30	.70

Note. BSS= Beck Scale for Suicide Ideation, SBQ-R= The Suicidal Behaviors Questionnaire-Revised, UPPS= Impulsive Behavior Scale, GAD-7= Generalized Anxiety Disorder 7-item, PHQ-9 = Patient Health Questionnaire, PSS= Perceived Stigma Scale, SOSS-SF = Stigma of Suicide Scale-Short Form, TIPI= Ten Item Personality Measure, Validity Checks.

*p<0.05; **p<0.01.

Table 5.

One-Way ANOVAS Examining Correlates of Inconsistent Responders Versus Consistent Responders (SA on 3)

	Inconsistent Responders (n = 12)		Consistent Responders (n = 23)					
	M	SD	M	SD	F	df	p	η_p^2
BSS Suicidal Ideation Severity	3.27	5.59	3.43	6.40	0.005	1, 32[a]	.943	<.001
SBQ-R Suicide Risk	0.92	1.08	1.52	1.20	2.133	1, 33	. 154	.061
SUPPS-P Negative Urgency	10.67	3.08	10.91	2.47	0.066	1, 33	. 798	.002
SUPPS-P Lack of Perseverance	6.83	1.27	7.09	2.00	0.159	1, 33	. 693	.005
SUPPS-P Lack of Premeditation	7.08	1.98	7.17	2.42	0.012	1, 33	. 912	<.001
SUPPS-P Sensation Seeking	11.42	2.50	9.96	3.14	1.941	1, 33	. 173	.056
SUPPS-P Positive Urgency	8.25	1.42	7.65	3.11	0.395	1, 33	. 534	.012
GAD-7 Anxiety Severity	10.00	6.62	10.09	6.75	0.01	1, 33	. 971	<.001
PHQ-9 Depression Severity	12.08	7.08	11.35	6.62	0.093	1, 33	. 762	.003
PSS Stigma Barriers	12.50	5.45	11.74	6.61	0.117	1, 33	. 735	.004
PSS Structural Barriers	13.50	3.90	12.65	4.60	0.296	1, 33	.590	.009
SOSS-SF Isolation/Depression	4.31	0.66	4.27	0.75	0.025	1, 33	. 874	.001
SOSS-SF Glorification/Normalization	2.46	1.00	2.30	0.83	0.234	1, 33	. 632	.007
SOSS-SF Stigmatizing	1.61	0.70	1.33	0.55	1.733	1, 33	. 197	.050
TIPI Openness	11.08	1.44	10.96	1.85	0.043	1, 33	. 837	.001
TIPI Conscientiousness	11.00	1.95	9.70	2.51	2.448	1, 33	. 127	.069
TIPI Extraversion	7.58	4.14	8.26	3.53	0.258	1, 33	. 615	.008
TIPI Agreeableness	9.50	1.93	10.43	2.29	1.452	1, 33	.237	.042
TIPI Neuroticism/Emotional Stability	8.00	3.49	6.48	2.61	2.124	1, 33	.154	.060

a. One Participant did not fully complete BSS.

Note. BSS= Beck Scale for Suicide Ideation, SBQ-R= The Suicidal Behaviors Questionnaire-Revised, UPPS= Impulsive Behavior Scale, GAD-7= Generalized Anxiety Disorder 7-item, PHQ-9 = Patient Health Questionnaire, PSS= Perceived Stigma Scale, SOSS-SF = Stigma of Suicide Scale-Short Form, TIPI= Ten Item Personality Measure, Validity Checks.
Partial eta-squared (η_p^2) values around 0.01 suggest a small effect, 0.06 a medium effect, and 0.14 a large effect (Cohen, 1992)