Recent Suicidal Ideation and Behavior in the General Population

The Role of Depression, Posttraumatic Stress, and Reactive Avoidance

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Abstract: The multivariate relationship between suicidality and three potential etiologic variables (depression, posttraumatic stress, and reactive avoidance) was examined in a stratified sample of 679 individuals from the general population. Lifetime exposure to a trauma or another very upsetting event was prevalent among those reporting suicidal behavior in the previous 6 months (58%) and those reporting recent suicidal ideation alone (40%), relative to those with no recent suicidal thoughts or behaviors (26%). Canonical correlation analysis indicated two independent sources of variance: the first loading on both suicidal ideation and behavior, predicted by depression, posttraumatic stress, and reactive avoidance, and the second indicating a unique relationship between suicidal behavior and reactive avoidance alone. Results indicate that the etiology of suicidality is likely multidimensional, and point to a significant variant of suicidal behavior that is unrelated to depression or posttraumatic stress, but may reflect emotional dysregulation and subsequent distress reduction behaviors.

Key Words: Suicidal ideation, suicidal behaviors, depression, posttraumatic stress, reactive avoidance

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S uicide is a significant public health concern for which a variety of interrelated social, biological, and psychological risk factors have been identified (van Heeringen and Vincke, 2000). Beyond variables such as sex, age, ethnicity, genetics, and social marginalization (Belik et al., 2007; Gomez et al., 2011; McLaughlin et al., 2012; van Heeringen and Vincke, 2000), those exhibiting or reporting suicidal behavior have often undergone adverse experiences, including interpersonal violence, losses, or natural disasters (e.g., Belik et al., 2007; Kolves et al., 2013). They are also more likely to report a range of psychological symptoms or problems (Blumenthal and Kupfer, 1990; World Health Organization, 2014), including mania/hypomania (e.g., Bronisch et al., 2005), guilt and shame (e.g., Lester, 1997), and hopelessness (e.g., Zhang and Li, 2013). Most examined in the epidemiologic literature, however, are depression, posttraumatic stress, and impulsivity associated with emotional dysregulation. Because many studies examine only one or two of these risk factors at a time, however, it is not entirely clear whether suicidality is most related to specific problems or states, or is more generally associated with distress and dysphoria.

Depression

Major depression is often described as the most common clinical correlate of suicidality (*e.g.*, Miret et al., 2013; Panagioti et al., 2012). Lifetime suicide risk for those with affective disorders is approximately 15% (Blumenthal and Kupfer, 1990) and increases to nearly 20% for those with untreated major depression (Gotlib and Hammen, 2009).

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In one study, 15% of people with major depression reported they had attempted suicide at some point in their lives (Chen and Dilsaver, 1996). Given such findings, depression is thought to be the primary risk factor for suicide attempts; national suicide prevention programs almost inevitably include screening for depression, along with suicidal plans, ideation, and behavior (Zalsman et al., 2016). Interestingly, however, data from the National Comorbidity Survey Replication study found that, although depression predicts suicidal ideation, it does not necessarily correlate with suicide plans or attempts (Nock et al., 2010). In fact, depression is rarely the sole mental health predictor of suicide attempts (e.g., Hoertel et al., 2015), suggesting the need to explore additional etiologies in the development of suicidal behavior (van Heeringen and Vincke, 2000).

Posttraumatic Stress

Because there is a significant link between exposure to adversity and suicidality, a number of studies have examined the role of posttraumatic symptoms in suicidal ideation and behavior. This research indicates an association between suicidality and posttraumatic stress (Belik et al., 2007; Briere et al., 2015; Cougle et al., 2009). In fact, among *DSM-IV* mental disorders (American Psychiatric Association, 2000), posttraumatic stress disorder (PTSD) is the fourth leading correlate of suicide attempts (Bolton and Robinson, 2010). In this regard, a meta-analysis of 50 studies found that a diagnosis of PTSD was associated with prior suicide attempts, and prior and current suicidal ideation (Krysinska and Lester, 2010). This link appears to remain even when controlling for depression (Oquendo et al., 2003; Sareen et al., 2005).

Reactive Avoidance

Along with depression and posttraumatic stress, studies indicate that some suicidal behavior may represent a response to dysregulated emotional states (Briere et al., 2010; Heffer and Willoughby, 2018; Rajappa et al., 2011). Although the underlying etiological explanations for such phenomena vary, clinical research suggests that suicide attempts and other self-endangering behaviors can arise when trauma- or attachment-related distress is activated in the context of inadequate emotional regulation capacity (e.g., Linehan, 1993; van der Kolk et al., 1991). In this context, suicidal behavior can be seen as an avoidance strategy, wherein the goal is to escape or reduce overwhelming negative emotions and cognitions associated with triggered memories. Notably, this distress may involve depression, posttraumatic stress, or another aversive internal state; the critical issue from a reactive avoidance (Briere, 2019) perspective is not the specific emotional experience, but rather the individual's relative inability to downregulate such emotions rather than resorting to suicidality. In support of this model, a number of studies link suicidal behavior to triggered, intense emotional distress (Hendin et al., 2007; Zouk et al., 2006), reduced emotional regulation skills (e.g., Boden et al., 2013; Briere et al., 2010), and subsequent "impulsive" suicidal behavioral (Anestis et al., 2014; Kotler et al., 2001).

The Current Study

Given 1) the potential multiple etiologies of suicidality, 2) the studies suggesting that suicidal ideation can differ from suicidal behavior in terms of its association with depression, and 3) the data linking

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suicidal behavior to posttraumatic stress and reactive avoidance, we examined data from a nationally representative adult sample with the aim of further exploring the potential impact of these various types of symptoms on suicidal ideation and suicidal behaviors. We hypothesized that prior adverse experiences and current symptoms of depression, posttraumatic stress, and distress reduction would all be associated with suicidal ideation and behaviors, but that these variables might differentially predict attempts versus ideation. We tested these hypotheses in two sets of analyses: 1) examining the prevalence of adverse events in three groups (those with no recent suicidality, those with recent suicidal ideation only, and those with both suicidal ideation and behavior), and 2) evaluating the multivariate association between a set of predictor variables (demographics, depression, posttraumatic stress, and reactive avoidance) with two continuous suicidality variables (suicidal ideation and suicidal behavior), using multivariate analysis of variance analysis (MANOVA) and canonical correlation analysis (CCA). Because the relevant CCA allowed potential specification of up to two independent relationships within the data, we hypothesized that the first canonical variate might load on suicidal ideation, suicidal behavior, depression, and posttraumatic stress, and the second on suicidal behavior and distress reduction.

The decision to categorize participants on a three-level suicidality continuum (no suicidality, ideation only, and both suicidal ideation and behavior) reflected our desire both to directly compare the correlates of ideation versus behavior, as well as to operationalize suicidal severity, wherein ideations alone were deemed less severe than actual suicidal behaviors. This approach runs the risk of misclassifying some individuals with very frequent and intense suicidal ideation, but no actual behavior, as being less severely suicidal than another individual with infrequent, perhaps not especially lethal, behavior. Generally, however, clinical logic supports this approach, suggesting that the greater risk to life associated with suicidal behavior necessarily prioritizes it over suicidal ideations alone. In this regard, we hypothesized that higher suicidal severity would be more associated with adverse experiences and related to higher levels of symptoms.

METHODS

Participants

The current study was conducted using archival data from the Trauma Symptom Inventory 2 (TSI-2; Briere, 2011) normative sample, with permission from the test publisher, Psychological Assessment Resources (PAR). This sample was stratified to be representative of the US population for individuals between 18 and 90 years, as defined by the US Census (2007), for age, sex, race/ethnicity, and geographic region. Individuals were excluded from this sample if they were 1) incarcerated, 2) currently residing in an inpatient medical or psychiatric facility, 3) under medical care for schizophrenia or some other psychotic disorder, 4) suffered from uncorrected vision or hearing loss, 5) unable to comprehend English or read at the third-grade level, or 6) otherwise unable to provide informed consent.

Respondents were anonymously recruited through a national survey sampling company used by PAR. Participants were asked "At any time in your life, have you experienced a trauma or a very upsetting event?" (hereafter referred to as adverse experiences), and their responses to the TSI-2 were collected via the Web. The specific number of individuals initially recruited for this study is unknown to the test publisher, and thus the response rate cannot be calculated. PAR did not have access to names or other identifying information, and the survey company did not have access to the responses. All responses were kept anonymous and confidential. The first 679 individuals who met the specified criteria for inclusion participated in the standardization process and constituted the sample used in the present study. The University of Southern California Institutional Review Board approved the subsequent analysis of the deidentified data from the TSI-2 normative sample.

The modal sex of this sample was female (54%), and the mean age was 53.4 years (SD = 18.3, ranging from 18 to 87 years). Most identified themselves as white (73%), with the remainder identifying as Black/African (11%), Hispanic (9%), and other (7%). A total of 32% were high school graduates, with the rest completing less than high school (15%), some college (27%), or college or beyond (26%). Nineteen percent reported being single, 55% were either married or cohabiting with their romantic partner, 13% were divorced or separated, and 13% were widowed. A total of 218 participants (32.3%) reported having been exposed to one or more adverse experiences in their lives.

Measures

Trauma Symptom Inventory 2

The TSI-2 (Briere, 2011) is a revised version of the TSI (Briere, 1995), a frequently used test of trauma- and adversity-related symptoms and behaviors (Elhai et al., 2005). The TSI-2 consists of 136 items, assesses a wide range of self-reported symptoms experienced over the previous 6 months, and has been shown to demonstrate good test-retest reliability, internal consistency, and various forms of validity (Briere, 2011). Primary variables in the present study were the Depression and Tension Reduction Behavior (TRB) scales, along with the two subscales of the Suicidality scale (suicidal ideation and suicidal behavior). Also used was a secondary variable, the Posttraumatic Stress-Total (PTS-T) scale, as described later.

The 10-item Depression scale of the TSI-2 evaluates cognitive, emotional, and somatic components of depression. Specific items include feelings of sadness, depression-specific anorexia, anhedonia, low self-esteem, thoughts of worthlessness and hopelessness, depressive self-isolation, and self-hatred. Cronbach's alpha for the Depression scale was 0.94.

The TRB scale, used to measure reactive avoidance, contains 10 items referring to involvement in external activities that help the individual to modulate, interrupt, avoid, or soothe distressing internal states in the absence of sufficient emotional regulation/tolerance skills. Typical items involve engagement in dramatic behaviors, aggression, and self-injury, as well as dysfunctional behaviors such as thrill-seeking and food bingeing, when upset or triggered. Cronbach's alpha for the TRB scale was 0.82 in the present study.

The Suicidal Ideation subscale contains five items concerned with wishing one was dead, feeling so hopeless that suicide was desirable, suicidal thoughts in general, and fantasies about dying. The Suicidal Behavior subscale assesses trying to end one's life, intentional overdosing, attempting suicide but then changing one's mind, suicide attempts in general, and doing dangerous things in the hopes that death might ensue. Cronbach's alpha for these two subscales were 0.88 and 0.85 in the present study, as reported in the TSI-2 manual.

PTSD Symptom Checklist for *DSM-IV*, Civilian Version

Although the TSI-2 includes a PTS-T scale, the more widely validated total PTSD Symptom Checklist for DSM-IV, civilian version (PCL-C; Weathers et al., 1994) score was used in the present study to evaluate this variable. This 17-item scale has been shown to be reliable and a valid measure of PTSD symptoms in a number of studies (Wilkins et al., 2011). Cronbach's alpha for this scale was 0.93 in the present study. Because the version of the PCL-C used in this study evaluated symptoms over the prior month, it necessarily assessed more acute symptoms than did the TSI-2, which specifies the prior 6 months. To ensure that differential PCL-C results were not due to differences in symptom rating periods, the PCL-C was replaced with the PTS-T scale in a secondary analysis.

Suicide Level Specification

The TSI-2 Suicidal Ideation and Suicidal Behavior subscales were used to create the suicide level variable, consisting of three values: 0 = no endorsement of symptoms on the Suicidal Ideation or Suicidal

TABLE 1. Lifetime Exposure to One or More Adverse Experiences and Suicide Level (n = 674)

	Suicide Level				
Adverse Experiences	None	Ideation Only	Behavior		
No	301 (74.1%)	140 (60.3%)	15 (41.7%)		
Yes	105 (25.9%)	92 (39.7%)	21 (58.3%)		

Behavior subscales within the prior 6 months; 1 = at least some level of symptoms on the Suicidal Ideation subscale, but no endorsement on the Suicide Behavior subscale; and 2 = symptoms endorsed on both the Suicidal Ideation and Suicidal Behavior subscales. Based on this scoring, 406 participants (59.8%) were coded as 0 (no suicidality), 232 (34.2%) were coded as 1 (suicidal ideation only), and 36 (5.3%) were coded as 2 (suicidal behavior). Five participants (0.6%) endorsed the unlikely scenario of suicidal behavior but no suicidal ideation and were eliminated from calculation of this variable. When these participants were nevertheless included in the Suicidal Behavior category, the results reported below were equivalent.

Multivariate Statistical Procedures

MANOVA and CCA were used in the present study to examine the multivariate relationship between suicidal ideation and behavior as a function of different patterns of symptoms. Most relevant to the potential complexity of suicidality and its etiologies, CCA identifies orthogonal patterns in complex datasets, generally involving the sequential interrelationships between independent and dependent sets of variables (Sherry and Henson, 2005). A major benefit of CCA, beyond its control for Type I errors, is its ability to identify multiple independent relationships (canonical variates) in the data, limited only by the number of variables in the smaller of the two variable sets (Tabachnick and Fidell, 1996). The first variate represents the largest independent-dependent variable relationship, whereas subsequent variates examine additional sources of variance once the prior variates have been taken into account. In CCA, structure coefficients, directly analogous to factor analysis structure coefficients, can be examined to identify the relative importance of variables in each significant variate (Sherry and Henson, 2005). In the present study, canonical independent variables were age, sex, the Depression and TRB scales of the TSI-2, and the PCL. The dependent variables were the two subscales of the TSI-2 Suicidality scale: Suicidal Ideation and Suicidal Behavior.

RESULTS

As presented in Table 1, lifetime self-reported exposure to one or more adverse experiences predicted increasing levels suicidality in the present study, $\chi^2(2)_{linear-by-linear} = 24.31$, p < 0.001, Spearman's r = 0.18. Specifically, a history of adverse experience was present in 26%

TABLE 3. Canonical Correlation of Relationship Between Suicidal Ideation and Behaviors With Demographics, Depression, Posttraumatic Stress, and Distress Reduction (n = 679)

	Variate 1	Variate 2	
	c^a	c	
Predictor variables			
Age	-0.23	0.29	
Sex	0.06	-0.03	
Depression	0.97	0.19	
PCL total score	0.86	-0.05	
TRB	0.83	-0.54	
Dependent variables			
Suicidal ideation	1.00	0.10	
Suicidal behavior	0.68	-0.74	

^aCanonical structure coefficient, considered meaningful (bolded) if $|c| \ge 0.40$.

of those with no suicidality, 40% of those with suicidal ideation only, and 58% of those reporting suicidal behavior.

A $2_{\rm (sex)} \times 3_{\rm (suicidality\ level)}$ MANOVA indicated significant effects of sex (F[3,666]=6.53,p<0.001, eta $^2=0.03)$ and suicidality level (F[6,1332]=74.13,p<0.001, eta $^2=0.25)$ on symptoms, but no significant interaction. Post hoc analyses indicated that women scored higher on depression than men (F[1,668]=7.88,p=0.005). Increasing levels of suicidality were associated with incremental increases in depression, tension reduction behaviors, and posttraumatic stress (see Table 2 for effects of suicide level on symptoms). These results did not change significantly when the PTS-T was substituted for the PCL-C.

As shown in Table 3, CCA revealed two significant variates ($Rc_1 = 0.67$, F[10, 1344] = 61.38, p < 0.001; $Rc_2 = 0.37$, F[4, 673] = 27.18, p < 0.001), both of which accounted for sufficient variance ($Rc^2 = 0.45$ and 0.14, respectively) to support statistical interpretation. The first variate indicated a relationship between 1) both suicidal ideation and suicidal behavior and 2) all three symptom clusters: depression, posttraumatic stress, and distress reduction. The second variate revealed an additional, independent relationship between suicidal behavior and distress reduction.

DISCUSSION

This study examined the relationship between exposure to adverse events and suicidal thoughts and behaviors, and tested three competing models of suicidality. Consistent with the available literature, those with a self-reported history of major adverse events were significantly more likely to self-report suicidality in the previous 6 months than those without such experiences. Further, two separate sources of variance were found in the data, one in which both suicidal ideation and behavior were related to depression, posttraumatic stress, and reactive

TABLE 2. Relationship Between Level of Suicidality and Symptoms (n = 674)

		Suicidality Level						
	None $(n = 406)$		Ideation $(n = 232)$		Behavior $(n = 36)$		ANOVA	
Symptom Scale	M	SD	M	SD	M	SD	F(2, 668)	p
Depression	5.19	4.85	13.28	7.16	20.17	6.34	213.13	< 0.001
Posttraumatic stress	22.72	6.70	31.19	11.29	43.11	12.71	130.10	< 0.001
TRB	1.79	2.35	4.79	4.18	10.42	5.27	144.39	< 0.001

All differences in depression, posttraumatic stress, and TRB as a function of suicide level were significant at p < 0.001 (Tukey's test).

avoidance, and one in which suicidal behavior was associated with reactive avoidance alone.

The relationship between self-reports of a past "trauma or a very upsetting event" and suicidal thoughts and behaviors was expected, given previous research on trauma and suicidality, although the variable used in the present study includes a range of adversities, some of which may have been very upsetting, but not necessarily traumatic, as defined by the DSM-5 (American Psychiatric Association, 2013). One obvious reason for a link between past adversity and suicidality involves the symptoms often associated with negative life events, including posttraumatic stress, depression, and reactive avoidance (Briere and Scott, 2014), each of which have been linked to suicidality. Joiner (2005) also suggested that direct exposure to distressing, upsetting, and threatening situations may habituate the individual to pain, injury, and death, leading to a greater willingness to use suicide as a way to deal with adversity.

Beyond exposure to adversity, the present findings indicate that, as expected, suicidal thoughts and behaviors are related to psychological symptoms, but also that suicidal severity increases as symptoms increase. Post hoc univariate tests of the MANOVA severity effect indicated that those reporting recent suicidal ideation, but not suicidal behavior, reported higher depression, posttraumatic stress, and reactive avoidance than those with no recent suicidality, and those reporting suicidal behavior had higher levels of these types of symptoms than those with suicidal ideations alone. Although causality cannot be inferred based on such cross-sectional results, the monotonic relationship between suicidal severity and symptoms suggests the possibility of a direct linkage between these variables.

Although suggestive, the MANOVA results are unable to provide information on the multivariate relationships between both suicidal ideation and suicidal behavior as they simultaneously relate to different forms of symptoms. For example, the suicidal severity variable used in this study collapses thoughts and behaviors into a single variable, which, although theoretically meaningful, does not allow study of the covariation between suicidal ideation and behavior in the context of other variables. Similarly, post hoc analyses of the MANOVA severity effect are, of necessity, univariate in nature, and thus preclude study of potentially different patterns of depression, posttraumatic stress, and reactive avoidance as they relate to different types of suicidality.

As expected, multivariate analyses provided greater insight into the relationship between symptoms and suicidality. CCA, which considers dimensionality in the relationship between multiple independent and dependent variable sets, revealed two possible routes to suicidality: a general one involving elevated symptoms and both suicidal ideations and behaviors, and one in which reactive avoidance was specifically related to suicidal behavior. Because CCA identifies separate, orthogonal relationships between independent and dependent variables, it was possible to rule out the possibility that reactive avoidance was just a part of elevated symptoms in the present study. Instead, a relationship was found between reactive avoidance and suicidal behavior even after controlling for the more general relationship between symptoms and behavior.

The identification of an independent association between reactive avoidance and suicidal behavior suggests that emotional distress, in isolation, may not be the only reason for suicidality; there may also be individuals who have insufficient emotional regulation capacities, are easily overwhelmed, and rely on distress reduction behaviors in response to even lower levels of stress or dysphoria. This possibility is supported by other studies indicating that low emotional regulation capacities are associated with "impulsive" suicidal behaviors (e.g., Rajappa et al., 2011; Zouk et al., 2006). The present study extends this finding by suggesting that this relationship is not just an epiphenomenon of greater posttraumatic stress and depression, but rather exists as a separate, independent response pattern.

There are several clinical implications of the current findings. First, the post hoc univariate results and the first CCA dimension indicate that adversity, depression, posttraumatic stress, and distress reduction behaviors are all related to suicidality and suicidal severity, which supports suicide screening for those who have been exposed to negative experiences and who manifest symptoms. Notably, these results suggest that testing for depression alone, as is common among suicide prevention programs, may not always be sufficient; also relevant are other symptoms or problems frequently comorbid with suicidality, notably PTSD (Ferrada-Noli et al., 1998), but also potentially difficulties associated with reactive avoidance, such as substance abuse (Harned et al., 2006), nonsuicidal self-injury (Asarnow et al., 2011), bingeing or purging (Bodell et al., 2013), and compulsive gambling (Newman and Thompson, 2003). The potential contribution of adverse experiences, posttraumatic stress, and reactive avoidance to suicidality reinforces the recommendation that suicide risk be considered when clients or others present with a history of attachment disturbance, child maltreatment, other traumas, and their sequelae.

A second implication of this study is that not all suicidality is related to enduring emotional distress. Instead, some suicidal behavior appears to be a rapid avoidance response to immediate stressors or triggers. Although this specific response can be linked to instances of borderline personality disorder (Linehan, 1993), in many instances, a formal personality disorder is not present (Briere, 2019). More specifically important may be the individual's relative capacity to downregulate painful internal states, so that a distress reduction behavior – like a suicide attempt – is less necessary.

Fortunately, there are a range of evidence-based clinical approaches and interventions that directly address the dynamics of reactive avoidance (e.g., Briere, 2019; Briere and Lanktree, 2012; Cloitre et al., 2006; Habib et al., 2013; Linehan, 1993), often with an eye toward reducing suicidal behavior (e.g., Miller et al., 2007). More generally, clinicians are increasingly becoming aware that suicide prevention may include treating posttraumatic stress as well as depression (e.g., Stevens et al., 2013), as well as specifically intervening in the emotional dysregulation thought to contribute to suicidality (e.g., Bryan and Rozek, 2018).

Limitations and Further Studies

Because this study involved a nonclinical, general population sample, the current findings may less directly relate to people whose suicidality occurs in the context of significant psychiatric comorbidities, as is often the case in clinical groups. As well, the cross-sectional nature of this study precludes causal conclusions. For example, it is possible that suicidal behavior can contribute to depression or posttraumatic stress, rather than the reverse, although this sequence seems less likely. Future research will ideally use longitudinal samples and related statistical procedures to confirm these findings and further specify the causal trajectories leading to suicidality.

Moreover, our measures relied on retrospective self-report, which may introduce typical biases, including underreporting or overreporting, and recall issues. It is also important to consider other variables that may mediate or moderate the results reported here, such as social support (Kleiman and Liu, 2013), socioeconomic status (Purselle et al., 2009), and the role of early parent-child attachment (Godbout et al., 2019) in suicidal behavior. As well, future research should consider inclusion of other negative internal states in addition to depression and posttraumatic stress, such as mania, severe anxiety, guilt and shame, and personality disturbance that does not directly arise from reactive avoidance (e.g., narcissism). Especially worthy of additional consideration is hopelessness, which has been linked to suicidality in various studies (e.g., Beck et al., 1985). Although hopelessness is part of the TSI-2 Depression scale, it was not considered as a separate variable in the current study. Additional research may find, for example, that hopelessness mediates or moderates the relationship between depression and suicidality, and/ or that it serves as its own independent risk factor (Lamis et al., 2016; Zhang and Li, 2013).

Future research should also include more specific and delineated adversity and trauma variables, since the one used in this study ("trauma or a very upsetting experience") taps a broad domain and may be interpreted differently by different individuals. Although this variable has been used successfully in other research (Briere and Eadie, 2016), more comprehensive measures of trauma and adversity (e.g., Weathers et al., 2013) would provide more detailed and specific information in the relationship between negative events and suicidality, including the recency of the stressor and the specific role of interpersonal loss. As well, although the reactive avoidance measure used in the present study (the TRB scale) is described in the TSI-2 manual as assessing involvement in external activities as a way to avoid painful internal states in the absence of adequate emotional regulation (Briere, 2011), future studies will ideally augment such scales with at least one formal measure of emotional dysregulation, and potentially, impulsivity.

CONCLUSIONS

The results of this study support several conclusions. First, a substantial number of individuals in the general population reported suicidal ideations or behaviors in the past 6 months. Second, suicidality was most likely among those who reported previous adverse experiences. Third, there may be two independent pathways to suicidality: one in which suicidality, in general, is predicted by a range of psychological symptoms, and one in which reactive avoidance is specifically associated with suicidal behavior. These findings have clinical implications both for suicide screening and treatment.

DISCLOSURE

John Briere is the author of the Trauma Symptom Inventory, first edition (TSI) and second edition (TSI-2), for which he receives royalties from Psychological Assessment Resources. Omin Kwon, Randye J. Semple, and Natacha Godbout have no conflicts of interest to declare.

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