Worst-point suicidal plans: a dimension of suicidality predictive of past suicide attempts and eventual death by suicide

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Abstract

Among 440 psychiatric outpatients with current suicidal ideation, we examined the empirical distinction between the “plans” vs. “desire” dimensions of suicidality, focusing for conceptual and empirical reasons on a worst-point assessment strategy. Factor analyses were consistent with the distinction, but more importantly, among the current ideators included in this study, the worst-point “plans” dimension was the only predictor significantly related to both of two important indices, history of past attempt and eventual suicide. These findings bear on the trajectory of suicidal behavior over time, as well as inform the clinical assessment of suicidal patients.

Keywords: Completed and attempted suicide; Suicidal plans; Suicidal desire; Worst-point assessment strategy

1. Introduction

Several studies have suggested that the structure of suicidal symptoms is multidimensional, and that the factors are not similarly related to key suicide-related indices. As a specific example,
Joiner, Rudd, and Rajab (1997) showed that the factor space containing suicidal symptoms can be adequately explained by two factors, which were named “resolved plans and preparations” and “suicidal desire and ideation” (see also Beck, Brown, & Steer, 1997, who reported a similar factor structure). This study demonstrated that, although the presence of symptoms corresponding to either factor is of clinical concern, the symptoms of “resolved plans and preparation” may be, relatively speaking, of more concern than the symptoms of “suicidal desire and ideation” (e.g., “resolved plans and preparation” was more related than “suicidal desire and ideation” to pernicious suicide indicators such as having attempted suicide recently).

The “resolved plans and preparation” factor was composed of the following: a sense of courage to make an attempt; a sense of competence to make an attempt; availability of means to and opportunity for attempt; specificity of plan for attempt; and preparations for attempt. Importantly, these symptoms, especially competence and courage, are facilitated by previous suicidal experience—in general, the more severe the previous suicidal experience, the more one habituates to the “taboo” and prohibited quality of suicidal behavior, as well as to the fear and pain associated with self-harm. As one gains “practice” with and loses inhibitions regarding suicidal behavior, competence and courage regarding suicidality accrue (for accounts of the effects of previous suicidal behavior on subsequent suicidality, see Beck, 1996; Joiner & Rudd, 2000; Joiner, Rudd, Rouleau, & Wagner, 2000). The “resolved plans and preparation” factor includes symptoms heightened by the effects of past suicidal experience. A focus on past suicidal experience is relevant in light of our “worst-point” suicide assessment strategy to be described later.

The “suicidal desire and ideation” factor comprised the following: reasons for living (loaded negatively); wish to die; wish not to live; passive attempt; desire for attempt; lack of deterrents to attempt; and talk of death/suicide. In contrast to the “resolved plans and preparation” factor, the “suicidal desire and ideation” factor does not include as much material relevant to past suicidal behavior, such as competence and courage regarding suicide.

The distinction between the “resolved plans and preparation” and the “suicidal desire and ideation” factors may have clinical value. For example, based on this conceptualization, a relatively formal clinical assessment procedure was developed (Joiner, Walker, Rudd, & Jobes, 1999). The approach prioritizes the distinction between “resolved plans and preparations” and “suicidal desire and ideation” (the concept of the multiple suicide attempter is also emphasized; Rudd, Joiner, & Rajab, 1996).

Suicide risk assessment is a crucial clinical endeavor, one that should rest on a solid empirical foundation. The assertion that “resolved plans and preparations” and “suicidal desire and ideation” form a foundation of suicide risk assessment is generally consistent with clinical lore, but more importantly, has some empirical support (e.g., Beck et al., 1997; Joiner et al., 1997). In this paper, using a sample of patients with current suicidal ideation, we solidify the distinction’s empirical basis, by affirming its factor-analytic rigor, and more importantly, showing that the “plans” factor is more associated than the “desire” factor with two of the most important suicide-related indices of all: history of previous suicide attempts, and eventual death by suicide.

We do this by utilizing a “worst-point” assessment strategy, which involves a retrospective report of suicidal symptoms at their most severe point. Symptoms from both the “plans” and “desire” factors are retrospectively assessed. There are conceptual and empirical reasons to take this assessment approach. From a conceptual standpoint, as noted earlier, past suicidal experience, especially if severe, affects subsequent suicidal symptoms. Those individuals whose “worst-point”
suicidality has been severe are, in general, more likely than others to be emboldened about suicide. Additionally, for those with severe “worst points,” suicide-related cognitions and behaviors may become more accessible and active (Beck, 1996; Teasdale, 1988, has provided a related cognitive account regarding depression, and Post et al., 1996, provided a similar neurobiological view). The more accessible and active these thoughts and behaviors become, the more easily they are triggered (e.g., even in the absence of negative events), and the more severe are the subsequent suicidal episodes—a view that has been empirically supported in adults (Joiner & Rudd, 2000) and youth (Joiner et al., 2000).

The “worst-point” assessment strategy has more pointed empirical support as well. “Worst-point” reports have been found to be a significant predictor of completed suicide (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999; Pierce, 1981). In the Beck et al. (1999) study, patients with high scores on a “worst-point” measure were 14 times more likely to later commit suicide than patients with lower scores. Reports of current suicidality, too, have been shown to predict subsequent completed suicide in a large prospective study with psychiatric outpatients (Brown, Beck, Steer, & Grisham, 2000), but this result did not emerge in a smaller study with psychiatric inpatients (Beck, Steer, Kovacs, & Garrison, 1985).

To summarize, the factor structure of suicidal symptoms, and attendant distinctions between suicidal symptom clusters, amount to more than issues of psychometrics and construct validity, because they inform suicide risk assessment, a mental health procedure that can save lives. Using a “worst-point” assessment procedure, we provide considerable support to the “plans” vs. “desire” distinction, especially by showing that the “plans” dimension is particularly related to subsequent completed suicide, as well as to lifetime history of suicide attempts, among psychiatric outpatients experiencing suicidal ideation at the time of assessment.

2. Method

2.1. Participants

From a total sample of 3701 outpatients previously studied by Beck et al. (1999), a sample of 440 current suicide ideators was selected, for whom (a) complete data on current and worst-point suicide scales (described later), as well as complete data on past suicide attempts, were available and (b) the current level of suicidal ideation as determined by the total score on a scale for current suicidal ideation (SSI-C; see below) was less severe than the worst level of suicidal ideation that the patient had ever experienced (total score on SSI-W; see below). Thus, all participants were experiencing current suicidal symptoms, and all had experienced at least one past episode of suicidality that was more severe than the current episode. Our focus on those reporting current suicidality is similar to the approach of Joiner et al. (1997), who found clear support for the “plans” vs. “desire” structure, and who studied currently suicidal patients. Our focus on those who had experienced at least one past episode of suicidality that was more severe than the current episode is consistent with our reasoning that past suicidal experience, especially if severe, affects subsequent suicidal symptoms, via the accrual of competence and courage regarding suicide, as well as the sensitization of suicide-related cognitive structures (Beck, 1996; Joiner & Rudd, 2000;
The relation of worst-point “plans” and “desire” to completed suicide and past history of suicide—the focus of the present paper—has not been addressed before in these patients. Beck and Steer’s (1991) method of screening for suicide ideators was used to designate those with current suicidal ideation using the Scale for Suicide Ideation (SSI; Beck, Kovacs, & Weissman, 1979). Specifically, patients were designated as current ideators if they received a rating greater than zero on an item assessing “desire for suicide attempt” or an item assessing “desire for passive attempt” (e.g., leaving life and death to chance, by carelessly crossing a busy street, driving recklessly, etc.). To be selected for this study, patients had to report at least a weak desire to actively or passively attempt suicide in previous worst-point episodes. In addition, the total worst-point SSI scores must have exceeded total current SSI scores.

All of the current suicide ideators were consecutively evaluated at the Center for Cognitive Therapy (CCT), University of Pennsylvania, between January 1975 and December 1995. There were 278 (63%) women and 162 men. The ethnic composition was 353 (93%) white. The mean age was 33.50 (SD = 11.16) years. Regarding marital status, 54% were single and had never been married, whereas 46% were married, divorced, separated, or widowed. With respect to education, 79% had some college education or above, whereas 21% did not. Approximately 27% of patients were unemployed, and 73% were either employed or students. Regarding psychiatric history, 36% had been hospitalized for a psychiatric problem, 71% indicated that a family member had been treated for a mental disorder, and 9% indicated that a family member had committed suicide.

After signing voluntary informed consent forms, patients were administered the worst-point and current versions of the Scale for Suicidal Ideation as part of the standard intake battery of psychological tests and psychiatric rating scales given to all patients evaluated at the CCT. All patients received clinical diagnoses based on structured interviews; those patients evaluated after 1980 (n = 430, 97.7% of the total sample) were diagnosed with consecutive editions of the Structured Clinical Interview (SCID) for DSM-III or DSM-III-R (Spitzer, Williams, Gibbons, & First, 1990). The 10 patients (2.3% of the total sample) evaluated prior to 1980 received diagnoses based upon the detailed interview described in Beck, Rush, Shaw and Emery (1979). In the present study, disorders were classified into broad diagnostic groups.

There were 344 (78%) patients who were diagnosed with a principal Axis I mood disorder, 53 (12%) outpatients who were diagnosed with a principal anxiety disorder, and 43 (10%) who were diagnosed with another type of Axis I disorder. A comorbid Axis I disorder was diagnosed for 292 (66%) patients. Of these, 118 (40%) were diagnosed with a secondary mood disorder, 126 (43%) were diagnosed with a secondary anxiety disorder, and 48 (17%) were diagnosed with another type of secondary disorder. With respect to Axis II, 254 patients (58%) were diagnosed with a personality disorder.

A key dependent variable in our regression analyses, reported later, is past suicide attempts. 184 (42%) patients reported that they had made a past suicide attempt (defined as self-injury with some stated intent to die).

2.2. Instruments

2.2.1. Scales for suicide ideation, current (SSI-C) and worst-point (SSI-W)

The 19-item SSI-C (Beck, Kovacs, et al., 1979), an interviewer-rated measure, was used to evaluate the current intensity of patients’ specific attitudes, behaviors, and plans to commit suicide.
These 19 items assess such characteristics as capability for suicide, preparations for suicide, wish to die, wish to live, reason for living or dying, active suicidal desire, passive suicidal desire, and so forth (see Table 1). Each item is rated on a three-point scale from 0 to 2, and each item is graded according to the intensity of the suicidality. Total scores are calculated by summing the 19 ratings, and these total scores can range from 0 to 38. The first five items are used to screen for attitudes toward living and dying, and only suicide ideators or patients who report a desire to make an active (item #4) or passive (item #5) suicide attempt are rated on items #6–19. The Cronbach coefficient alpha of the SSI-C for the present 440 current ideators was 0.81.

The same scoring format that was employed with the SSI-C was also used to rate the patients’ suicide ideation at its worst point in their lives (SSI-W). However, with the SSI-W, patients were instructed to recall the approximate date and circumstances when they experienced the most intense desire to commit suicide. Then patients were asked to keep this experience in mind while the interviewer administered the SSI-W and rated the patients’ responses to each of the 19 items regarding how suicidal they were at that point in their lives. The internal consistency of the SSI-W for the 440 worst-point ideators was also high (Cronbach alpha = 0.87). Moreover, Beck et al. (1999) showed that interrater reliability for SSI-C and SSI-W was adequate, in that correlations of the total scores for both scales were high among the initial interviewer and two additional,

| Item | SSI-W | | SSI-C | |
|------|------|--|------|--|------|
|      | Plans | Desire | $h^2$ | Plans | Desire | $h^2$ |
| 1    | Wish to live | –0.03 | 0.57 | 0.31 | –0.11 | 0.63 | 0.34 |
| 2    | Wish to die | –0.09 | 0.63 | 0.34 | 0.06 | 0.45 | 0.24 |
| 3    | Reason for living/dying | –0.12 | 0.77 | 0.51 | –0.06 | 0.66 | 0.40 |
| 6    | Duration of ideation | 0.28 | 0.48 | 0.46 | 0.05 | 0.61 | 0.40 |
| 7    | Frequency of ideation | 0.22 | 0.49 | 0.41 | 0.11 | 0.60 | 0.44 |
| 8    | Attitude toward ideation | 0.31 | 0.40 | 0.38 | 0.13 | 0.45 | 0.27 |
| 9    | Control over action | 0.39 | 0.26 | 0.25 | 0.22 | 0.29 | 0.19 |
| 10   | Deterrents to attempt | 0.39 | 0.21 | 0.07 | 0.26 | 0.14 | 0.12 |
| 11   | Reason for attempt | 0.09 | 0.21 | 0.49 | 0.77 | –0.04 | 0.56 |
| 12   | Specificity of planning | 0.69 | –0.13 | 0.45 | 0.66 | –0.07 | 0.40 |
| 13   | Availability/opportunity | 0.73 | 0.06 | 0.42 | 0.42 | 0.12 | 0.23 |
| 14   | Capability | 0.62 | 0.15 | 0.50 | 0.37 | 0.23 | 0.27 |
| 15   | Expectancy/anticipation | 0.37 | –0.02 | 0.53 | 0.47 | 0.14 | 0.30 |
| 17   | Suicide note | 0.42 | 0.04 | 0.20 | 0.41 | 0.00 | 0.17 |
| 18   | Final acts | 0.33 | 0.02 | 0.12 | 0.40 | 0.06 | 0.19 |
| 19   | Deception/concealment | 0.37 | –0.05 | 0.12 | 0.40 | 0.06 | 0.01 |

Note: $N=440$ for worst-point and current ideators, respectively. SSI-W=scale for suicide ideation—worst. SSI-C=scale for suicide ideation—current. Salient loadings $\geq 0.30$ are underlined. Item numbers 1–3 and 6–8 were retained for the “desire” subscale and items 12–17 were retained for the “plans” subscale.
independent raters (all possible correlations among the three raters were 0.98 or higher, $p < 0.001$). The scale has demonstrated adequate concurrent validity through moderate correlations with clinicians’ ratings of suicidal risk (Beck, Kovacs, et al., 1979). Beck, Rush, et al. (1979) established discriminant validity by distinguishing depressed outpatients from inpatients hospitalized for suicidal ideation; the two groups did not differ regarding level of depression, but the suicidal group scored significantly higher on the SSI. Convergent and discriminant validity have also been demonstrated through the SSI-C’s and SSI-W’s relations to depression ($r = 0.39$), hopelessness ($r = 0.47$), and diagnosis of personality disorders (Beck et al., 1997). In addition, Wetzel (1975, 1976) found that high scores on the SSI were associated with less favorable ratings of the concepts of “life”, “myself”, and “suicide.” The SSI-C has demonstrated predictive validity regarding suicide completion (Brown et al., 2000; but see Beck et al., 1985). The SSI-W, too, appears to be related to eventual suicide and to previous suicide attempts (Beck et al., 1997, 1999).

Subscales representing the “plans” and “desire” dimensions, based on factor analyses described later in the Results section, were formed by summing the SSI-C and SSI-W ratings for items #1–3 and #6–8 for the “desire” dimension, and items #12–17 for the “plans” dimension (see Table 1 for item content). These items were specifically chosen as markers for the two dimensions because the same sets of six salient items per each dimension emerged in analyses on both the SSI-C and SSI-W. The coefficient alphas for the SSI-C “desire” and “plans” subscales were, respectively, 0.75 and 0.71; for the SSI-W “desire” and “plans” subscales, coefficient alphas were 0.78 and 0.81, respectively.

2.2.2. Beck Depression Inventory (BDI; Beck, Rush, et al., 1979; Beck & Steer, 1987)

The BDI is a 21-item self-report inventory of depressive symptoms. Total scores range from 0 to 63, with higher scores indicating more severe depression. The BDI has yielded adequate reliability estimates (Beck, Steer, & Garbin, 1988), and has been well-validated as a measure of severity of depressive symptoms (Beck, Steer, & Ranieri, 1988).

2.2.3. Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974; Beck & Steer, 1993)

The BHS is a 20-item true–false self-report inventory of negative expectations regarding the future. Total scores range from 0 to 20, with higher scores representing more severe levels of hopelessness. Beck et al. (1974) reported an internal consistency of 0.93 among a sample of patients recently hospitalized for a suicide attempt. The test–retest reliability has been estimated at 0.85 (Holden & Fecken, 1988). Concurrent validity has been established by correlations between clinicians’ ratings of hopelessness and scores on the BHS ($r = 0.74$ for outpatients, $r = 0.64$ for inpatient suicide attempts).

2.3. Follow-up procedure

Deaths in the sample were ascertained by use of the national death index (NDI). The NDI is a centralized computer database of death record information compiled from data submitted annually by individual state vital statistics offices beginning with 1979. Identifying information provided by the user is checked against corresponding information in the NDI database. Possible
matches were compared to the intake records according to specific criteria outlined by the NDI (US Department of Health and Human Services, National Center for Health Statistics, 1981). When a match was made, a copy of the death certificate was obtained from the particular state’s vital statistics office in order to determine the cause of death. Of the 440 patients in the present study, and who were searched for from 1979 to 1995 (the years covered by the NDI at that time), eight patients had “suicide” listed as the cause of death on their death certificates.

3. Results

3.1. Factor structure of the suicidality scales (SSI-C and SSI-W)

To ascertain whether the “plans” and “desire” dimensions found by Joiner et al. (1997) were also underlying this study’s ideators’ SSI-W and SSI-C ratings, we first calculated Kaiser’s Measure of Sampling Adequacy (MSA; Dziuban & Shirkey, 1974) for both the SSI-C and SSI-W. In general terms, the MSA assesses whether variables’ intercorrelations are cohesive enough that common-factor analyses can proceed. The ratings for items #4 and 5, “desire for suicide attempt” and “desire for passive attempt”, for both scales were excluded because these items had been employed in determining whether patients were included in the study. The MSA values were, respectively, 0.89 and 0.84 for the SSI-W and SSI-C ratings; such values were considered by Kaiser (1970) as “meritorious”.

Iterated principal-factor analyses were next used to identify the dimensions of worst-point and current suicide ideation, and the resultant factors were rotated to a Promax (oblique) criterion. Because the present analyses were intended to ascertain whether the “plans” and “desire” subscales corresponding to Joiner et al.’s (1997) same-named subscales could be constructed from the present sample’s SSI-W and SSI-C ratings, two dimensions were extracted for each scale.

Table 1 presents the Promax-rotated standardized regression coefficients for the SSI-W and SSI-C factor pattern matrix. The first factor in Table 1 for SSI-W contained many items related to the “plans” dimension. Salient (≥0.30) loadings occurred for such items as capability for suicide, actual preparation, specificity of planning, availability and opportunity, and final acts. As the table also shows, a similar “plans” factor emerged from within the SSI-C, with salient loadings on such items as capability for suicide, actual preparation, specificity of planning, availability and opportunity, suicide note, and final acts.

Both the SSI-C and SSI-W scales also produced a recognizable “desire” factor, with salient loadings on such items as wish to die, wish to live, reasons for living or dying, and frequency of ideation. Therefore, the overall item compositions of both factors for both ratings scales generally reflect the “plans” and “desire” dimensions emphasized by Joiner et al. (1997), and similar to factors originally reported by Beck, Kovacs, et al. (1979).

As would be expected, there were positive correlations between the two factors for both scales (for SSI-W: $r = 0.55$, $p < 0.001$ and for SSI-C: $r = 0.48$, $p < 0.001$). These correlations converge with the coefficient of 0.52 reported by Joiner et al. (1997).
3.2. Regression analyses predicting past attempt and eventual suicide

We conducted two multiple logistic regression analyses to evaluate the relations of SSI-W “plans”, SSI-W “desire”, SSI-C “plans”, and SSI-C “desire” to eventual suicide and to past suicide attempt. In these analyses, statistical assumptions for dispersion were met, including for the analysis on eventual suicide, for which the dependent variable was skewed. Importantly, the analytic procedures used here are resilient under such conditions (Long, 1997). Moreover, there was no under- or overdispersion produced by not including interactions, quadratic or higher relationships between explanatory and response variables, extreme outliers, the omission of important explanatory variables, or the small number of completed suicides (Statistical Analysis System, 1995). No outlier had a significant impact on the current analyses. The four predictors, SSI-W “plans”, SSI-W “desire”, SSI-C “plans”, and SSI-C “desire”, were simultaneously entered into the equation, thus controlling for the possible confounding effects of predictors on one another (intercorrelations between the four predictors were in the range from 0.28 to 0.55, with SSI-W “plans” and SSI-W “desire” showing the highest correlation; problems related to multicollinearity are thus not likely). Our prediction was that worst-point “plans” would emerge as the strongest predictor in both equations.

In the analysis predicting past suicide attempt (at least one previous attempt vs. no previous attempt), the conditional odds ratios (ORs), with 95% confidence intervals (CIs), indicated that only SSI-W “plans” (OR = 1.44; 95% CI: 1.31–1.58) and SSI-C “desire” (OR = 1.19; 95% CI: 1.08–1.31) significantly contributed unique odds to the estimation of past suicide attempt. In fact, for every point that the SSI-W “plans” score increased, there was a 44% increase in the likelihood of past attempt, whereas there was a 19% increase in the likelihood of past attempt for every point that the SSI-C “desire” score increased. Consistent with prediction, then, worst-point “plans” comprised the strongest predictor of past suicide attempt.

In the analysis predicting eventual suicide, the conditional ORs indicated that only SSI-W “plans” (OR = 1.40; 95% CI: 1.05–1.86) significantly contributed unique odds to the estimation of eventual suicide. The likelihood of eventual suicide rose 40% for every point that the SSI-W “plans” score increased. Again consistent with prediction, then, worst-point “plans” comprised the strongest predictor, and the only significant predictor of the four suicidality dimensions, of eventual death by suicide.1

To further test the predictive ability of worst-point “plans”, we repeated the previous two analyses, but entered as covariates depression scores as measured by the BDI and hopelessness scores as measured by the BHS. Demonstrating that worst-point “plans” has predictive value over these two established predictors of suicidal behavior would serve to strengthen its case as a unique predictor of suicidal behavior. Consistent with prediction, worst-point “plans” remained a significant predictor of both past suicide attempt (OR = 1.42; CI = 1.27–1.57) and eventual completed suicide (OR = 1.42; 95% CI: 1.03–1.95), even after controlling for depression and hopelessness.

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1 Because patients in this study were selected on the basis of responses to SSI-C and SSI-W ratings for items #4 and 5, “desire for suicide attempt” and “desire for passive attempt”, we were concerned that range restriction might occur, especially for the current and worst-point “desire” dimensions. But this was not the case—the “desire” dimensions’ variances were not significantly different than those for the “plans” dimensions, and the variances for the “desire” and “plans” dimensions in this selected sample were not different from those reported on unselected psychiatric outpatients (cf. Beck et al., 1999).
4. Discussion

Our study was intended to further solidify the empirical distinction between the “plans” vs. “desire” dimensions of suicidality, focusing for conceptual and empirical reasons on a worst-point assessment strategy. Factor analyses were consistent with the distinction, as well as with past work (Beck et al., 1997; Joiner et al., 1997). More important, among the current ideators included in this study, the worst-point “plans” dimension was the only predictor significantly related to both of two important indices, history of past attempt and eventual suicide.

The finding that the “plans” factor was related to key suicide indices should not be surprising, for several reasons. First, these results converge with those presented by Joiner et al. (1997), who also reported that a “plans” factor was more related than a “desire” factor to past suicide attempt. Second, the factor contains content that should be familiar to clinicians as particularly worrisome (e.g., specific plans; actual preparatory behaviors; access to means for suicide). Third, content related to capability, confidence, and competence regarding suicide implies some resolution to the intense ambivalence that is a feature of suicidality and that may forestall suicide attempt if unresolved (Shneidman, 1992). For these reasons, Joiner et al. (1997) specifically predicted that the “plans” factor may be an indicator of heightened risk for future suicidality, a prediction that the current findings on completed suicide bear out.

Importantly, however, worst-point plans, not current plans, comprised a predictor of completed suicide and past suicide attempts, as we had hypothesized. We therefore suggest that while planfulness is important, so is past experience with severe suicidality, the implications of which are potentially numerous. For example, repeated experience with self-harm may engage opponent-processes. Opponent process theory (Solomon, 1980) predicts that, with repetition, the effects of a provocative stimulus diminish (the “a” process), and the opposite effect, or opponent process, becomes amplified and strengthened. As applied to suicidal behavior, the painful and fear-inducing qualities of suicidality may diminish with repetition, whereas opponent processes (e.g., calming and pain-relieving effects) may intensify. Moreover, people may engage in more and more extreme behaviors to obtain the same effects. Just as a skydiver may try higher or more interesting dives to further amplify the exhilarating opponent process, someone who self-harms may engage in increasingly dangerous behavior. Additionally, as experience with severe suicidality accumulates, suicide-related mental structures may become more and more easily triggered (Beck, 1996; see also Rudd, Joiner, & Rajab, 2000 for detailed clinical approach based on this perspective).

This general perspective assigns importance to the effect of past suicidal experience on future suicidality, and does not view the relation of past to future suicidality as spurious (e.g., accounted for by a third variable, such as an enduring predisposition to suicidal behavior). Clark, Gibbons, Fawcett, and Scheftner (1989) evaluated two models of the relation of previous to subsequent suicide attempt among mood disordered patients. One model (the “trait” or “heterogeneity” model) viewed likelihood of suicide attempt as predetermined by enduring dispositions and as uninfluenced by intervening occurrences of suicidal behavior, whereas the other model (“crescendo” or “state dependence” model) assumed that each occurrence of suicidal behavior increases the subsequent likelihood of suicidal behavior. Data were consistent with both models, but Clark et al. concluded that the “trait” model was preferable, on the grounds of parsimony. Importantly, the framework we have articulated here was not fully captured by either the “crescendo” or “trait” models tested by Clark et al. Our views would be captured by an amended “crescendo” model,
in which occurrences of suicidal behavior increase the subsequent likelihood of suicidal behavior only if the original behavior contains “planful” elements and approaches or exceeds previous worst-point suicidality. On this view, mild suicidality may not increase the subsequent likelihood of suicidality.

It is important to note that we did not directly test the opponent process or amended “crescendo” models espoused in the previous paragraphs. Indeed, these models go beyond the scope of what we tested in this study. However, they coincide roughly with our findings, and we set them forth as potential explanations of our findings. Further, we encourage future research to explicitly test these models’ predictions.

We note some additional implications of our results, as well as limitations of the study that should be kept in mind when interpreting these findings. First, our findings provide further support to the general clinical assessment framework outlined by Joiner et al. (1999). The framework is adaptable to many clinical settings, and may help economize and refine clinicians’ risk assessment activities. Second, insofar as impulsivity is a documented risk for suicidal behavior (Apter, Plutchik, & van Praag, 1993), it is interesting to consider that the completed suicides in this sample may have involved impulsivity. How might this square with our emphasis on “planfulness”? In reply, we suggest that many features of the “plans” dimension of suicidality (e.g., capability, courage, competence) may be operative in impulsive (as well as other) suicides. Indeed, through repeated impulsive suicidal acts, impulsive people may become experienced, capable, courageous, and competent regarding suicide, and in this sense, “planful”. Third, it is important to emphasize that, like Joiner et al. (1997), we focused only on current suicide ideators, and the present results are limited only to current ideators. Interestingly, Joiner et al.’s (1997) approach, although not purposefully a worst-point strategy, may have amounted to one, because young people in a severe crisis were studied. The present results using a worst-point strategy, and those of Joiner et al. (1997) using what may have amounted to a worst-point strategy, produced similar conclusions.

Four other considerations deserve mention. First, current-point predictors may have been constrained relative to worst-point predictors due to the different time periods for which they could predict a past suicidal attempt. That is, predictors from the worst point could predict attempts occurring both before and after the worst point, while current-point predictors could only predict attempts occurring prior to the current (intake) period. While we think it is unlikely to occur and is inconsistent with our proposed conceptual framework, it is nonetheless possible that current-point predictors may have demonstrated more strength if future attempts (i.e., attempts occurring after intake) were predicted as well as past attempts. However, our data did not allow us to examine this possibility. Second, given the infrequent occurrence of suicide in our sample, statistical power was low and may have hindered the predictive ability of the four suicidality dimensions (but, it is reiterated, analytic procedures used here are resilient under such conditions; Long, 1997). This limitation is common to suicide research due to the low base rates of completed and attempted suicide. However, if low statistical power were an explanation for our findings, then null results should have been found for worst-point “plans” as well as the other dimensions (instead, worst-point “plans” was the only dimension related to attempted and completed suicide). Although low statistical power may provide an explanation for the null findings regarding the remaining three suicidality dimensions, the fact that worst-point “plans” emerged as a significant predictor in spite of low power further highlights its strength as a predictor of suicidal behavior. Incidentally, the rate of suicide in our sample was comparable to that found in other clinical
samples, which is usually between 1 and 5 suicides per 1000 patient years of follow-up (Coppen & Farmer, 1998). Third, we reiterate that the worst-point assessment involved retrospective accounts of past behavior. This did not seem to systematically confer any advantageous bias on the worst-point predictors in general, because worst-point “desire” was predictive of neither attempt nor completed suicide. Fourth, for those who died by suicide, the interval between assessment and eventual death by suicide varied. Although this issue should be considered when interpreting our results, it is unlikely to explain the convergence of results pointing to worst-point “plans” as the only dimension predictive of both attempted and completed suicide.

In summary, within the study’s constraints, we have further supported a two-factor structure of suicidality emphasizing “plans” vs. “desire” dimensions. For conceptual and empirical reasons, we used a worst-point assessment strategy, and showed that worst-point “plans” was predictive of past suicide attempt and eventual death by suicide among patients with current suicidal symptoms. These findings bear on the trajectory of suicidal behavior over time, as well as inform the clinical assessment of suicidal patients.

References


