Testing Shneidman's model of suicidality in incarcerated offenders and in undergraduates

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ABSTRACT

Suicidality constitutes a major health issue for society in general and incarcerated populations in particular. Shneidman's model of suicide proposes that psychache (i.e., intense psychological pain) is the pre-eminent psychological cause of suicidality and mediates the influence of all other psychological correlates such as depression or hopelessness. The current research evaluates Shneidman's model for samples of 73 male federal offenders, 80 male undergraduates, and 80 female undergraduates. Consistent with Shneidman's theory, psychache was both a significant and a more important statistical predictor of reported self-harming ideation and action than was either depression or hopelessness. Further, this relatively greater importance of psychache for the statistical prediction of suicidality was not moderated either by offender status or by sex. Overall, findings support the applicability of Shneidman's model of suicidality to incarcerated individuals and indicate the model's generalizability across sex and offender status.

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1. Introduction

As one of the leading causes of death, suicide annually accounts for almost one million deaths globally (World Health Organization, 2000). Further, for every death by suicide, there are many times more suicide attempts resulting in hospitalization (Holley, Fick, & Love, 1998) and an even larger number of suicide attempts not involving inpatient admission (Pagliaro, 1995). As such, suicide and self-harm constitute extensive mental health issues in society.

For incarcerated populations, death by suicide is a relatively more common occurrence than for non-incarcerated individuals. McKenzie and Keane (2007), for example, indicate that suicide rates in British prisons are approximately 10 times higher than those in the general public. Further, in a US national study, Hayes (1989) summarizes that the rate for death by suicide in jails is nine times that of the general population. Indeed, suicide is a compelling concern for correctional facilities and agencies.

Among risk factors for suicide, although a previous suicide attempt and male sex are the most consistent predictors for subsequent death by suicide, these historical or demographic variables are not subject to control or intervention. Consequently, recent research has emphasized the identification of psychological risk factors for suicidal behaviour because such factors are believed to be

more amenable to therapeutic change (Brown, Beck, Steer, & Grisham, 2000). Prominent among psychological factors associated with suicidal manifestations are the constructs of depression, hopelessness, and psychache.

Depression has a long history as a recognized risk factor for suicide. In his cognitive theory of depression, Beck (1987) indicates that depression is caused by a triad of negative cognitions about the self, the world, and the future, and that suicide may be related to some specific aspects of this negative triad. In particular, a negative view of the future (i.e., hopelessness) is notable for its replicable ability to predict subsequent death by suicide (Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Brown, & Steer, 1989; Beck, Steer, Kovacs, & Garrison, 1985; Brown et al., 2000). For example, Brown et al., in a 20-year longitudinal study following over 6000 psychiatric outpatients, found that patients scoring above a specific cut-score for hopelessness at initial assessment time were four times more likely to die by suicide subsequently than those patients who scored below the cut-score. Thus, depression and, in particular, a hopelessness subtype of depression are implicated as psychological factors relevant to suicide.

Distinct from cognitive theories, Shneidman (1993) states that suicide is caused by psychache or internal perturbations (i.e., intense psychological pain, anguish, hurt). As defined by Shneidman, psychache is a chronic, free-floating, nonsituation-specific psychological pain. This affective state is conceptually distinct from any specific psychiatric disorders such as depression, and psychache is posited by Shneidman to be caused by the presence of
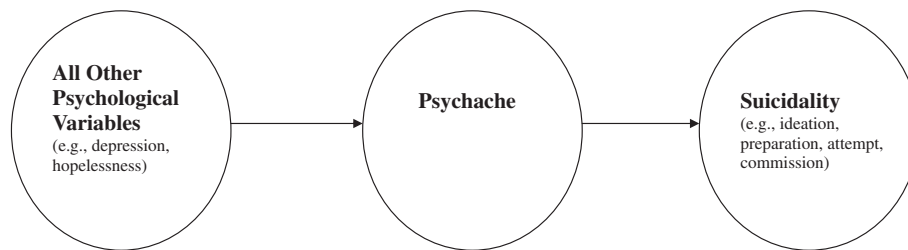
Fig. 1. Psychache as a mediator between all other psychological variables and suicidality.

unfulfilled, frustrated, or thwarted psychological needs. According to Shneidman, psychache is the most proximal cause of suicide and all other psychological factors are relevant for suicide only as they relate to psychache (Fig. 1). Although recognizing the relevance of pain, perturbation, and psychological press (Shneidman, 2005) and the consideration of other factors (e.g., life stressors, genetics, cognitive constriction), Shneidman (1993) asserted that "Suicide is caused by psychache" (p. 145), and further that "there is almost no suicide without a great deal of psychological pain" (Shneidman, 2005, p. 9). As such, psychache is regarded as a necessary condition for suicide. Recent findings support this priority for psychache in links between perfectionism and suicidality (Flamenbaum & Holden, 2007) and between alexithymia and suicidality (Keefer, Holden, & Gillis, 2009). Furthermore, empirical evidence indicates that psychache or internal perturbation explains unique variance in the statistical prediction of suicidality, when controlling for depression and hopelessness (Berlim et al., 2003; DeLisle & Holden, 2004; Holden, Kerr, Mendonca, & Velamoor, 1998; Holden & Kroner, 2003; Holden & McLeod, 2000; Holden, Mehta, Cunningham, & McLeod, 2001; Johns & Holden, 1997).

Are depression, hopelessness, and psychache truly distinct constructs or do they comprise common variance that is merely labeled differentially according to different theories? Factor analytic evidence (DeLisle & Holden, 2009) indicates that depression, hopelessness, and psychache constitute three correlated, but separate, dimensions. Furthermore, using exploratory and confirmatory factor analyses, Troister and Holden (2010) also demonstrate the distinctiveness, and the convergent and discriminant validity of measures of depression, hopelessness, and psychache. In addition, canonical analysis focusing on construct overlap establishes that psychache accounts for more variance in depression and hopelessness than these latter two variables account for in psychache (DeLisle & Holden, 2009). Finally, Mills, Green, and Reddon (2005) find that, although related to depression, hopelessness, and anxiety, psychache is neither conceptually nor empirically redundant with these constructs.

With Shneidman's model of suicide emphasizing psychache's relative importance over other psychological factors for understanding suicide and given recent research identifying psychache's unique and relative contribution to the statistical prediction of suicide manifestations, the current study tested the robustness of Shneidman's model by evaluating its applicability in samples drawn from quite diverse populations: incarcerated offenders and undergraduate university students. Although our samples varied substantially with regard to age and sex distribution, factors related to the predictors and suicide-related behaviours (Beck, Steer, & Brown, 1996; Holden & Fekken, 1988) measured in this study, Shneidman's perspective does not indicate that psychache's relevance for understanding suicidality is moderated by either age or sex or any other demographic feature. Consequently, based on Shneidman's model of suicide indicating the pre-eminence of psychache as the cause of suicide and suicide-related behaviour,

and in consideration of suicide as a particularly relevant issue for incarcerated offenders, our hypotheses were:

1. Offenders would score higher on measures of suicidality and suicide risk factors than non-offenders.
2. Psychache would have validity for statistically predicting suicide manifestations.
3. Psychache would be more important than depression or hopelessness for statistically predicting suicidality.
4. In regressing suicidality simultaneously on psychache, depression, and hopelessness, because psychache mediates the association between all other factors and suicidality, regression coefficients for depression and hopelessness would not be statistically significant.

2. Method

2.1. Participants and procedure

This research was approved by a University Research Ethics Board and participants were treated in accordance with board ethical guidelines. Participants consisted of three samples. Sample 1 included 73 male federal inmates from a Canadian minimum security correctional institution. As a minimum security facility, these participants comprised a combination of offenders at low security risk (based on the nature of their offenses) and offenders with longer sentences who were preparing for release and, thus, had been moving down through security levels. Mean age of this sample was 44.89 years (SD = 9.94; range from 25 to 71). This sample was over 85% Caucasian and consisted of consecutive referrals for a preliminary mental status assessment. Participation occurred within a few days of arrival at the institution and was part of a clinical intake conducted by the institution's psychology department.

Sample 2 included 80 male undergraduate university students with a mean age of 19.04 years (SD = 1.62; range from 18 to 24) and Sample 3 consisted of 80 female undergraduates with a mean age of 19.55 years (SD = 1.63; range from 17 to 25). These participants were recruited through email advertisements, in-class requests for volunteers, and an introductory psychology course subject pool. Participation involved groups of 3–10 participants individually completing the measures. Credit toward a psychology course was given for these undergraduate volunteer participants.

2.2. Measures

2.2.1. Statistical predictors

Three scales assessed constructs of psychache, depression, and hopelessness, with higher scores on each scale indicating higher scores on the corresponding construct. The Psychache Scale (Holden et al., 2001) is a 13-item (e.g., "My soul aches") self-report scale designed to measure psychache according to Shneidman's (1993) definition of psychological pain. Items are answered on a