Grateful individuals are not suicidal: Buffering risks associated with hopelessness and depressive symptoms

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ABSTRACT

With suicidal behavior serving as a leading cause of injury and death around the world, researchers must expand ongoing efforts to uncover protective factors. In this study, we examined if gratitude mitigated existing risk factors for suicide. Specifically, we predicted that gratitude moderates the relationship between suicidal ideation and (a) hopelessness and (b) depressive symptoms in a sample of 369 diverse undergraduate students. Results indicate that for people who are highly grateful, both hopelessness and depressive symptoms are less likely to be associated with thoughts and intentions to kill oneself. The findings demonstrate the value of integrating protective factors against suicidality, including character strengths such as gratitude, into existing theories that tend to be limited to vulnerability factors. We offer tentative ideas for enhancing the impact of suicide prevention and intervention programs by directly addressing gratitude, which has been shown to be highly modifiable.

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1. Introduction

Western psychology has long-focused on the alleviation of harmful symptoms and avoidance of negative experiences, often giving little attention to the cultivation of positive experiences and psychological strengths. Over the past decade with the advent of positive psychology, this imbalance has shifted (Seligman & Csikszentmihalyi, 2000). Research consistently finds that "positive" and "negative" emotions, behaviors, and personality traits are unique and inversely related (Carver, Sutton, & Scheier, 2000; Keyes, 2007). Thus, researchers continue to expound on the value of comprehensive models of human functioning where enhancing psychological strengths might mitigate the consequences of negative life events and existing risk factors for emotional disturbances (Joseph & Wood, 2010). This idea is especially important when considering suicide—the third leading cause of death among individuals aged 15–24 in the United States, following accidental injury and homicide (Centers for Disease Control and Prevention, 2013). Although less than 1 in 10,000 people in the United States actually die by suicide in a given year, approximately 15% of Americans will have serious thoughts of killing themselves at some point in their lives (suicidal ideation) (Nock et al., 2008). The next generation of research must focus on resiliency factors that can offset risk factors that precede suicidal thoughts and behaviors. One

such resiliency factor and psychological strength is gratitude. In the present study, we examined whether gratitude alters associations between suicidal ideation and two risk factors for suicidal thoughts and behavior: (1) hopelessness and (2) depressive symptoms.

Gratitude is a tendency towards "noticing and appreciating the positive in life" (see Wood, Froh, & Geraghty, 2010 for a review). Researchers have found that gratitude predicts a variety of outcomes that are negatively associated with suicide ideation. For example, grateful individuals have stronger social connections (Algoe & Haidt, 2009), a greater sense of belonging (Kashdan, Mishra, Breen, & Froh, 2009), and use more adaptive coping techniques to manage stressors (Wood, Joseph, & Linley, 2007). All of these healthy correlates of gratitude also happen to be inversely associated with suicide (for a review, see Johnson, Wood, Gooding, Taylor, & Tarrier, 2011). Furthermore, gratitude is not only correlated with indicators of well-being; researchers have shown that experiences of gratitude lead to greater well-being (Wood, Maltby, Stewart, Linley, & Joseph, 2008). Taken together, the broad psychological and social benefits of gratitude, along with evidence that gratitude is modifiable through simple interventions, suggest that gratitude is a promising new factor to explore in models of risk and resilience to suicidal thoughts and behavior.

A grateful disposition in which individuals explicitly focus on and appreciate the positive in life can be contrasted against a depressive disposition, which includes a focus on negative aspects of the self, others, and the future (Beck, 1963). Recent work reveals the nature of the relationship between gratitude and depression. In a series of longitudinal studies, Wood, Maltby, Gillett, Linley, and

Joseph (2008) found that higher levels of gratitude led to lower levels of depression. Extending this line of research, Lambert, Clark, Durtschi, Fincham, and Graham (2010) found that gratitude led to greater use of positive reframing, which in turn led to fewer depressive symptoms. This body of work suggests that gratitude is a relevant, robust predictor of greater mental health.

Although there is considerable work on the role of gratitude in well-being and depression, there has been little on the link between gratitude and suicide. We are aware of only one published study that examined the relationship between gratitude and suicidal ideation. Li, Zhang, Li, Li, and Ye (2012) found that in Chinese adolescents, the indirect effect of gratitude on suicidal ideation through self-esteem was stronger for individuals with fewer stressful life events (mediated moderation model). This single study offers initial promise. To extend this work, instead of conducting isolated tests of resiliency factors such as gratitude, there is value in examining synergistic models with risk factors for suicide such as depressive symptoms and hopelessness. Thus, in the present study, we examine gratitude as a moderator of the relationships between hopelessness and depressive symptoms with suicidal ideation. Hopelessness represents a robust, well-documented risk factor for suicide (Beck, Brown, & Steer, 1989; Brown, Beck, Steer, & Grisham, 2000). Completed and attempted suicides are rare in the absence of psychiatric illness, particularly depressive disorders (Beck, Steer, Beck, & Newman, 1993). The inclusion of gratitude in investigations of these two important risk factors for suicide might clarify points of intervention to reduce suicide risk.

1.1. The present study

The present investigation contributes to the literature in two major ways. First, to our knowledge, this is only the second study to explore the relationship between gratitude and suicidal ideation (and the first to do so in adults). Second, we integrate highly relevant risk factors for suicidal ideation, and ultimately suicide attempts with potential resiliency factors. Through consilience between separate disciplines, we hope to expedite the rate of innovation in the study, prevention, and treatment of suicide. Based on prior theory and empirical work, we hypothesized that gratitude would moderate the relationships between both risk factors (hopelessness and depressive symptoms) in predicting suicidal ideation. That is, for individuals high in gratitude, there would be a weaker relationship between suicide risk factors and suicidal ideation relative to individuals low in gratitude.

2. Method

2.1. Participants

A total of 369 undergraduates (85.1% female; mean age = 22.02, SD = 5.78, range 18–60) were recruited for an IRB-approved online study. Approximately 55% of the sample self-identified as Caucasian, 17% Asian, 11% African American, and 17% other/multi-racial.

2.2. Procedure

Participants completed online measures of hopelessness, depressive symptoms, gratitude, and suicidal ideation as part of a larger study. We used stringent suicide procedures under the supervision of a licensed clinical psychologist (JHR), and an Institutional Review Board approved this study.

2.3. Measures

2.3.1. Hopelessness

The Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974) is a 20-item true/false self-report measure that assesses negative expectations for the future. Eleven items are keyed for true to indicate a hopeless response and nine are keyed for false to indicate a hopeless response. Hopeless responses are summed to obtain an overall hopelessness score (range 0–20) where higher scores equal higher levels of hopelessness.

2.3.2. Gratitude

The Gratitude Questionnaire (GQ-6; McCullough, Emmons, & Tsang, 2002) is a six-item self-report measure that assesses the tendency to experience gratitude in daily life. Scores are summed, including two reverse scored items, to obtain an overall gratitude score where higher scores indicate higher daily gratitude. Previous studies have found strong reliability and validity for this measure (e.g., Kashdan et al., 2009; McCullough, Tsang, & Emmons, 2004).

2.3.3. Depressive symptoms

The Beck Depression Inventory, 2nd edition (BDI-II; Beck, Steer, & Brown, 1996) is a 21-item measure of current depressive symptoms. The BDI item assessing suicide (item #9) was removed to avoid contamination with the dependent variable. Meta-analytic studies of previous version of this measure find strong internal consistency and convergent validity (Beck, Steer, & Carbin, 1988) and more recent studies confirm the psychometrics for the current version of the measure (Dozois, Ahnberg, & Dobson, 1998).

2.3.4. Suicidal ideation

The Beck Suicide Scale (BSS; Beck & Steer, 1991) is a 21-item self-report measure that assesses current suicide intent. The first 19 items are designed to measure suicide ideation and the last two designed to measure past attempts. Similar to prior studies (e.g., Kleiman, Riskind, Schaefer, & Weingarden, 2012), we relied on the 19 suicidal ideation items. The BSS has demonstrated strong psychometric properties and has been shown to predict a variety of suicidal behaviors such as gaining access to means to commit suicide and writing a suicide note (Beck, Brown, & Steer, 1997).

2.4. Analytic plan

We found evidence of positive skewness for suicidal ideation in the present data (skew = 6.07, SE = 0.13). This was expected, as suicide is a relatively low base-rate phenomenon. Given the non-normal distribution and to avoid violating the assumptions of regression, we log transformed BSS scores prior to conducting a set of hierarchical regression models. This technique is recommended by Keene (1995), and is commonly used in suicide research in populations with a low base rate, such as college students. We conducted separate regression models to test the two hypotheses that gratitude would moderate the relationship between (1) hopelessness and suicidal ideation and (2) depressive symptoms and suicidal ideation. Each model included two steps. The first step contained the main effects of hopelessness, depressive symptoms, and gratitude. The second step contained the relevant interaction (hopelessness × gratitude or depressive symptoms × gratitude). We controlled for the opposite predictor in the first step of each analysis (e.g., depressive symptoms when hopelessness was the independent variable) as a test of specificity. This was important because hopelessness and depressive symptoms are conceptually related and highly correlated in the present study. All main effects were mean-centered prior to calculating the interaction term according to the recommendations of Aiken and West (1991). Doing so reduces collinearity between the