The Role of Optimism in the Interpersonal-Psychological Theory of Suicidal Behavior

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A possible relationship between Joiner’s (2005) interpersonal-psychological theory of suicidal behavior and optimism was investigated by examining the ability of optimism to act as a moderator of perceived burdensomeness, thwarted belongingness, and acquired capability to engage in self-injury in the prediction of suicidal ideation. Results supported hypotheses that optimism would serve as a moderator of the effects of thwarted belongingness and perceived burdensomeness in the prediction of suicidal ideation; however, similar results were not found regarding the acquired capability to engage in self-injury. How optimism might play a role in alleviating suicidal ideation and clinical implications of the findings are discussed.

Suicide has been the subject of much research, yet suicide and suicide attempts continue to be significant problems in our society. In 2006 alone, over 33,000 people died by suicide in the United States, which averages to a rate of 91 suicides each day (Centers for Disease Control and Prevention, 2007). Moreover, suicide attempts, as opposed to completed suicides, occur at rates ranging from four attempts for each completed suicide in adults over age 65 years to an estimated ratio of 100–200 attempts for each completed suicide in young people age 15–24 years (Goldsmith, Pellmar, Kleinman, & Bunney, 2002). Given the toll on lives, it seems particularly important to research not only risk factors for suicide, but also factors that may protect against suicide, with the ultimate goal of preventing needless injuries and deaths.

One recently proposed model of suicide risk that has been gaining attention is Joiner’s (2005) interpersonal-psychological theory of suicidal behavior. Joiner proposed that there are three primary risk factors for suicide, each of which is a necessary but not sufficient element contributing to the overall risk of suicidal behavior. These three risk factors are thwarted belongingness, perceived burdensomeness, and acquired capability to engage in self-injury. Joiner posited that although each of these constructs represents a risk factor that could lead to suicidal thoughts or behavior, it is the combination of all three that forms the most lethal risk.

Thwarted belongingness refers to a lack of connection with other people, such as having few friends or family members to turn to in time of need. Numerous studies have demonstrated that a lack of social connection has a strong correlation with suicidal behavior and suicide is more likely to occur in individuals with little social support or few family connections. Indeed, as long ago as 1897, Durkheim (1897/1951) found an increased incidence of suicide in individuals who were not integrated into a social network. A large body of sociological work specifically focused on belongingness has continued to find support for the importance
of social belongingness and Durkheim’s social integration theory (for a review of sociological literature, see Stack, 2000). Furthermore, a review of empirical research found social disengagement to be one of the five most consistent predictors of suicide (Conner, Duberstein, Conwell, Seidtitz, & Caine, 2001), whereas a later study showed that social disconnection contributed to an increased risk of suicide beyond the risk associated with the presence of depression (Duberstein et al., 2004). Moreover, social rejection can result in a diminished ability to resist engaging in potentially negative or harmful behaviors (Baumeister, DeWall, Ciarocco, & Twenge, 2005). Baumeister and Leary (1995) proposed that the need to belong is a basic human need, and Joiner (2005) posited that if the need to belong is not met it can create a sense of disconnection and social isolation that can lead to suicidal behavior.

The second component of Joiner’s (2005) theory, perceived burdensomeness, refers to the perception, albeit generally a mistaken perception, that one’s existence has created a burden on others. Joiner posited that a sense of perceived burdensomeness arises when one feels ineffective or incompetent in one’s actions, and in turn believes this ineffectiveness or incompetence is creating a burden for others. A survey of psychiatrists found that the perception of being a burden to others was commonly present in their patients who ultimately completed suicide (O’Reilly, Truant, & Donaldson, 1990). Support for the role of perceived burdensomeness in suicidal behavior was also demonstrated by de Catanzaro (1995), who found significant correlations between social isolation, perceived burdensomeness, and suicidal ideation. In addition, the perception of being a burden in one’s relationships has been found to be significantly correlated with depression and hopelessness, as well as with both suicidal ideation and behavior (Brown, Dahlen, Mills, Rick, & Biblarz, 1999). Joiner asserted that the risk posed by a sense of perceived burdensomeness reaches its peak when the individual can foresee no change in his or her level of effectiveness or competence, and thus interprets being a burden as a stable and permanent condition.

Joiner also posited that perceived burdensomeness and thwarted belongingness may be interconnected in that the sense of ineffectiveness associated with perceiving oneself as a burden may lead to withdrawal from others, which can exacerbate a feeling of thwarted belongingness. In essence, it is the combination of perceived burdensomeness and thwarted belongingness that can lead to a wish to end one’s life (Joiner, 2005). In support of this theory, Van Orden, Witte, Gordon, Bender, and Joiner (2008) found that perceived burdensomeness significantly predicted suicidal ideation in a college-student sample after accounting for symptoms of depression, as well as finding that the interaction of perceived burdensomeness and thwarted belongingness significantly added to the prediction of suicidal ideation. However, the wish to die is not sufficient to lead one to suicide unless one has acquired the capability to carry out the act, which is the third element of Joiner’s interpersonal-psychological theory of suicidal behavior.

The acquired capability to engage in self-injury can refer not only to intentional acts of self-injury, but also repeated exposure to any of a variety of painful experiences, such as sports injuries or medical conditions. Joiner (2005) posited that whether the experience of pain or injury occurs intentionally or unintentionally, it can lead to a reduced sensitivity to pain. Furthermore, this reduced sensitivity to pain can diminish the inherent fear of harm that a person generally experiences, thus making it easier for that individual to acquire the ability to engage in self-injury. Indeed, past research has shown previous self-injury and suicide attempts to be strong predictors of suicidal behavior. A study that followed up on 11,583 patients who had been treated at a hospital for self-injury found a markedly increased occurrence of suicide in the first year following the patient’s release, a risk that was 66 times the risk of suicide in the general population (Hawton, Zahl, & Weatherall, 2003).
Hawton and colleagues also found that subsequent acts of self-injury often involved more lethal means of self-injury than the initial act, providing evidence that the capability to engage in self-injury is acquired. Van Orden et al. (2008) showed a relation between the acquired capability to engage in self-injury and past suicide attempts, as well as finding that the interaction of acquired capability to engage in self-injury and perceived burdensomeness significantly predicted clinician-rated risk assessment of suicidal behavior.

In addition to the identification of risk factors for suicidal behavior, utilizing a complementary positive psychology approach of identifying factors that might serve to protect individuals from experiencing suicidal thoughts or behavior deserves further attention (Wingate et al., 2006). One potential protective factor is optimism, which is conceptualized as a general expectation that good things will happen in one’s future and that one will meet one’s goals (Scheier & Carver, 1985). On the surface, optimism may seem much like the counter of hopelessness (Beck, Weissman, Lester, & Trexler, 1974), long recognized as a risk factor for suicide (e.g., Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Brown, & Steer, 1989). However, Scheier and Carver conceptualized optimism as a disposition, a more trait-like quality as compared to the more transient state of hopelessness. Indeed, recent research has shown hopelessness and optimism to be moderately correlated yet distinct constructs (O’Connor & Cassidy, 2007), suggesting that optimism warrants investigation as a protective factor against suicide.

Carver and Scheier (1982) noted that the act of withdrawing or disengaging from an attempt to reach a goal may produce a focus on one’s inability to reach that goal, which can cause distress in the individual. Indeed, Scheier and Carver (1987) asserted that disengagement may not always take the form of a passive process of withdrawal and that suicide can be viewed as an extreme act of disengagement. Optimism may provide some protection, however, as optimists have been found to be less likely to use disengagement from goals as a coping strategy (Scheier, Weintraub, & Carver, 1986), and thus may be less likely to disengage from life.

Many studies examining optimism have focused on its association with various coping strategies and physical or psychological symptoms, and numerous studies have demonstrated the beneficial role optimism plays in both physical and mental health (Scheier & Carver, 1992). Wingate et al. (2006) noted the wealth of research relating optimism to other forms of psychopathology, yet noted the dearth of research exploring the relation of optimism to suicidal behavior. More recent research has begun to fill this gap. For example, Hirsch, Conner, and Duberstein (2007) found that optimism negatively predicted suicidal ideation in a college-student sample. Hirsch and colleagues concluded that cultivating positive outcome expectancies may be useful as a suicide prevention approach.

Optimists have a general expectation of success, whether it occurs as a result of their own actions, the actions of others, or through outside forces (Carver & Scheier, 2002; Magaletta & Oliver, 1999). Thus, the support of others can play an important role in optimism, just as it can play an important role in suicide risk. Brissette, Scheier, and Carver (2002) found that optimism was a prospective predictor of increases in perceived social support, in addition to providing some protection against increased stress and depression over the course of students’ first semester of college. Findings such as these raise the question as to whether the higher levels of perceived social support associated with optimism might serve to bolster one’s sense of social connectedness, thus staving off feelings of thwarted belongingness and perceptions of burdensomeness, in turn reducing the risk of suicidal thoughts and behaviors.

The purpose of the present study was to explore the role of optimism as a protective factor against suicidal ideation. A possible relationship between each construct of Joiner’s (2005) interpersonal-psychological theory of suicidal behavior and the construct of optimism was investigated by
examining the ability of optimism to act as a moderator of perceived burdensomeness, thwarted belongingness, and acquired capability to engage in self-injury in the prediction of suicidal ideation. It was hypothesized that optimism would negatively predict suicidal ideation after controlling for the effects of depression. It was further hypothesized that optimism would moderate the relationship between each construct of the interpersonal-psychological theory and suicidal ideation, such that optimism would reduce the risk of suicidal ideation in those experiencing thwarted belongingness, perceived burdensomeness, or the acquired capability to engage in self-injury.

**METHOD**

**Participants**

Participants in the current study were 452 undergraduate students attending a state university who received course credit for their participation. The participants ranged in age 18–47 years (\(M = 19.87, SD = 3.12\)); 34.4% were men and 65.6% were women. Regarding ethnicity, 81.9% self-identified as Caucasian, 8.6% as Native American, 3.3% as African American, 2.4% as Asian American, 2.2% as Hispanic, 0.4% as Biracial, and 1.1% as other. As related to social connectedness, 73.7% of participants endorsed being a member of some type of social group, most commonly a sorority or fraternity (20.8%), a religious group (13.3%), or an athletic team (6.4%). Finally, 10.3% of participants endorsed having experienced some level of suicidal ideation within the previous 2 weeks.

**Measures**

Participants completed a demographics form along with the following measures.

*Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977).* The CES-D is a 20-item self-report measure of depressive symptoms experienced in the past week. Items are rated on a 4-point response scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time), with item responses summed to compute the total score. Total scores ranging from 0 to 60 are possible, with higher scores indicating greater severity of depressive symptoms. Internal consistency has been shown to be good (\(\alpha = .85\)). Test–retest reliability has been variable, as would be expected in a measure of transient symptoms, ranging from .48 to .67 over periods of 2 weeks to 12 months, generally with stronger correlations found in the shorter time frames. The CES-D has shown excellent ability to discriminate between nonclinical and clinical samples, with a mean of 9.25 (SD = 8.58) for a nonclinical sample and a mean of 24.42 (SD = 13.51) for a clinical sample. Reliability for the current sample was found to be good (\(\alpha = .91\)).

*Revised Life Orientation Test (LOT-R; Scheier, Carver, & Bridges, 1994).* The LOT-R is a 10-item self-report measure of dispositional optimism. Items are rated on a 5-point response scale ranging from 0 (strongly disagree) to 4 (strongly agree) Three of the items are keyed in the positive direction, three items are keyed in the negative direction, and four items are filler items, which are not included in the scoring. Included item responses are summed, such that total optimism scores can range from 0 to 24, with higher scores indicating higher levels of optimism. Internal consistency has been found to be acceptable (\(\alpha = .78\)). Test–retest reliability has also been acceptable, with values ranging from .56 to .79 at intervals ranging from 4 to 28 months. Correlations to measures of trait anxiety, self-mastery, self-esteem, and neuroticism have been found to be modest, indicating acceptable convergent and discriminant validity. Reliability for the current sample was acceptable (\(\alpha = .78\)).

*Interpersonal Needs Questionnaire (INQ; Van Orden et al., 2008).* The INQ is an 18-item self-report measure designed to measure the constructs of perceived burdensomeness and thwarted belongingness. Items are rated on a 7-point response scale ranging
Participants rate the items according to how they have felt recently. Nine items pertain to each construct and eight items are reverse scored. Mean scores are calculated for each construct, such that final scores for each construct can range from 1 to 7, with higher scores indicating higher levels of perceived burdensomeness or thwarted belongingness. Representative items for perceived burdensomeness include “These days I think I make things worse for the people in my life” and “These days, the people in my life would be happier without me.” Representative items for thwarted belongingness include “These days, I often feel like an outsider in social gatherings” and “These days, I feel there are people I can turn to in time of need.” Internal consistency has been shown to be good for both perceived burdensomeness (α = .89) and thwarted belongingness (α = .85). Reliability was also found to be good in the current sample, with alphas of .89 for perceived burdensomeness and .90 for thwarted belongingness.

Acquired Capability for Suicide Scale (ACSS; Van Orden et al., 2008). The ACSS is a 20-item self-report measure designed to measure an individual’s lack of fear regarding injury or harm. Items are rated on a 5-point response scale ranging from 0 (not at all like me) to 4 (very much like me). Seven items are reversed scored. Mean scores are calculated for the measure, such that the final score can range from 0 to 5, with a higher score indicating a higher level of acquired capability to engage in self-injury. Representative items include “I can tolerate a lot more pain than most people” and “Things that scare most people do not scare me.” Internal consistency has been shown to be adequate (α = .67) and correlations with other measures indicate good discriminant validity. Reliability for the current sample was good (α = .83).

Depressive Symptom Inventory-Suicidality Subscale (DSI-SS; Metalsky & Joiner, 1991, 1997). The DSI-SS is a 4-item self-report measure designed to assess suicidal ideation in the past 2 weeks. The DSI-SS is a subscale of the larger Hopelessness Depression Symptom Questionnaire developed by Metalsky and Joiner (1991). Response items range from 0 to 3 and the corresponding responses vary for each item. Item responses are summed and total scores can range from 0 to 12, with higher scores indicating higher levels of suicidal ideation. Metalsky and Joiner (1997) found internal consistency for the subscale to be good (α = .86). Reliability in the current sample was also good (α = .90).

RESULTS

Means, standard deviations, and correlation coefficients of study variables are presented in Table 1. To test the hypothesis that optimism would negatively predict suicidal ideation after controlling for the effects of symptoms of depression, a hierarchical regression analysis was conducted with suicidal ideation as the outcome variable. As shown in Table 2, results were as hypothesized, with symptoms of depression accounting for 18.7% of the variance in suicidal ideation in step 1 (β = .432, t(441) = 10.06, p < .001). In step 2, optimism accounted for an additional 1.5% of the variance in suicidal ideation after controlling for the effects of depression (β = -.139, t(440) = −2.90, p = .004).

Three separate hierarchical regression analyses were conducted to test the hypotheses that optimism would act as a moderator of the effects of each construct of Joiner’s (2005) interpersonal-psychological theory of suicidal behavior in predicting suicidal ideation. Results for the regression of thwarted

1It should be noted that suicidal ideation was positively skewed; a square root transformation improved the distribution significantly. However, the transformation did not appreciably affect any of the results; thus results are reported using the untransformed values for ease of interpretation.

2Each of the predictor variables was centered on its respective grand mean prior to being entered into the regression in order to prevent problems caused by multicollinearity of variables when analyzing for interaction effects (Aiken & West, 1991).
belongingness and optimism as predictors of suicidal ideation while controlling for depression are shown in Table 3. Depression significantly predicted suicidal ideation in step 1 ($\beta = .432, t(441) = 10.06, p < .001$), while thwarted belongingness significantly added to the prediction in step 2 ($\beta = .199, t(440) = 3.81, p < .001$). The addition of optimism did not significantly add to the prediction ($\beta = .090, t(439) = 1.79, p = .075$). As hypothesized, however, optimism did significantly moderate the effect of thwarted belongingness on suicidal ideation ($\beta = -.205, t(438) = -4.49, p < .001$). The recommendations of Aiken and West (1991) were followed to examine the interaction, and regression lines of the variables at values one standard deviation above and below the mean were plotted. As can be seen in Figure 1, high levels of thwarted belongingness were associated with higher levels of suicidal ideation for individuals low in optimism, while the effect of high levels of thwarted belongingness on suicidal ideation for individuals high in optimism was reduced.

Results for the regression of perceived burdensomeness and optimism on suicidal ideation, while controlling for depression, are shown in Table 4. Again, depression significantly predicted suicidal ideation in step 1 ($\beta = .432, t(441) = 10.06, p < .001$), while perceived burdensomeness significantly added to the prediction in step 2 ($\beta = .154, t(440) = 2.98, p = .003$). The addition of optimism in step 3 significantly added to the prediction ($\beta = -.112, t(439) = -2.29, p = .023$). As hypothesized, optimism did significantly moderate the effect of perceived burdensomeness on suicidal ideation ($\beta = -.214, t(438) = -4.78, p < .001$), such that high levels of perceived burdensomeness were associated with higher levels of suicidal ideation for individuals low in optimism, while the effect of high levels of perceived

### TABLE 1

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<td>.585*</td>
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<td>.432*</td>
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<td>-.071</td>
<td>.345*</td>
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<td>2.24</td>
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<td>1.06</td>
<td>.63</td>
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$N = 452$.

Burden = perceived burdensomeness; Th. Belong = thwarted belongingness; Acq. Cap. = acquired capability to engage in self-injury; Suic. Idea. = suicidal ideation.

*p < .001.

### TABLE 2

Hierarchical Regression Analysis of Depressive Symptoms and Optimism as Predictors of Suicidal Ideation

<table>
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<tr>
<th></th>
<th>$\Delta R^2$</th>
<th>df</th>
<th>$F$</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
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<tbody>
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<td>1, 441</td>
<td>101.11</td>
<td>.046</td>
<td>.005</td>
<td>.432</td>
<td>10.06</td>
<td>&lt;.001</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Step 2</td>
<td>.015</td>
<td>2, 440</td>
<td>55.61</td>
<td>-.037</td>
<td>.013</td>
<td>-.139</td>
<td>-2.90</td>
<td>.004</td>
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burdensomeness on suicidal ideation for individuals high in optimism was reduced, as depicted in Figure 2.

Results for the regression of acquired capability to engage in self-injury and optimism, while controlling for depression, on suicidal ideation are shown in Table 5. Again, depression significantly predicted suicidal ideation in step 1 ($\beta = .432$, $t(438) = 10.04$, $p < .001$). However, the addition of acquired capability to engage in self-injury in step 2 did not add to the prediction ($\beta = .029$, $t(437) = .66$, $p = .508$), while the addition of optimism in step 3 did add significantly to the prediction ($\beta = -.140$, $t(436) = -2.91$, $p = .004$). Contrary to the hypothesis, the interaction of acquired capability to engage in self-injury and optimism did not significantly predict suicidal ideation ($\beta = .016$, $t(435) = .92$, $p = .360$).

**DISCUSSION**

The purpose of the present study was to explore the role of the positive psychology

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**TABLE 3**

<table>
<thead>
<tr>
<th>Step</th>
<th>$\Delta R^2$</th>
<th>$df$</th>
<th>$F$</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
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</thead>
<tbody>
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<td>1</td>
<td>101.11</td>
<td>.046</td>
<td>.005</td>
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<td>.199</td>
<td>.052</td>
<td>.199</td>
<td>3.81</td>
<td>&lt; .001</td>
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<td>-1.79</td>
<td>.075</td>
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<td>4</td>
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<td>4</td>
<td>37.00</td>
<td>-.046</td>
<td>.010</td>
<td>-.205</td>
<td>-4.49</td>
<td>&lt; .001</td>
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Th. Belong. = thwarted belongingness.
construct of optimism as a protective factor against suicidal ideation. A possible relationship between Joiner’s (2005) interpersonally-psychological theory of suicidal behavior and optimism was investigated by examining the ability of optimism to act as a moderator of perceived burdensomeness, thwarted belongingness, and acquired capability to engage in self-injury in the prediction of suicidal ideation. Results were consistent with the hypothesis that optimism would negatively predict suicidal ideation, even after controlling for the effects of depression. This finding is consistent with the findings of Hirsch et al. (2007), adding further support to the idea that optimism can be a protective factor against suicidal ideation, even in the face of depression. Overall results also supported the hypotheses that optimism would serve as a moderator of the effects of thwarted belongingness and perceived burdensomeness in the prediction of suicidal ideation; however, similar results were not found regarding the acquired capability to engage in self-injury.

Consistent with Joiner’s (2005) theory, high levels of thwarted belongingness significantly predicted suicidal ideation, even when controlling for depression. Numerous studies have shown that social connection and

<table>
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<th>Step</th>
<th>ΔR²</th>
<th>df</th>
<th>F</th>
<th>B</th>
<th>SE B</th>
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<tr>
<td>Step 1</td>
<td>.187</td>
<td>1,441</td>
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<td>2,440</td>
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<td>36.70</td>
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<td>-.012</td>
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Burden = perceived burdensomeness.
social support can serve as protective factors against suicidal thoughts and behavior (e.g., Conner et al., 2001; Duberstein et al., 2004). The concept of thwarted belongingness implies a lack of social connection to others, which can contribute to a desire to end one’s life. Carver and Scheier (2002) noted that the efforts of others can play a role in the optimist’s positive expectancies, thus an optimist who is experiencing a sense of thwarted belongingness may be better able to hold to the belief that this is a temporary occurrence, and expect that a feeling of social connection and belongingness will return. Indeed, optimism did show a significant element of protection against the effect of thwarted belongingness. For individuals experiencing high levels of thwarted belongingness, those who were also high in optimism showed a lower level of suicidal ideation than those who were less optimistic. Joiner (2005) noted that an individual who does not expect any future change in his or her perceived lack of effectiveness or competence is likely to experience higher levels of perceived burdensomeness. Results of the current study suggest that one who expects the future to hold a positive change in effectiveness, that is, the optimist, is less likely to experience suicidal ideation in the face of perceived burdensomeness.

In contrast to the results for thwarted belongingness and perceived burdensomeness, the acquired capability to engage in self-injury did not significantly predict suicidal ideation, which may be due to inherent differences between the constructs. As previously noted, thwarted belongingness and perceived burdensomeness are associated with a desire for death, whereas the acquired capability to engage in self-injury did not significantly predict suicidal ideation, which may be due to inherent differences between the constructs. As previously noted, thwarted belongingness and perceived burdensomeness are associated with a desire for death, whereas the acquired capability to engage in self-injury is associated with the ability to carry out the suicidal act. Thus, thwarted belongingness and perceived burdensomeness may be more strongly associated with suicidal ideation, while the acquired capability to engage in self-injury may only be associated with actual suicidal behavior, such as acts of self-harm or suicide attempts.

The results of the current study provide evidence for the potential protective

### TABLE 5

| Hierarchical Regression Analysis of Depression, Acquired Capability, and Optimism as Predictors of Suicidal Ideation |
|---|---|---|---|---|---|---|---|
| ΔR² | df | F | B | SE B | β | t | p |
| Step 1 | .187 | 1, 438 | 100.85 | .046 | .005 | .433 | 10.04 | < .001 |
| Depression | .001 | 2, 437 | 50.58 | .049 | .073 | .029 | .66 | .508 |
| Step 2 | Acq. Cap. | .016 | 3, 436 | 37.13 | .037 | .013 | −.140 | −2.91 | .004 |
| Step 3 | Optimism | .002 | 4, 435 | 28.05 | .016 | .018 | .040 | .92 | .360 |
| Step 4 | Acq. Cap. × Optimism | |

power of optimism against suicidal ideation. These findings suggest that the use of therapeutic methods designed to enhance or instill optimism may benefit clients who are at risk for, or may be experiencing, suicidal thoughts. A wealth of research supports the use of cognitive and behavioral therapy techniques to alleviate depressive symptoms. Techniques of cognitive restructuring aimed at challenging negative future expectations and replacing them with a more positive future-oriented outlook hold promise for countering the negative effects of thwarted belongingness or perceived burdensomeness and alleviating thoughts of suicide. Indeed, research has shown that therapeutic programs aimed at instilling a more optimistic explanatory style have been successful in alleviating symptoms of depression in school children (Gillham, Reivich, Jaycox, & Seligman, 1995; Jaycox, Reivich, Gillham, & Seligman, 1994); results of the current study suggest such efforts may be beneficial in adults as well.

As noted by Joiner (2005), the sense of perceived burdensomeness is actually a misperception, a cognitive distortion precipitated by the individual’s internal attributions of ineffectiveness and incompetence. Therefore, cognitive therapy techniques could be used to engage the client in examining the evidence behind this distorted thinking in order to elicit more realistic thinking and reduce suicidal ideation. Similarly, cognitive therapy techniques could also be used to examine the evidence behind the sense of thwarted belongingness. In addition to cognitive techniques, behavioral therapy techniques aimed at increasing positive interactions with others could be utilized to alleviate the lack of social connection associated with thwarted belongingness.

One limitation to the current study is the use of a cross-sectional design, which precludes any causal inference. Future research would benefit from the use of a longitudinal design in order to clarify causal relationships between optimism, thwarted belongingness, perceived burdensomeness, and suicidal ideation. An additional limitation was that the sample in this study was ethnically homogeneous; future studies utilizing more diverse samples are necessary to examine whether the findings are consistent across different groups. Furthermore, the use of a college-student sample may limit the generalizability of the results, as the number of participants experiencing suicidal thoughts was relatively low. However, the use of participants in this age group could also be considered a strength of this study, in that suicide is the third leading cause of death among those aged 15–24 years (Centers for Disease Control and Prevention, 2007) and suicide attempts are at the highest level among this age group (Goldsmith et al., 2002); thus, any knowledge that can be gained toward possibly reducing suicidal ideation or behavior in this group is particularly important.

Future research to determine whether the same relationships among optimism, thwarted belongingness, perceived burdensomeness, and suicidal ideation exist in a clinical population would be informative. Moreover, future clinical outcome studies examining the effects of cognitive therapy aimed at instilling optimism would provide more concrete evidence as to the effectiveness of such a treatment in achieving a reduction in suicidal thoughts and behaviors.

REFERENCES


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