



Does Capability Moderate the Relationship Between Emotions and Suicide Behavior History?

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INTRODUCTION

The Interpersonal Theory of Suicide and the Ideation to Action framework suggest that there is a fundamental difference between risk for suicide ideation and risk for suicide attempts.^{1,2} Individuals' suicide risk is predicted by emotional resilience, while suicide ideation is associated with emotional dysregulation.³ Another factor that predicts suicide risk is suicide capability, which is a reduced fear of death and pain sensitivity.⁵ Studies have found that suicide attempters have higher perceived suicide capability than ideators.⁴ Another study found that an individual's perception of their fearlessness may be the most relevant to their actual suicide capability and subsequent suicide risk.⁵

In our study, we were interested in evaluating how emotions surrounding suicide and suicide capability interact with suicide attempt history versus ideation only. Thus we examined: **(1) are emotions related to suicide ideation different for those who have vs. have not had a suicide attempt?** **(2) Does suicide capability moderate the relationship between (a) emotions surrounding suicide ideation and (b) history of suicide attempts?**

METHOD

Participants:

- 363 adults (66%) with a history of suicide ideation but no history of suicide attempts, and 187 adults (34%) with at least one prior suicide attempt
- These 550 participants were selected from an original sample of 3,125 adults. Based on a priori criteria, participants were excluded if they had no history of suicide ideation or attempts, or had not responded to the main variables of interest.
- Participants were recruited and surveyed online.

Demographics:

- Median age = 29 (IQR 24-34)
- 50.7% women, 48.0% men, and 1.3% other
- 77.6% white, 22.4% non-white (4.4% Black, 5.5% East Asian, 0.7% South Asian, 4.9% Latin American or Hispanic, 0.7% Middle Eastern, 0.7% Native American, 5.5% multiple ethnicities)

METHOD (con't)

Measures & Procedures:

- History of a suicide attempt was self-reported. Suicide capability was measured using the Acquired Capability of Suicide Scale (ACSS; Van Orden et al., 2008), a 20-item self-report questionnaire. Emotions surrounding suicide were measured using the Emotions Around Suicide Questionnaire (EASQ) developed for this study.
- Factor analysis was performed on the 32 EASQ emotions, and three factors were identified: Negative Emotion (15 variables), Active Positive Emotion (11 variables), and Passive Positive Emotion (six variables). See Table 1.
- Relationships between the three emotion indexes and attempt status were examined using independent samples t-tests. Logistic regression was used to determine whether capability moderates these relationships.

RESULTS

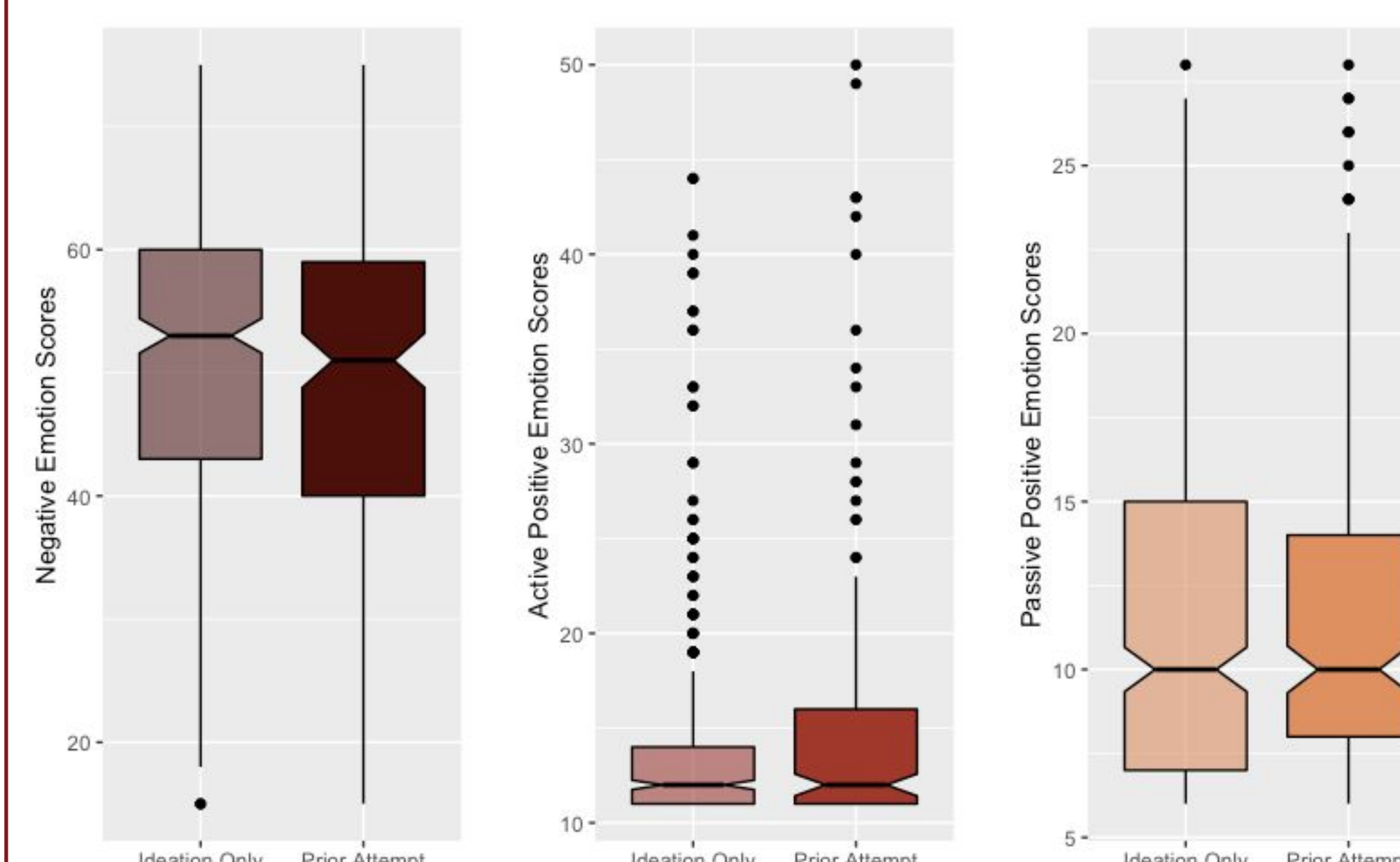
Table 1. Emotions Surrounding Suicide Scales

Negative Emotions (scores range from 15-75)	Angry, Anxious, Dissatisfied with self, Tense, Overwhelmed, Guilty, Frustrated, Sad, Disgusted, Afraid, Ashamed, Nervous, Lonely, Irritable, Angry at self
Active Positive Emotions (scores range from 11-55)	Exhilarated, Bored, Happy, Proud, Excited, Enthusiastic, Inspired, Joyful, Interested, Cheerful, Confident
Passive Positive Emotions (scores range from 6-30)	Calm, Satisfied, Relaxed, Indifferent, Relieved, In control

- Participants responded to 32 questions from the EASQ asking how much (1 = Not at all to 5 = Extremely) they felt a specific emotion when they felt suicidal. Factor analysis was performed on all variables and resulted in three clusters, and variables in each cluster were summed to create an index score. See Table 1.

RESULTS (con't)

Figure 1. Emotions Surrounding Suicide Do Not Vary by Attempt vs Ideation History



- Emotions around suicide did not significantly predict suicide attempt history vs. ideation for any of the three indexes: Negative Emotion ($t(548) = 0.85, p > .05$), Active Positive Emotion ($t(308.2) = -1.74, p > .05$), and Passive Positive Emotion ($t(548) = -0.16, p > .05$). See Figure 1.
- In addition, gender ($X^2 = 4.14, p > 0.05$) and race/ethnicity ($X^2 = 2.06, p > 0.05$) did not significantly predict a history of a prior attempt vs. ideation only.

Table 2. Suicide Capability Does Not Moderate the Relationship Between Emotions Surrounding Suicide and Attempt History

	ACSS Sum Score Tertiles		
	Lower (-1 S.D.)	Middle (Mean)	Upper (+1 S.D.)
Negative Emotions	0.003 ($p > 0.05$)	-0.001 ($p > 0.05$)	-0.006 ($p > 0.05$)
Active Positive Emotions	0.002 ($p > 0.05$)	0.014 ($p > 0.05$)	0.026 ($p > 0.05$)
Passive Positive Emotions	-0.003 ($p > 0.05$)	0.011 ($p > 0.05$)	-0.019 ($p > 0.05$)

- In logistic regression, ACSS sum score did not significantly moderate the relationship between emotions surrounding suicide and attempt history for Negative Emotions, Active Positive Emotions, or Passive Positive Emotions (all $p > 0.05$, see Table 2).

DISCUSSION

Conclusion:

We found no significant difference between the emotions surrounding suicide experienced by those who had previously attempted suicide versus those who had solely ideated. Additionally, acquired capability for suicide did not significantly moderate this relationship.

In our exploratory analyses, we found that neither race nor gender was significantly correlated with suicide attempts versus suicide ideation.

Limitations:

Important methodological limitations of this study include the cross-sectional approach, which precludes the possibility of causal findings. Additionally, self report measures on emotions surrounding suicide were collected retrospectively, rather than while the participants were actually feeling suicidal, which may be a source of bias. Lastly, this sample was majority white, which limits the generalizability of the findings.

Future Questions:

- Do emotions experienced directly before a suicide attempt differ from emotions surrounding suicide experienced by ideators?
- What other elements of suicide ideation, besides emotion, significantly differentiate suicide attempters from ideators? Does suicide capability moderate any of these relationships?

SOURCES

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