Examining associations between negative affect arousal dimensions and self-injurious thoughts in highrisk adolescents

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Self-injurious thoughts and behaviors (SITBs)



Fluctuating, time-varying





Negative affect intensity

Ecological momentary assessment

Bentley et al., 2014; Kleiman et al., 2017; Kleiman et al., 2019; Kuehn et al., 2022; Nock et al., 2010; Shneidman, 1993

• Far less evidence in adolescent populations









Russell, 1980

- High arousal (e.g., agitation) vs. low arousal (e.g., sadness)
- Most studies:
 - Collapse all negative affect states
 - Narrowly focus on <u>specific</u> negative affect states



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- Examining NSSI thoughts as an outcome
- Delineating predictors of passive suicidal thoughts (wish to die) vs. active suicidal thoughts (desire to kill oneself)



Current Study

- Types of negative affect (i.e., *arousal* dimensions)
 - High arousal vs. low arousal
- Examining NSSI thoughts as an outcome
- Delineating predictors of **passive** suicidal thoughts (wish to die) vs. **active** suicidal thoughts (desire to kill oneself)



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Bentley et al., 2021; Kuehn et al., 2022; Liu et al., 2020; Nock et al., 2010; Rogers et al., 2016

Method – Sample

• 101 adolescents (M_{age} = 14.27, SD = 1.63) with past 3 months acute psychiatric hospitalization for suicide risk

Race/Ethnicity: % (n/N)	
Asian	4.95% (5/101)
Black	27.7% (28/101)
White	48.5% (49/101)
Multi-racial	12.87% (13/101)
Other/Do not wish to answer	5.9% (6/101)
Hispanic/Latinx	18.81% (19/101)
Gender Identity: % (n/N)	
Cisgender male	20.0% (19/95)
Cisgender female	47.36% (45/95)
Transgender	11.57% (11/95)
Non-binary	7.36% (7/95)
Gender fluid	6.31% (6/95)
Questioning/unsure about gender	4.21% (4/95)
Genderqueer/Prefer to self-identify	3.15% (3/95)

Method – Procedure

Baseline assessment

- 28-day real-time monitoring period
 - Ecological momentary assessment (EMA)
 - Signal-contingent (random) surveys: up to 4x per day



Method – EMA Measures

- Negative affect (assessed multiple times per day) predictor
 - High arousal: mad, scared, stressed
 - Low arousal: lonely, empty, guilty, sad
- Suicidal thoughts (assessed multiple times per day) outcome
 - Active
 - Suicide desire
 - Suicide intent
 - Passive
 - Desire to not be alive
- NSSI thought intensity (assessed multiple times per day) outcome

Bentley et al., 2021; Glenn et al., 2022; Kleiman et al., 2017; Nock et al., 2009

Analytic Plan

- A series of **multi-level models** to test negative affect arousal dimensions as predictors of self-injurious thoughts
 - Age as covariate



Results – Passive suicidal thought intensity



Results – Active suicidal thought intensity



Results – NSSI thought intensity



Summary

- Passive and active suicidal thought intensity
 - High and low arousal NA contemporaneous
 - Low arousal NA only lagged



- NSSI thought intensity
 - High and low arousal NA contemporaneous and lagged
- High arousal: thoughts \rightarrow behavior
- Emotional inertia
- Clinical implications
 - Mood tracking
 - Positive affect treatment vs. distress tolerance



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Asarnow et al., 2021; Craske et al., 2019; Rogers et al., 2016; Saccaro et al., 2024; Smyth et al., 2017

Thank you!

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