

# Emotion Regulation and Suicidal Ideation among Individuals with First-Episode Psychosis

By: Heather Wastler, PhD

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for Suicide  
Prevention

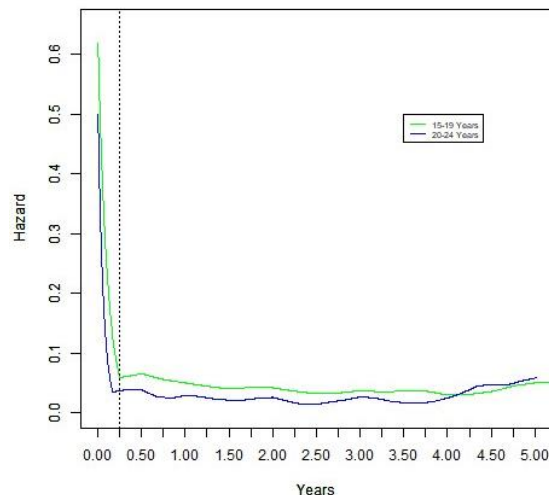
# Disclosures

This project was supported by Grant YIG-0-184-20 awarded to Heather Wastler from the American Foundation for Suicide Prevention. The content is solely the responsibility of the authors and does not necessarily represent the official views of the American Foundation for Suicide Prevention.

# Why focus on *early* psychosis?

- Suicide rates in psychosis are ~13x greater than general population
- Risk is greatest during early stages of illness
- FEP: 30% ideation & 10% attempts
- Highest risk is within first 3mo

Moe, Llamaco, Wastler et al., 2021



Bornheimer et al., 2019; Nordentoft et al., 2002; Nossel et al., 2018;  
Pelizza et al., 2020; Srihari et al., 2015; Too et. al 2019

# What do we know about suicide risk & psychosis?

Isolation  
Medical Comorbidity  
Prior Attempts Substance Use  
Caucasian Male Family History  
Higher IQ  
Depression  
Worthlessness  
Hopelessness Prior Hospitalization  
Positive Symptoms  
Cognition Alcohol Use

Bornheimer et al. 2019; Cassidy et al 2018; Honings et al 2016; Hor & Taylor, 2015; Huang et al 2018; McGinty et al 2018; Pelizza et al. 2019; Pompili et al 2011; Sicotte et al 2021; Taylor et al. 2015; Ventriglio et al 2016; Wastler et al. 2021; Yates et al. 2019



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# Why study emotion regulation?

- Transdiagnostic mechanism
- Difficulties exist across the psychosis continuum
- Modifiable treatment target

Anestis et al. 2011; Beauchaine et al 2019; Bryan et al. 2018; Klonsky et al 218; Linehan 1993; Ludwig et al., 2019, 2020; O'Driscoll et al., 2014; Raugh & Strauss, 20220; Strauss et al., 2019, 2022; Visser et al. 2018

# What do we know about emotion regulation, suicide, and psychosis?

## Suicide Risk & Emotion Reg

- Emotion Dysregulation
- Maladaptive Strategies

## Emotion Reg & Psychosis

- Difficulties across all stages
- Regulate at the wrong time
- Maladaptive strategies
- Excessively switch
- Reduced effectiveness

## Emotion Reg, Suicide Risk, Psychosis

- Childhood dysreg & later SA
- Coping beliefs
- Social problem solving
- Reappraisal mediates AH/SA

Suicide risk & Emotion Reg: Anestis et al., 2014; Harris et al., 2018; Hatkevich et al., 2019; Neacisu et al., 2018; Rajappa et al., 2012 Brausch & Woods, 2019; Forkmann et al., 2014; Lynch et al 2004; Miranda et al., 2013; Miranda & Nolen-Hoeksema, 2007. Emotion Reg & Psychosis: Bartolomeo et al., 2022; Ludwig et al., 2019, 2020; O'Driscoll et al., 2014; Raugh & Strauss, 2022; Straus et al., 2019; Visser et al. 2018. Emotion Reg, Suicide risk, Psychosis: Breitborde et al. 2020; Chang et al., 2014; Grattan et al., 2020; Hielscher et al., 2020; Johnson et al., 2010

# Emotion Regulation & SI in FEP (n=32)

|                        | $r_{PB}$ | p    |
|------------------------|----------|------|
| Situation selection    | -0.29    | 0.12 |
| Situation modification | -0.28    | 0.14 |
| Distraction            | 0.18     | 0.42 |
| Reappraisal            | -0.45    | 0.01 |
| Rumination             | -0.16    | 0.39 |
| Emotion suppression    | 0.38     | 0.05 |
| Masking emotion        | 0.09     | 0.67 |
| Expressive Suppression | -0.12    | 0.60 |
| Sharing emotions       | -0.21    | 0.33 |

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# Broadening Our Perspective: The Extended Process Model

# Emotion Regulation as a Multi-Faceted Construct

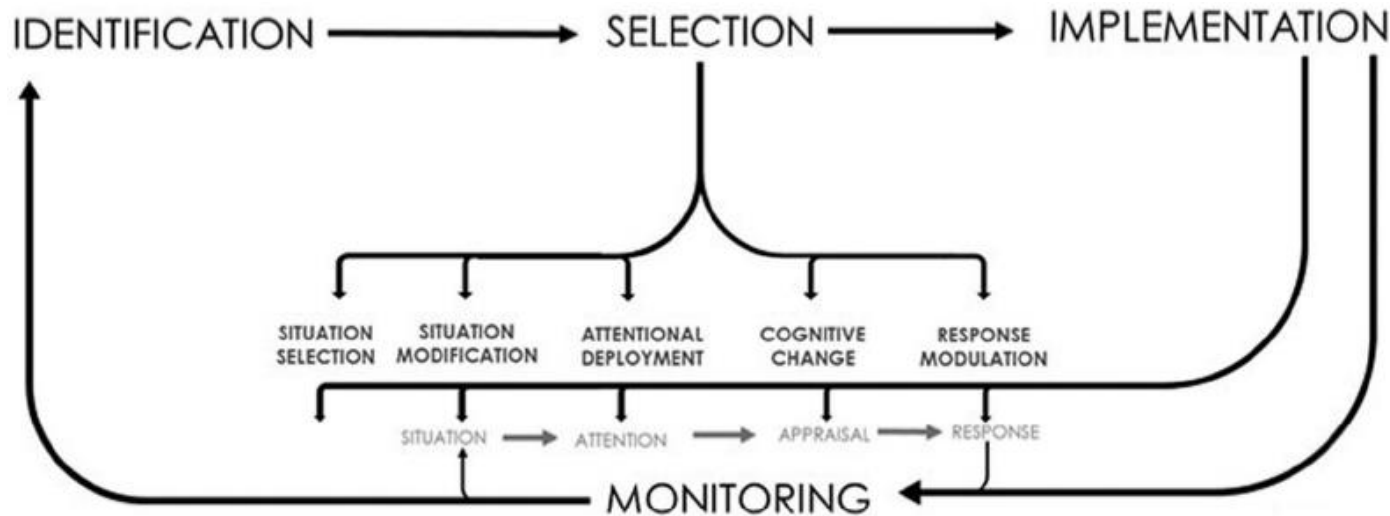


Image from: McRae, K., & Gross, J. (2020). Emotion Regulation. *Emotion*. 20(1). doi: 10.1037/emo0000703

Gross, 1998, 2015; McRae & Gross, 2020; Sheppes et al. 2015

# Emotion Regulation as a Dynamic, Iterative Process

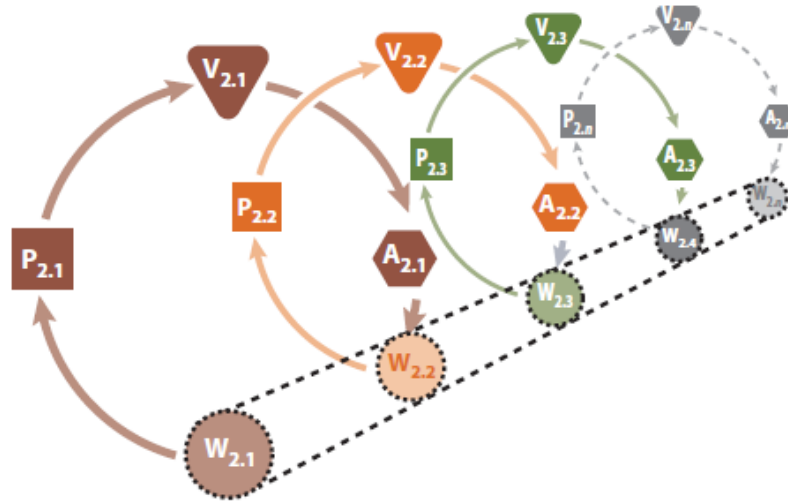


Image from: Shepes, G., Suri, G., & Gross, J. (2015). Emotion Regulation and Psychopathology. *Annu Rev Clin Psychol.* 11(1). doi:10.1146/annurev-clinpsy-032814-112739

Gross, 1998, 2015; McRae & Gross, 2020; Sheppes et al. 2015



# AFSP Funded Study

## Ongoing study

- Individuals with FEP; ages 18-35
- Target n= 31 with SI; 31 without SI
- Preliminary analyses= 20 (13 SI; 7 no SI)
- Baseline → 28 days of (EMA) → Follow Up



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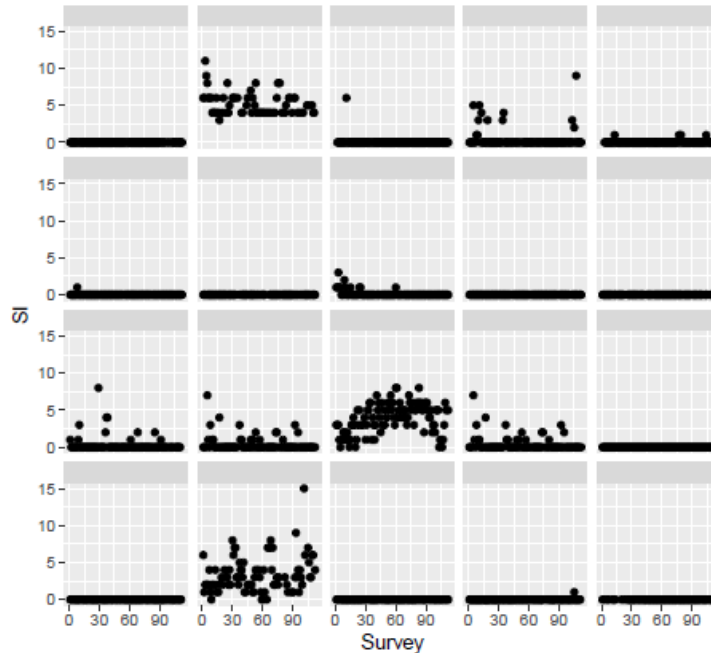
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# Preliminary Findings: EMA Overview (n=20)

~1930 surveys; 314 instances of SI

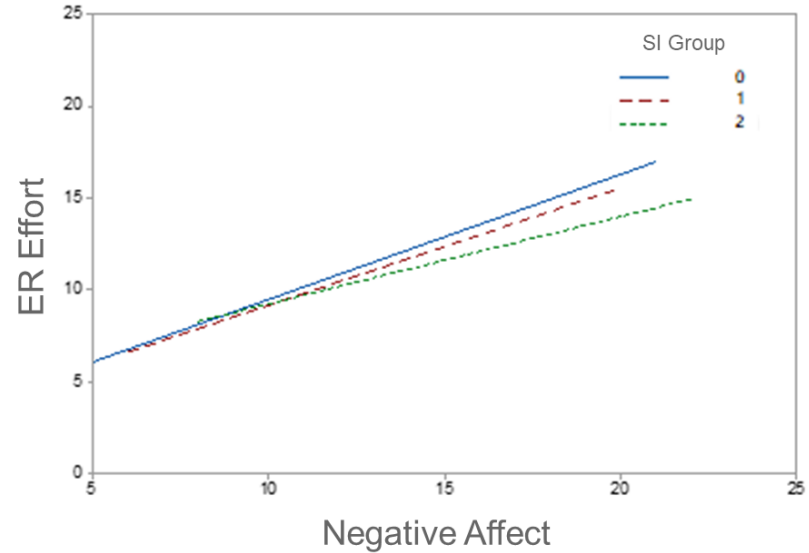
~86% compliance



*\*Unpublished data; do not cite*

# Preliminary Findings: Identification

- A *higher* regulation threshold is associated with the presence of SI during EMA ( $r = 0.46$ ,  $p = 0.042$ ).
- Greater NA ( $B = 0.13$ ,  $p < 0.01$ ) & lower regulation effort ( $B = -0.03$ ,  $p < 0.01$ ) are associated with SI
- NAxER interaction is associated with SI ( $B = 0.006$ ,  $p < 0.01$ )



\*Unpublished data; do not cite

# Preliminary Findings: Selection

8 Strategies: Avoidance, Distraction, Rumination, Acceptance, Reappraisal, Expressive Suppression, Physiological Intervention, and Social Support

## Maladaptive v Adaptive

- Increased use of maladaptive strategies (B=0.06,  $p<0.01$ )
- Decreased use of adaptive strategies (B=-0.05,  $p<0.01$ )

## Separate Models

- Rumination (B=0.13,  $p<0.01$ )
- Ex supp (B=0.06,  $p=0.018$ )
- Avoidance (B=0.06,  $p=0.03$ )
- Acceptance (B=-0.11,  $p<0.01$ )

## One Model

- Rumination (B=0.16,  $p<0.01$ )
- Acceptance (B=-0.14,  $p<0.01$ )

*Relationship between acceptance and SI remains even when including negative affect in the model.*

*\*Unpublished data; do not cite*





# Preliminary Findings: Implementation

- Ineffective regulation = No change or worsening NA (t+1) following a regulation attempt (t)
- Ineffective emotion regulation is associated with greater severity suicidal ideation (B=0.078, p<0.01).

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# Limitations & Future Directions

- Replicate with full sample (target n=62)
- Time lagged models
- Group (SI/No SI) and psychotic sx as moderators
- Psychiatric control group
- Examine other stages of illness (CHR, FEP, SMI)



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# Takeaways

- Emotion regulation is a dynamic, multi-faceted process
- Specific emotion regulation abnormalities might contribute to suicide risk
- Emotion acceptance/suppression might be a key, understudied risk factor in FEP
- Focusing on ER strategies might not be enough

# Thank you

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