

The Ideation-to-Action Framework and the Three-Step Theory

New Approaches for Understanding and Preventing Suicide



E. David Klonsky, PhD

[@KlonskyLab](#)

Department of Psychology
University of British Columbia





Agenda

- I. Why scientific research is necessary
- II. The Ideation-to-Action Framework
- III. The Three-Step Theory of Suicide



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- I. **Why scientific research is necessary**
- II. The Ideation-to-Action Framework
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Suicide

Top 10 leading cause of death worldwide

#9 in North America

#2 in adolescents and young adults (age 15-34)

- ahead of heart attacks, cancer, car accidents, and homicide

Suicide rates not decreasing

Prediction not improving (Franklin et al., 2016)



Beyond Suicide Mortality

For every death, 20 attempts

For every attempter, 2.5 individuals with ideation

A large minority of people have felt suicidal



Why Scientific Research is Necessary

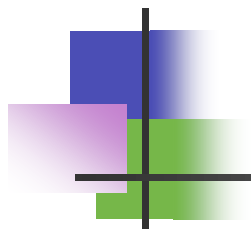
Examples:

1. Early group treatments for self-harm
2. High school yearbook
3. Myths
 - Cowardly
 - For Attention
 - Impulsivity



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A critical and specific knowledge gap



Oft-Cited Risk Factors for Suicide

- Psychiatric Disorders
 - Major Depression
 - Anxiety Disorders
 - Substance Disorders
 - Multiple Diagnoses
- Hopelessness
- Impulsivity/Aggression



What Do These Predictors Predict?

Clinical Disorder

Non-Suicidal vs. Suicide Attempter

| | |
|------------------------|------|
| Major Depression | 11.0 |
| Any Mood Disorder | 12.9 |
| Any Anxiety Disorder | 3.2 |
| Any Substance Disorder | 5.8 |
| Any Clinical Disorder | 6.7 |
| 3+ Clinical Disorders | 19.7 |

Kessler et al. (1999) – Data from the National Comorbidity Survey (n=5,877, 795 ideators, 272 attempters)



What Do These Predictors Predict?

Clinical Disorder

Non-Suicidal vs. Suicide Ideator

| | |
|------------------------|------|
| Major Depression | 9.6 |
| Any Mood Disorder | 10.7 |
| Any Anxiety Disorder | 2.9 |
| Any Substance Disorder | 3.9 |
| Any Clinical Disorder | 5.7 |
| 3+ Clinical Disorders | 14.3 |

Kessler et al. (1999) – Data from the National Comorbidity Survey (n=5,877, 795 ideators, 272 attempters)



What Do These Predictors Predict?

Clinical Disorder

Suicide Ideator vs. Attempter

| | |
|------------------------|-----|
| Major Depression | 2.0 |
| Any Mood Disorder | 1.8 |
| Any Anxiety Disorder | 1.2 |
| Any Substance Disorder | 1.6 |
| Any Clinical Disorder | 1.0 |
| 3+ Clinical Disorders | 1.1 |

Kessler et al. (1999) – Data from the National Comorbidity Survey (n=5,877, 795 ideators, 272 attempters)



What Do These Predictors Predict?

Kessler et al. (1999)

“all significant risk factors ... were more strongly related to ideation than to progression from ideation to a plan or an attempt” [p. 617].”

Replicated in WHO data (Nock et al., 2012; 2013)

What Do These Predictors Predict?

Hopelessness

Cohen's *d*

Never Suicidal vs. Suicide Attempter

0.92

Never Suicidal vs. Suicidal Ideator

0.65

Suicidal Ideator vs. Suicide Attempter

0.23

What Do These Predictors Predict?

Impulsivity

Cohen's d

Never Suicidal vs. Suicide Attempter 0.47

Never Suicidal vs. Suicidal Ideator 0.58

Suicidal Ideator vs. Suicide Attempter 0.11

What Do These Predictors Predict?



Aggression

Cohen's *d*

Never Suicidal vs. Suicide Attempter 0.73

Never Suicidal vs. Suicidal Ideator 0.67

Suicidal Ideator vs. Suicide Attempter 0.04

Meta-Analytic Data

(May & Klonsky, 2016)

Variable

Ideators vs. Nonsuicidal

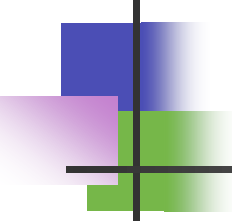
Depression Severity

Depressive Disorders

Hopelessness

Meta-Analytic Data

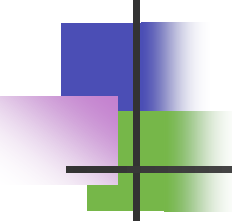
(May & Klonsky, 2016)



| <u>Variable</u> | <u>Ideators vs. Nonsuicidal</u> |
|----------------------|---------------------------------|
| Depression Severity | .90 |
| Depressive Disorders | .85 |
| Hopelessness | .55 |

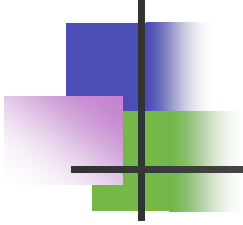
Meta-Analytic Data

(May & Klonsky, 2016)



| <u>Variable</u> | <u>Ideators vs. Attempter</u> |
|----------------------|-------------------------------|
| Depression Severity | .23 |
| Depressive Disorders | .24 |
| Hopelessness | -.05 |

What About Recent Suicidality?



Risk Factor

Depression

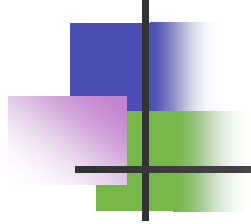
Current Suicidal Ideation

Non-Suicidal vs. Recent Ideation

Data Source:

- Mechanical Turk Dataset (Saffer & Klonsky, in prep)

What About Recent Suicidality?



Risk Factor

Non-Suicidal vs. Recent Ideation

Depression

1.61

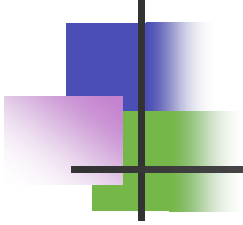
Current Suicidal Ideation

1.79

Data Source:

- Mechanical Turk Dataset (Saffer & Klonsky, in prep)

What About Recent Suicidality?



Risk Factor

Depression

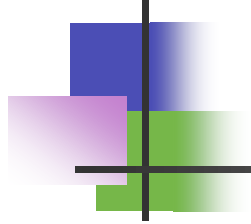
Current Suicidal Ideation

Recent Ideation vs. Recent Attempt

Data Source:

- Mechanical Turk Dataset (Saffer & Klonsky, in prep)

What About Recent Suicidality?



Risk Factor

Recent Ideation vs. Recent Attempt

Depression

.22

Current Suicidal Ideation

.23

Data Source:

- Mechanical Turk Dataset (Saffer & Klonsky, in prep)



What do our risk factors tell us?

✓ Who develops suicidal ideation

✗ Who acts on suicidal thoughts



Take Home Message

There are separate explanations for:

a) Who develops suicidal ideation

vs.

b) Who progresses from ideation to attempts

“Ideation-to-Action” Framework



Historically, just a single explanation...

- Social Isolation (Durkheim)
- Psychache (Shneidman)
- Escape (Baumeister)
- Hopelessness (Beck; Abramson)



The Pioneering Exception

Thomas Joiner's Interpersonal Theory (2005)

Desire + Capability → Suicide Attempt

Desire = Burdensomeness + Low Belongingness

Capability = Acquired Capability



Not Just a Specific Theory

A Framework for all
Suicide Knowledge and Prevention

“Ideation-to-Action” Framework



Old Way

Risk Factors for Suicide

Mental Disorders

Depression

Hopelessness

Impulsivity

Access to Lethal Means

Expertise in Lethal Means

Social Contagion

...

...



Ideation-to-Action Framework

| Suicidal Ideation | Suicidal Actions |
|--------------------------|-------------------------|
| | |
| | |
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| | |



Ideation-to-Action Framework

| Suicidal Ideation | Suicidal Actions |
|--------------------------|-------------------------|
| Mental Disorders | |
| Depression | |
| Hopelessness | |
| Impulsivity | |
| ... | |
| ... | |
| ... | |
| ... | |



Ideation-to-Action Framework

| Suicidal Ideation | Suicidal Actions |
|--------------------------|---------------------------|
| Mental Disorders | Acquired Capability |
| Depression | Access to Lethal Means |
| Hopelessness | Expertise in Lethal Means |
| Impulsivity | Social Contagion |
| ... | ... |
| ... | ... |
| ... | ... |
| ... | ... |



Ideation-to-Action Framework

| Suicidal Ideation | Suicidal Actions |
|--------------------------|---------------------------|
| Mental Disorders | Acquired Capability |
| Depression | Access to Lethal Means |
| Hopelessness | Expertise in Lethal Means |
| Impulsivity | Social Contagion |
| Non-Suicidal Self-Injury | Non-Suicidal Self-Injury |
| ... | ... |
| ... | ... |
| ... | ... |



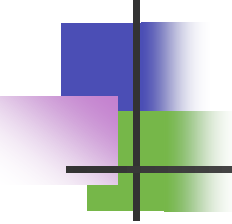
Ideation-to-Action Framework

| Suicidal Ideation | Suicidal Actions |
|---------------------------------|---------------------------------|
| Mental Disorders | Acquired Capability |
| Depression | Access to Lethal Means |
| Hopelessness | Expertise in Lethal Means |
| Impulsivity | Social Contagion |
| Non-Suicidal Self-Injury | Non-Suicidal Self-Injury |
| ... | ... |
| ... | ... |
| ... | ... |



Agenda

- I. Why scientific research is necessary
- II. The Ideation-to-Action Framework
- III. **The Three-Step Theory of Suicide**



Three-Step Theory of Suicide (3ST)

Klonsky and May (2015; International Journal of Cognitive Therapy)
Klonsky, May, & Saffer (2016; Annual Review of Clinical Psychology)



A Good Theory

- Positioned within the Ideation-to-Action Framework
- Consistent with basic behavioral and cognitive principles
- Consistent with known predictors
- Use predictors as clues to a cohesive explanation
- Testable and accurate



A Good Theory

Must achieve a balance:

- Broad enough to account for tremendous individual variation
- Specific enough to be useful



Step 1: When does suicidal ideation develop?

When two necessary conditions combine:

1. **Pain** (Shneidman's psychache, Linehan's emotional misery)
2. **Hopelessness** (that things will get better) (Beck)

Not additive, the combination is what matters



Step 2: When does ideation becomes active?

Ideation escalates if **pain** > **connectedness**

(Durkheim; Joiner)

Connection can be to:

- people, role, interest, job, project, purpose, or sense of meaning

Does your pain overwhelm your connectedness?



Audrie Pott

- 15 year-old girl
- Died by suicide September 2012

Final Facebook Post:

"I am in hell." (Pain)

"I can't do anything to fix it." (Hopelessness)

"The whole school knows ... I have a reputation I can never get rid of." (Disconnection)



Step 3: When does ideation lead to action?

Strong ideation progresses to action when there is the **capacity** to make an attempt:

1. **Acquired** (Joiner's IPT)
2. **Dispositional**
3. **Practical**
 1. Access to lethal means
 2. Knowledge and comfort with lethal means

Does total capacity make an attempt possible?

1) Are you in pain and hopeless?

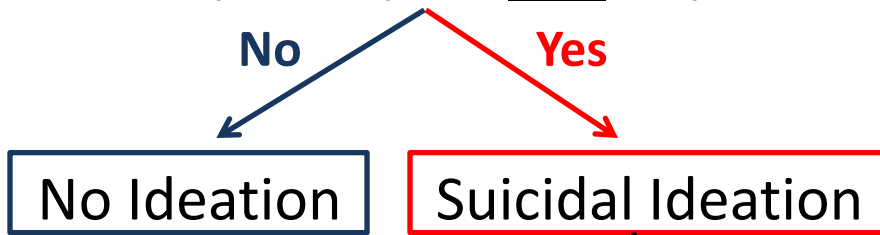
No

Yes

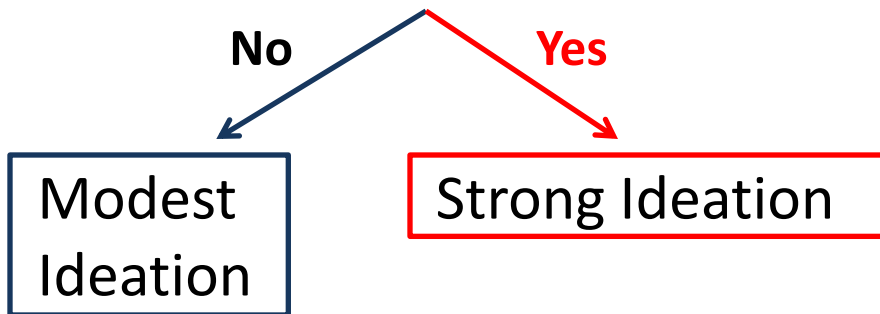
No Ideation

Suicidal Ideation

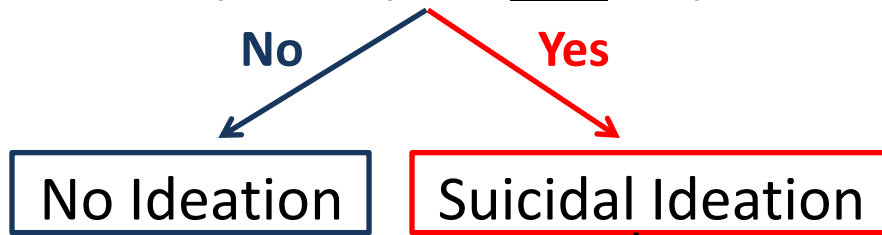
1) Are you in pain and hopeless?



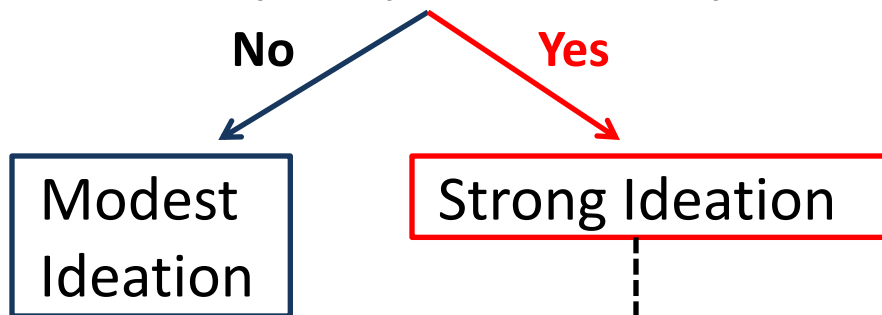
2) Does your pain exceed your connectedness?



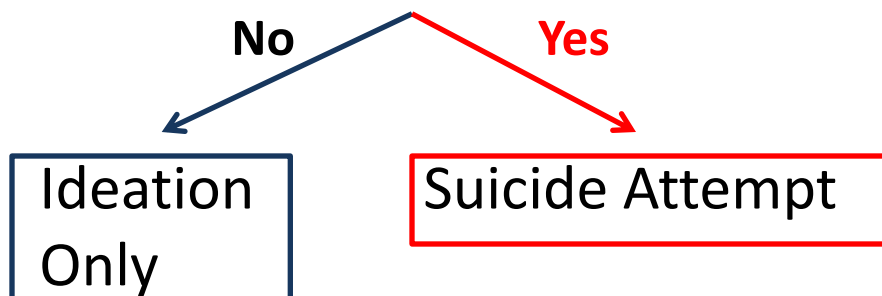
1) Are you in pain and hopeless?



2) Does your pain exceed your connectedness?



3) Do you have the capacity to attempt suicide?





Evidence?



Step 1

The combination of pain and hopelessness
leads to suicidal ideation

Predictors of Suicide



- Mood disorders
- Schizophrenia
- Anxiety disorders
- Some personality disorders
- Alcohol and substance use
- Impulsivity
- Aggressive tendencies
- History of trauma
- Physical and sexual abuse
- Major physical illness
- Chronic pain
- Family history of suicide
- Suicidal friend
- Job/financial loss
- Relationship loss
- Other stressful life event
- Lack of social support
- Barriers to health care
- Cultural/religious beliefs
- Female gender
- Poor problem solving skills
- History of non-suicidal self-injury
- Past attempt



Evidence?

Do pain and hopelessness stand out among hundreds of suicide correlates and risk factors?



Adult Community Outpatients

May & Klonsky (2013; *Suicide & Life-Threatening Behavior*)

| <u>Motivation</u> | <u>Mean</u> | <u>SD</u> |
|-------------------------|-------------|-----------|
| Hopelessness | | |
| Overwhelming Pain | | |
| Escape | | |
| Low Belongingness | | |
| Problem Solving | | |
| Burdensomeness | | |
| Fearlessness | | |
| Impulsivity | | |
| Help Seeking | | |
| Interpersonal Influence | | |



Adult Community Outpatients

May & Klonsky (2013; *Suicide & Life-Threatening Behavior*)

| <u>Motivation</u> | <u>Mean</u> | <u>SD</u> |
|-------------------------|-------------|-----------|
| Hopelessness | 15.4 | 4.0 |
| Overwhelming Pain | 15.2 | 4.6 |
| Escape | 13.0 | 5.1 |
| Low Belongingness | 9.0 | 5.3 |
| Problem Solving | 8.5 | 4.0 |
| Burdensomeness | 8.3 | 6.2 |
| Fearlessness | 8.3 | 5.3 |
| Impulsivity | 6.3 | 4.5 |
| Help Seeking | 5.5 | 4.8 |
| Interpersonal Influence | 3.6 | 4.3 |



Adult Community Outpatients

May & Klonsky (2013; *Suicide & Life-Threatening Behavior*)

| <u>Motivation</u> | <u>Mean</u> | <u>SD</u> |
|--------------------------|-------------|------------|
| Hopelessness | 15.4 | 4.0 |
| Overwhelming Pain | 15.2 | 4.6 |
| Escape | 13.0 | 5.1 |
| Low Belongingness | 9.0 | 5.3 |
| Problem Solving | 8.5 | 4.0 |
| Burdensomeness | 8.3 | 6.2 |
| Fearlessness | 8.3 | 5.3 |
| Impulsivity | 6.3 | 4.5 |
| Help Seeking | 5.5 | 4.8 |
| Interpersonal Influence | 3.6 | 4.3 |



Undergraduates

May & Klonsky (2013; *Suicide & Life-Threatening Behavior*)

| Motivation | Mean | SD |
|--------------------------|-------------|------------|
| Overwhelming Pain | 15.9 | 4.4 |
| Hopelessness | 14.7 | 4.4 |
| Escape | 13.0 | 5.2 |
| Low Belongingness | 9.0 | 5.4 |
| Problem Solving | 8.5 | 4.0 |
| Fearlessness | 7.6 | 5.1 |
| Burdensomeness | 7.5 | 6.1 |
| Help Seeking | 6.1 | 5.7 |
| Impulsivity | 6.0 | 4.8 |
| Interpersonal Influence | 4.8 | 5.9 |



Adolescent Psychiatric Inpatients

May, O'Brien, Liu & Klonsky (2016; *Archives of Suicide Research*)

| Motivation | Mean | SD |
|--------------------------|-------------|------------|
| Overwhelming Pain | 15.6 | 4.5 |
| Hopelessness | 15.1 | 4.0 |
| Escape | 14.6 | 4.6 |
| Burdensomeness | 10.1 | 6.0 |
| Low Belongingness | 9.2 | 5.4 |
| Fearlessness | 8.0 | 6.0 |
| Problem Solving | 7.6 | 5.4 |
| Impulsivity | 5.9 | 4.6 |
| Help Seeking | 4.1 | 4.0 |
| Interpersonal Influence | 1.5 | 2.8 |



Online US Sample (Mturk)

May & Klonsky (in prep)

| Motivation | Mean | SD |
|--------------------------|-------------|------------|
| Overwhelming Pain | 15.3 | 4.9 |
| Hopelessness | 15.6 | 4.0 |
| Escape | 12.8 | 5.1 |
| Low Belongingness | 9.5 | 5.3 |
| Problem Solving | 9.0 | 4.9 |
| Fearlessness | 7.8 | 5.4 |
| Burdensomeness | 8.0 | 6.3 |
| Help Seeking | 5.2 | 5.4 |
| Impulsivity | 5.2 | 5.4 |
| Interpersonal Influence | 3.6 | 4.8 |



Adult Psychiatric Inpatients

May & Klonsky (in prep)

| Motivation | Mean | SD |
|--------------------------|-------------|------------|
| Overwhelming Pain | 16.1 | 4.2 |
| Hopelessness | 16.2 | 3.6 |
| Escape | 13.4 | 5.2 |
| Low Belongingness | 7.8 | 5.1 |
| Problem Solving | 10.4 | 4.7 |
| Fearlessness | 10.2 | 5.2 |
| Burdensomeness | 9.8 | 6.8 |
| Help Seeking | 6.8 | 5.6 |
| Impulsivity | 6.8 | 5.3 |
| Interpersonal Influence | 2.6 | 3.3 |



More Evidence for Step 1

- Wintersteen (2014)
- Examined:
 - Adolescents hospitalized for an attempt
 - Loved ones who lost adolescents to suicide



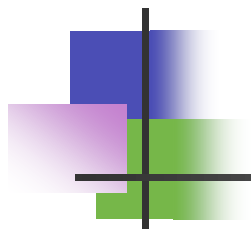
More Evidence for Step 1

- *What was different in the minutes/hours/days leading up to the suicide death or attempt?*
- Assessed 42 variables
 - Social withdrawal
 - Agitation
 - Sleep problems
 - Family conflict
 - Anger/hostility
 - Guilt/shame



More Evidence for Step 1

- Across the groups, the two most commonly endorsed answers were:
 1. “emotional misery or pain”
 2. “feelings of hopelessness about the future”

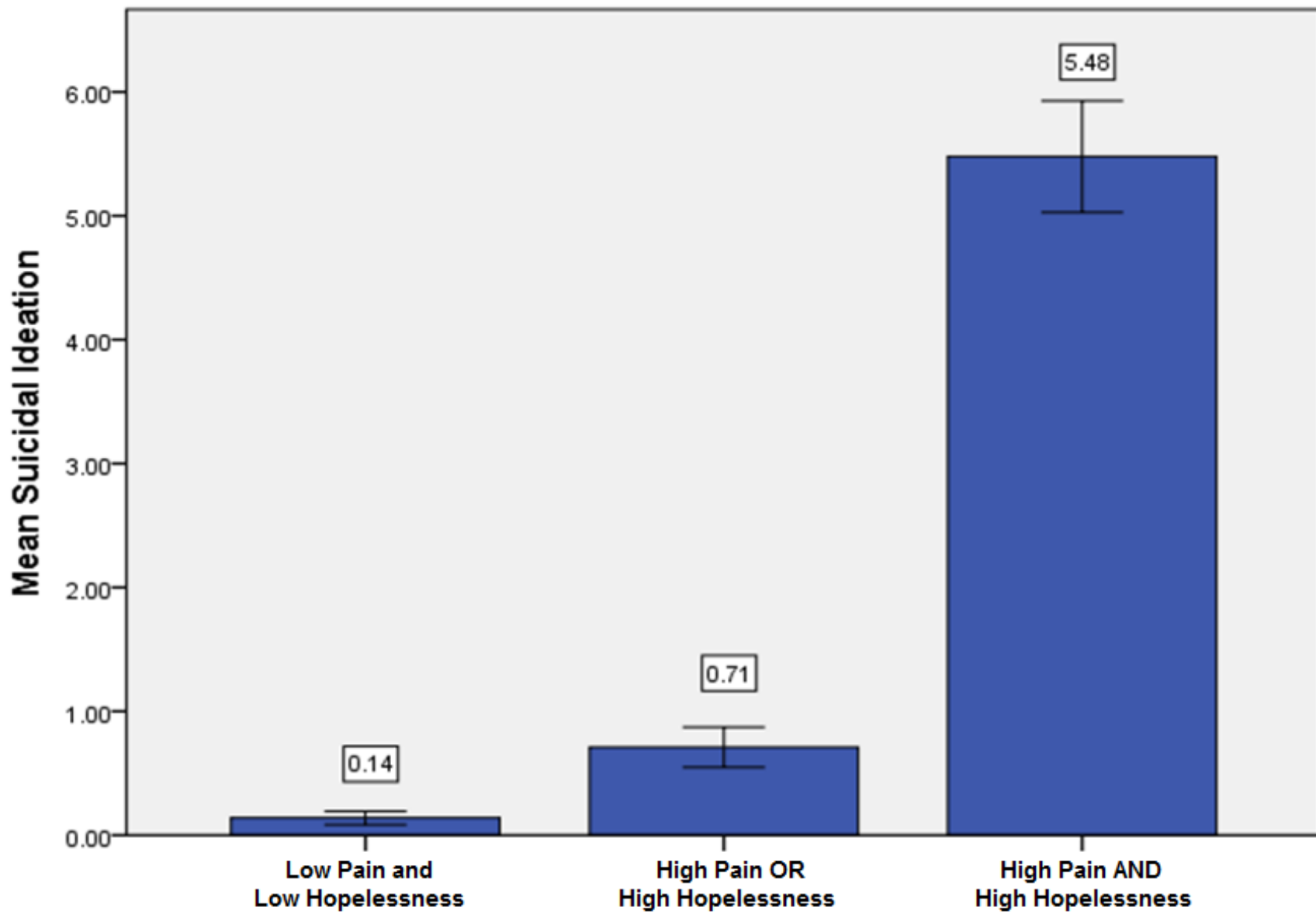


But ...

it's the combination that matter, right?

Right!

Data from: Klonsky and May (2015)





Step 2

Ideation escalates if **pain > connectedness**



Klonsky & May (2015; *International Journal of Cognitive Therapy*)

Correlation of connectedness with ideation in 2 subgroups

Pain + Hopelessness ($n=283$)

$r=-.36$

Everyone Else ($n=627$)

$r=-.14$



Step 2

Ideation escalates if **pain > connectedness**



Klonsky & May (2015; *International Journal of Cognitive Therapy*)

Computed a connectedness-pain difference score

Pain + Hopelessness ($n=283$) **$r=-.47$**

Everyone Else ($n=627$) **$r=-.22$**



Step 3

Progression from ideation to action is facilitated by the capacity to attempt suicide

1. Dispositional
2. Acquired
3. Pratical

Klonsky and May (2015)

Dispositional, acquired, and practical contributors each predicted suicide attempts above and beyond ideation



Why Is The Theory Promising?

- Conceptually sensible explanation
- Fully consistent with existing research
 - Emotional pain, Hopelessness, Disconnection, Capacity
- Fully consistent with basic behavioral and cognitive principles
- Testable and (so far) Accurate



Three-Step Theory (3ST)

Clear implications for
research and prevention



Organizing Model for Suicide Research



Organizing Model for Suicide Risk

| Pain | Hopelessness | Connectedness | Capacity |
|------|--------------|---------------|----------|
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |



Organizing Model for Suicide Risk

| Pain | Hopelessness | Connectedness | Capacity |
|--------------------------|---------------------|----------------------|-----------------|
| Psychache | | | |
| Depression | | | |
| Anxiety | | | |
| Emotion Dysregulation | | | |
| Mental Disorders | | | |
| General Distress | | | |
| | | | |



Organizing Model for Suicide Risk

| Pain | Hopelessness | Connectedness | Capacity |
|--------------------------|-------------------------|----------------------|-----------------|
| Psychache | Hopelessness | | |
| Depression | Pessimistic Outlooks | | |
| Anxiety | External Locus | | |
| Emotion Dysregulation | Learned Helplessness | | |
| Mental Disorders | Self-Efficacy | | |
| General Distress | Future Orientation | | |
| | | | |



Organizing Model for Suicide Risk

| Pain | Hopelessness | Connectedness | Capacity |
|--------------------------|-------------------------|----------------------|-----------------|
| Psychache | Hopelessness | Social Isolation | |
| Depression | Pessimistic Outlooks | Loneliness | |
| Anxiety | External Locus | Poor Social Support | |
| Emotion Dysregulation | Learned Helplessness | Low Belongingness | |
| Mental Disorders | Self-Efficacy | Burdensomeness | |
| General Distress | Future Orientation | | |
| | | | |



Organizing Model for Suicide Risk

| Pain | Hopelessness | Connectedness | Capacity |
|--------------------------|-------------------------|----------------------|-----------------------------|
| Psychache | Hopelessness | Social Isolation | Acquired Capability |
| Depression | Pessimistic Outlooks | Loneliness | Access to Means |
| Anxiety | External Locus | Poor Social Support | Knowledge of Means |
| Emotion Dysregulation | Learned Helplessness | Low Belongingness | Dispositional Capability |
| Mental Disorders | Self-Efficacy | Burdensomeness | |
| General Distress | Future Orientation | | |
| | | | |



4 Clear Targets for Intervention

- 1) Reduce Current Pain
- 2) Increase Hope for Future
- 3) Improve Connection
- 4) Reduce Capacity



Limitations and Next Steps

- Time-Scale (Glenn & Nock, 2014)
- Understanding the transition to attempt
- Fatal vs. non-fatal attempts
- Prospective studies
 - What can 3ST actually predict?
 - Does 3ST do any better than existing perspectives?
 - Is capacity the key difference between ideators and attempters?



Thanks!!!

Questions??

Comments??