



IT'S THE THOUGHT THAT COUNTS

Belief in Suicide as an Escape Moderates the Relationship
Between Emotion Dysregulation and Suicidal Ideation

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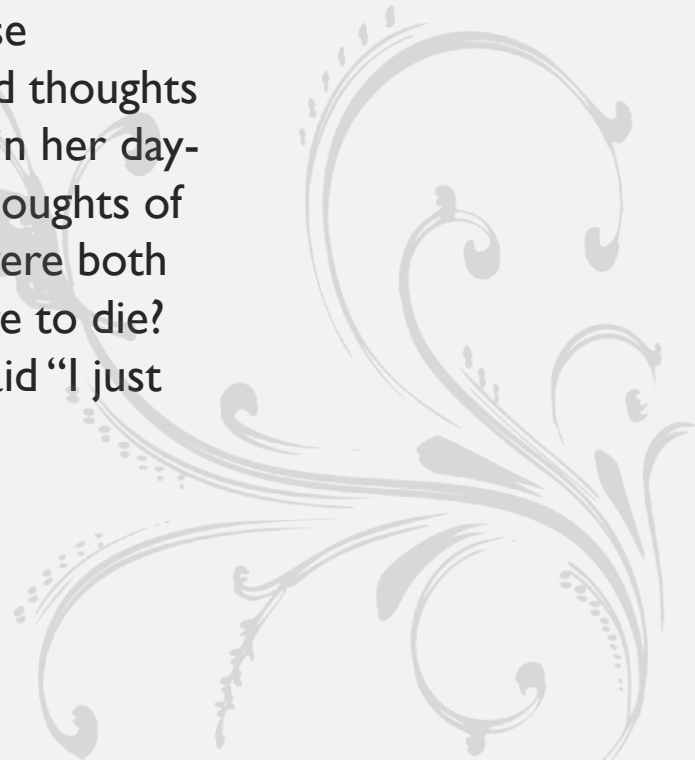
OUTLINE

- Case study
- Suicidal ideation
- Emotion dysregulation and borderline personality disorder
- Beliefs about the function of suicide
- Current study
- Methods
- Results
- Discussion



CASE STUDY

- A 35-year old female client with borderline personality disorder came into the clinic to receive dialectical behaviour therapy. While her emotions were quite controlled in sessions, she described a pattern of extreme and intense emotional mood swings that often led to feelings of hopelessness and thoughts of wanting to die (at times, wanting to drink an all-purpose cleaner) in her day-to-day life. Yet the link between these emotional mood swings and thoughts of killing herself was not clear. We explored this further together. We were both trying to understand, how did these intense emotions lead to a desire to die? One session, after we extensively dissected one such instance, she said “I just wanted to escape – I didn’t want to feel so badly anymore.”



SUICIDAL IDEATION

- Thoughts of engaging in suicidal behavior, a desire to engage in such behavior, and/or planning of suicide attempts (Beck et al., 1979; O'Carroll et al., 1996)
- Suicidal ideation is a risk factor for later attempts (Nock et al., 2008)
- Suicidal ideation is a chronic symptom of distress (Borgetts et al., 2008)
- Risk factors for suicidal ideation include:
 - Childhood adversity (Enns et al., 2006)
 - Social isolation (Cheatle et al., 2014)
 - Stressful and traumatic life events (Ang & Huan, 2006; Jakupcak et al., 2009)
 - Emotion dysregulation (Miranda et al., 2013)



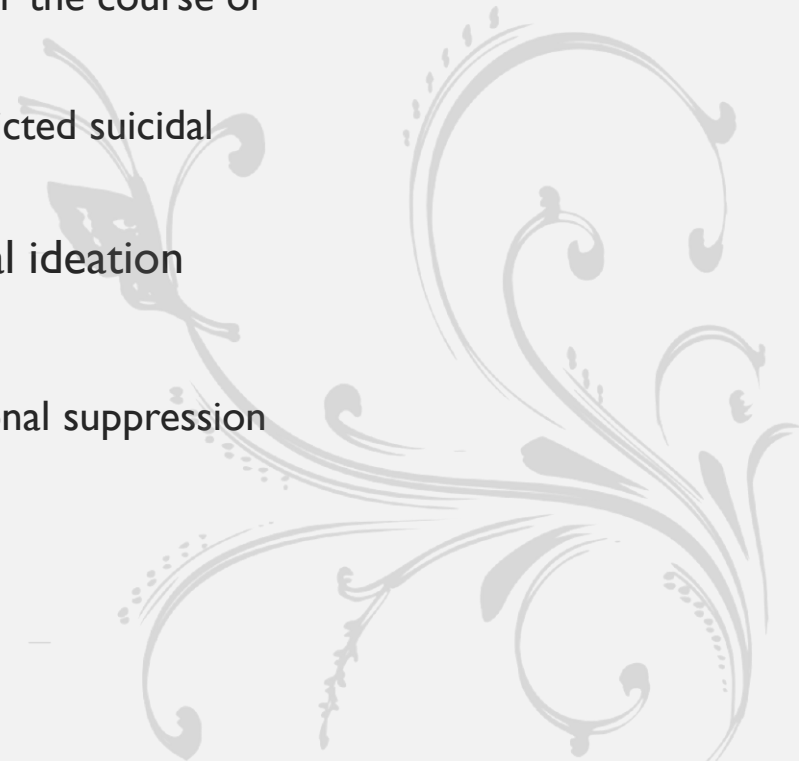
EMOTION DYSREGULATION AND BORDERLINE PERSONALITY DISORDER

- Emotion regulation: the ability to control strong negative emotions/accept one's emotional experiences (Gratz & Roemer, 2004)
- Borderline personality disorder (BPD)
 - Emotion dysregulation is believed to be a core feature of BPD (Glenn & Klonsky, 2009)
 - Individuals with BPD are at heightened risk of reporting suicidal ideation/behaviours (Black, Blum, Pfohl, & Hale, 2004)



EMOTION DYSREGULATION AND BORDERLINE PERSONALITY DISORDER

- The link between emotion dysregulation and suicidal ideation in BPD
 - Greater intensity of negative emotions predicts suicidal ideation over the course of one year (Links et al., 2007)
 - Greater emotional instability in adolescents with BPD features predicted suicidal ideation/behaviours (Glenn, Bagge, & Osman, 2013)
- Transdiagnostic link between emotion dysregulation and suicidal ideation
 - Concealing emotions to regulate affect (Forkmann et al., 2014)
 - Heightened negative emotional intensity/reactivity leading to emotional suppression (Lynch, Cheavens, Morse, & Rosenthal, 2004)
 - Reduced access to emotion regulation strategies (Miranda et al., 2013)



IT HAS BEEN SAID THAT...

Suicide is a problem with living, not a problem with wanting to die.

- Marsha M. Linehan

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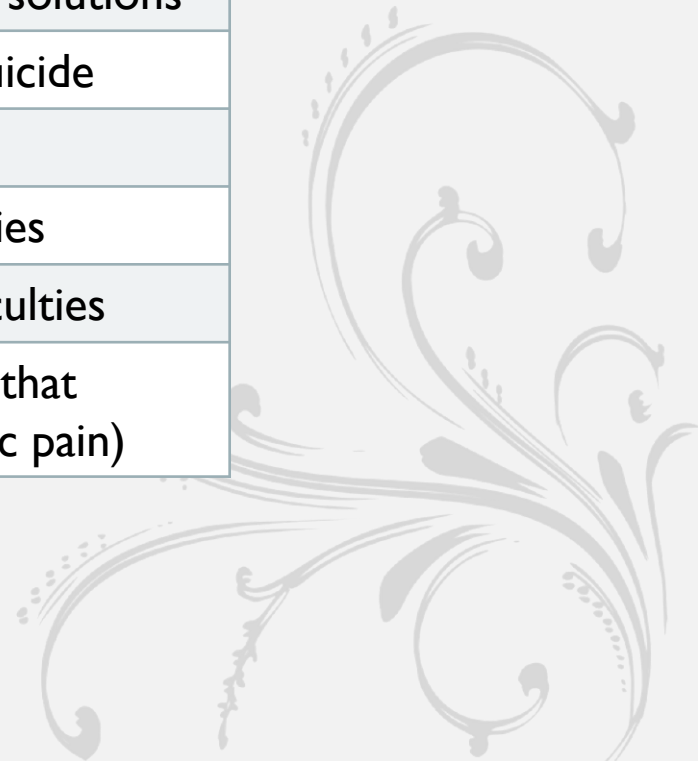
POTENTIAL LINK BETWEEN EMOTION DYSREGULATION AND SUICIDAL IDEATION

- Suicide as an escape from extreme emotional pain (Baumeister, 1990; Shneidman, 1993)
 - Experiential avoidance and suicidal ideation (Ellis & Rufino, 2016; Skinner et al., 2017; Zvolensky et al., 2015)
- Suicide as a solution to the problem of emotional pain (Clum, Patsiokas, & Luscomb, 1979; Schotte & Clum, 1987, 1982)
 - Problem solving deficits and suicidal ideation (Dieserud et al., 2003; Hughes & Neimeyer, 1993)




DIFFERENCES BETWEEN ESCAPE AND PROBLEM-SOLVING

ESCAPE	PROBLEM-SOLVING
Wanting to escape the moment	A process in looking through solutions
Avoiding emotional pain	Choosing the “solution” of suicide
INTERVENTION STRATEGIES FOR EACH	
Distress tolerance/crisis survival skills	Problem-solving skills/strategies
Exposure to difficult emotions	Problem-solving current difficulties
Learning emotions do not go on forever, that they are tolerable	Radically accepting problems that cannot be solved (e.g., chronic pain)



CURRENT STUDY

- Do beliefs in the function of suicide as an escape and/or as a solution to a problem moderate the relationship between emotion dysregulation and suicidal ideation in a BPD traits sample?
 - H1: Greater belief in suicide as an escape results in a stronger positive relationship between emotion dysregulation and suicidal ideation
 - H2: Greater belief in suicide as a solution to a problem results in a stronger positive relationship between emotion dysregulation and suicidal ideation
 - Both cross-sectional and longitudinal (suicidal ideation ~6-months later) examination
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METHODS

- 101 community participants
- 54% met a minimum of 3 BPD symptoms at clinical threshold
- $M_{\text{age}} = 27.52$ ($SD = 10.17$, range = 17-68). 62% female
- Ethnoracial breakdown: White/Caucasian (49%); South East/Eastern Asian (17%); Black/African (16%)
- Suicidal characteristics
 - 76% reported that there is chance they will consider suicide in their lifetime
 - 51% reported that there is chance they will consider suicide in the next year
 - 36% reported that there is chance they will consider suicide in the next four weeks

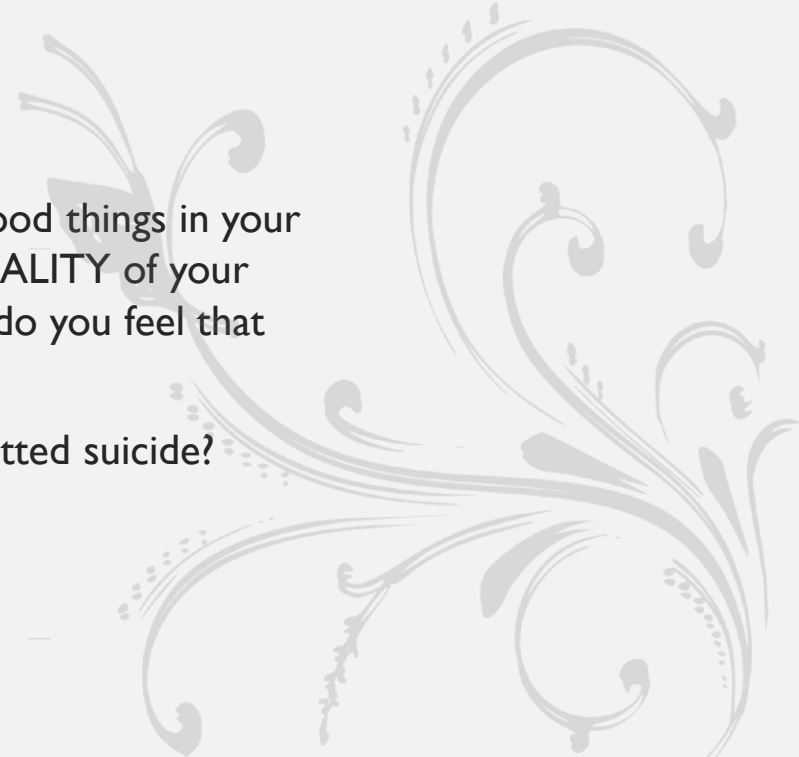
MEASURES

- The Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004)

DERS SUBSCALES	SAMPLE ITEM
Nonacceptance of emotional responses	When I'm upset, I feel guilty for feeling that way.
Difficulties engaging in goal-directed behaviour	When I'm upset, I have difficulty focusing on things.
Impulse control difficulties	When I'm upset, I lose control over my behaviours.
Lack of emotional awareness	When I'm upset, I acknowledge my emotions (r).
Limited access to emotion regulation strategies	When I'm upset, my emotions feel overwhelming.
Lack of emotional clarity	I have difficulty making sense out of my feelings.

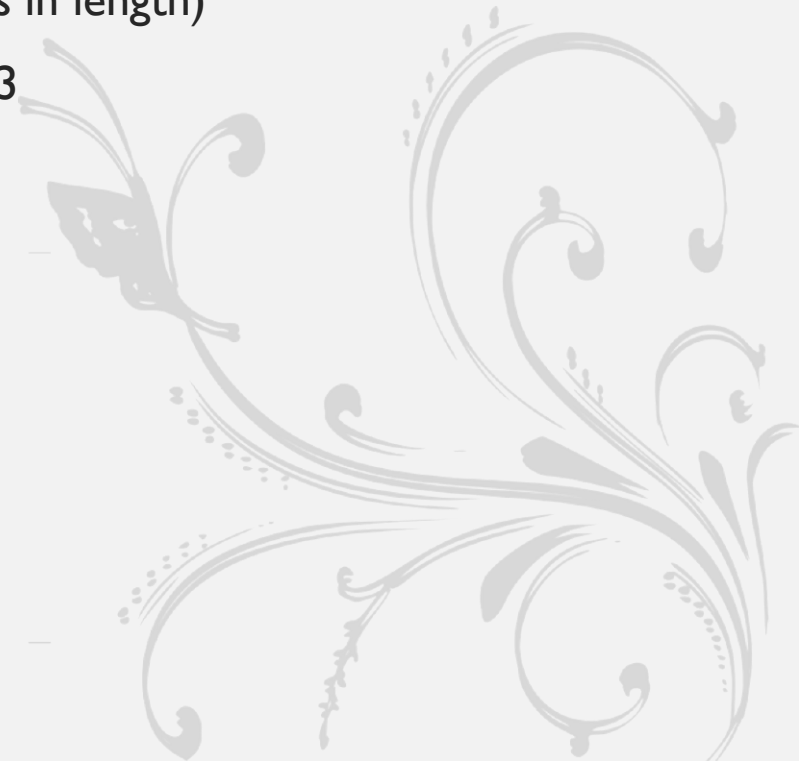
MEASURES

- Structured Clinical Interview for DSM-IV Axis II Personality Disorders – BPD Module (First et al., 1997)
- The Beck Scale for Suicide Ideation (BSS) (Beck, Steer, & Ranieri, 1988)
- The Suicidal Behaviour Questionnaire (Linehan, 1996)
 - Escape: Thinking about the way your life is today, that is, given the good things in your life now and any problems you might be having, IF you knew the QUALITY of your life would never change, that is, it would never get better or worse, do you feel that suicide would be a good way out?
 - Problem-solve: Would any of your problems be solved if you committed suicide?



PROCEDURES

- Longitudinal study with three assessments, each 6-months apart
- Same questionnaires/interviews for all assessments (1.5-2 hours in length)
- Compensation: \$50 for assessments 1 & 2, \$60 for assessment 3
- Only used data from assessments 1 & 2 for this study
- Retention: 91%
- 7.94 months between assessments ($SD = 2.64$ months)



ANALYSES

- Hierarchical linear regression:
 - Predictor: Suicidal ideation (baseline or ~6-months later)
 - Step 1: Age and gender (covariates). Baseline suicidal ideation (longitudinal analyses)
 - Step 2: Emotion dysregulation and beliefs in the function of suicide
 - Step 3: Emotion dysregulation X beliefs in the function of suicide



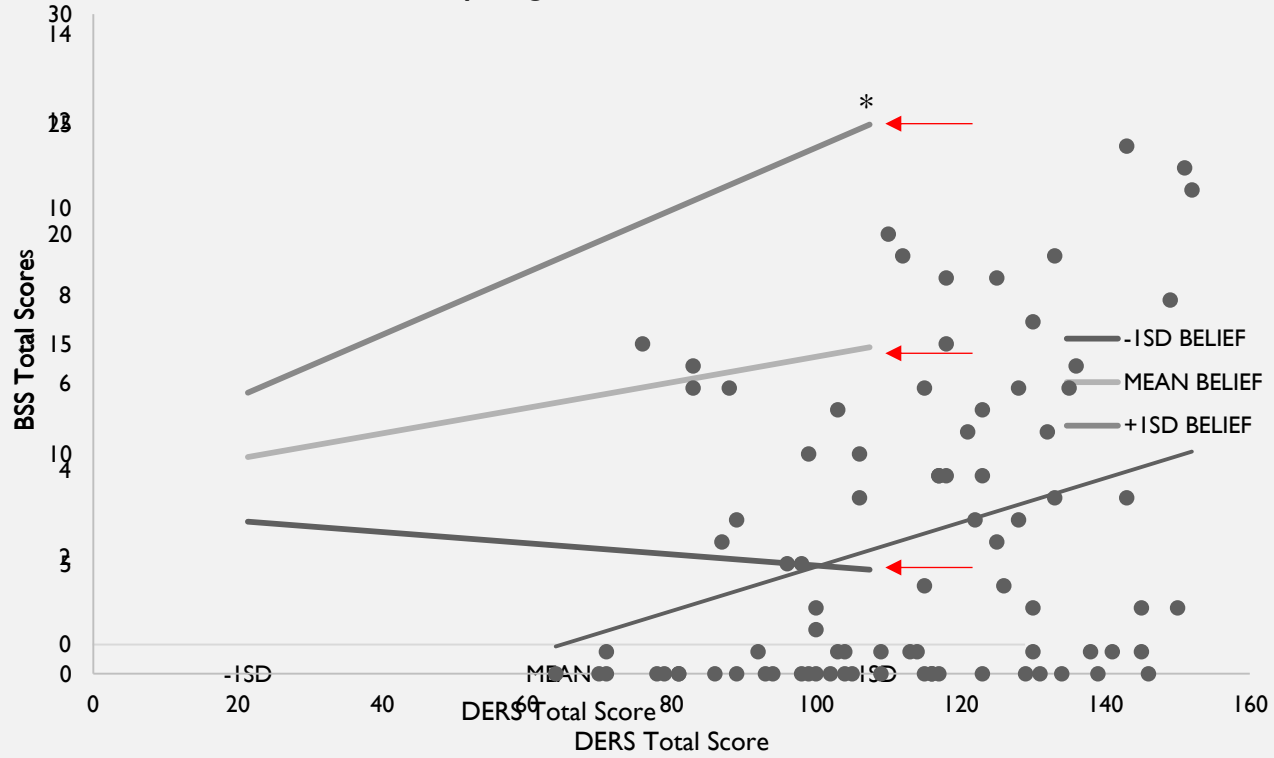
RESULTS

- Engaging in Goal Directed Behaviour and Lack of Emotional Awareness did not correlate with suicidal ideation at baseline or follow-up
- Suicide as a problem-solving strategy did not moderate the relationships between total emotion dysregulation and suicidal ideation (at baseline or 6-months later)



RESULTS: CROSS-SECTIONAL MODERATION

Belief in Suicide as an Escape Moderates the Relationship Between Emotion Dysregulation and Suicidal Ideation At Baseline
 Baseline Emotion Dysregulation and Baseline Suicidal Ideation

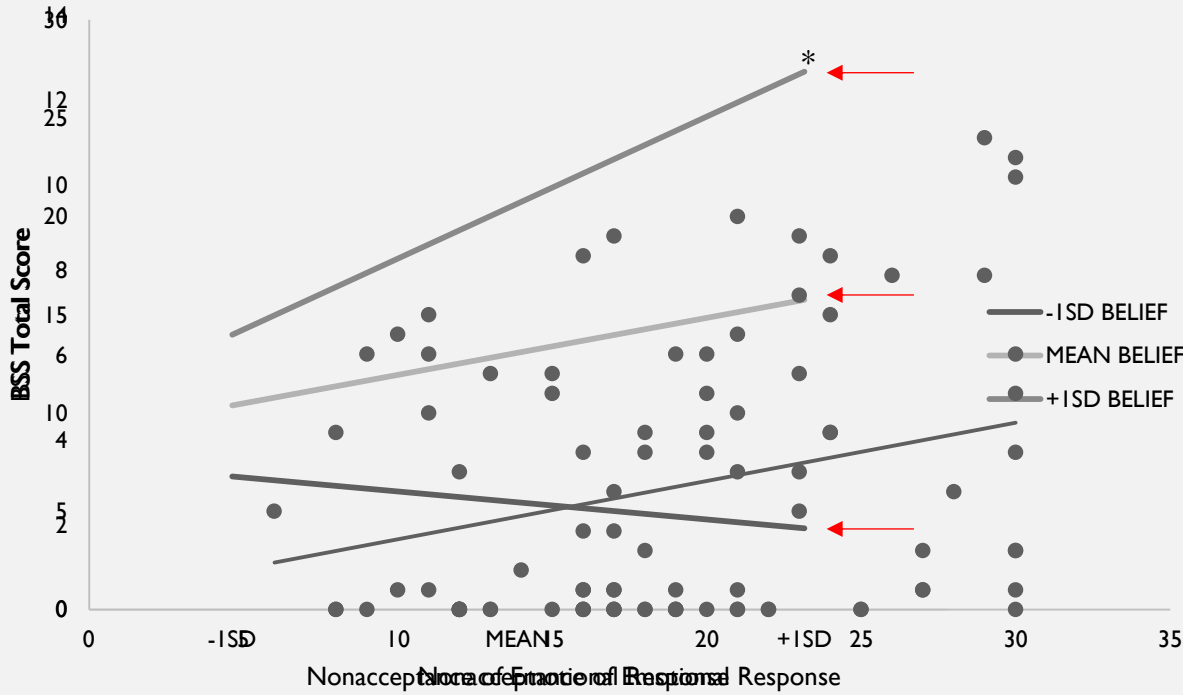


- Relationship between total score emotion dysregulation and suicidal ideation:
 - Non-sig: Belief in suicide as an escape below 1 SD above the mean score
 - Sig: Belief in suicide as an escape was 1 SD above the mean score

$\Delta R^2 = 0.05, F(1, 71) = 6.43, b = .06, SE = .02, t = 2.54, p = .013, 95\%C.I. [.013, .108].$

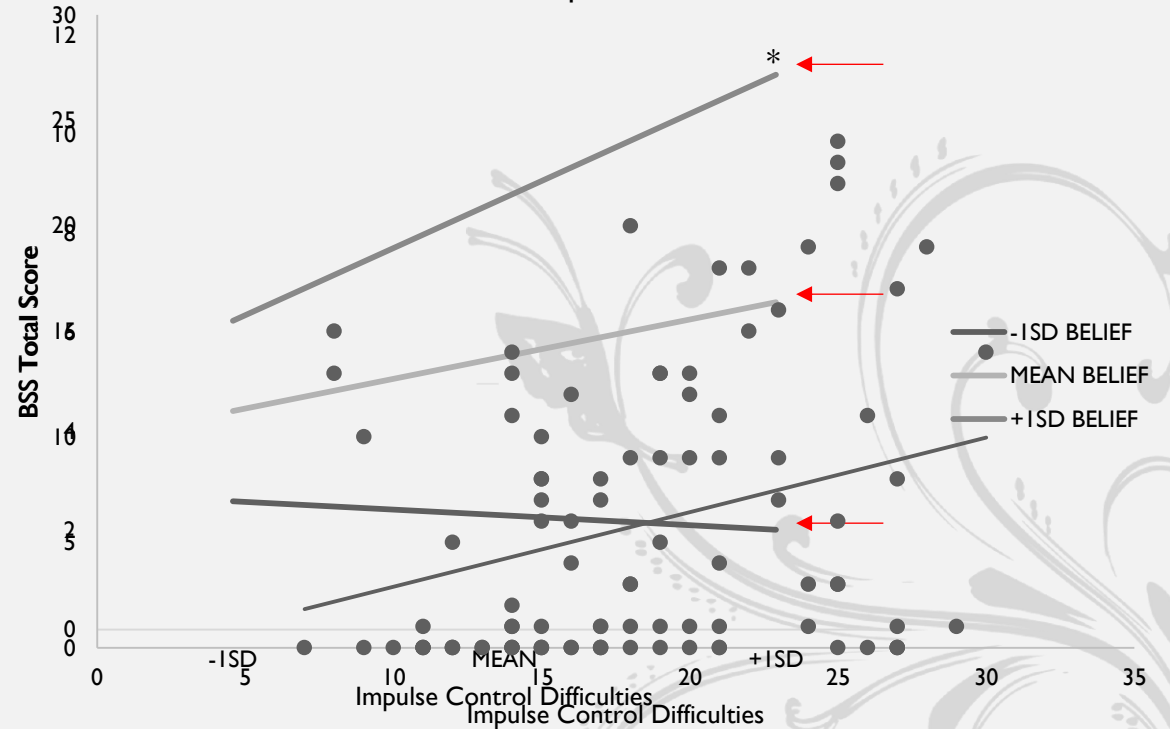
RESULTS: CROSS-SECTIONAL MODERATION

Belief in Suicide as an Escape Moderates the Relationship Between Baseline Nonacceptance of Emotional Response and Baseline Suicidal Ideation



$\Delta R^2 = 0.06, F(1, 78) = 7.33, b = .22, SE = .08, t = 2.71, p = .008, 95\%C.I. [.059, .386].$

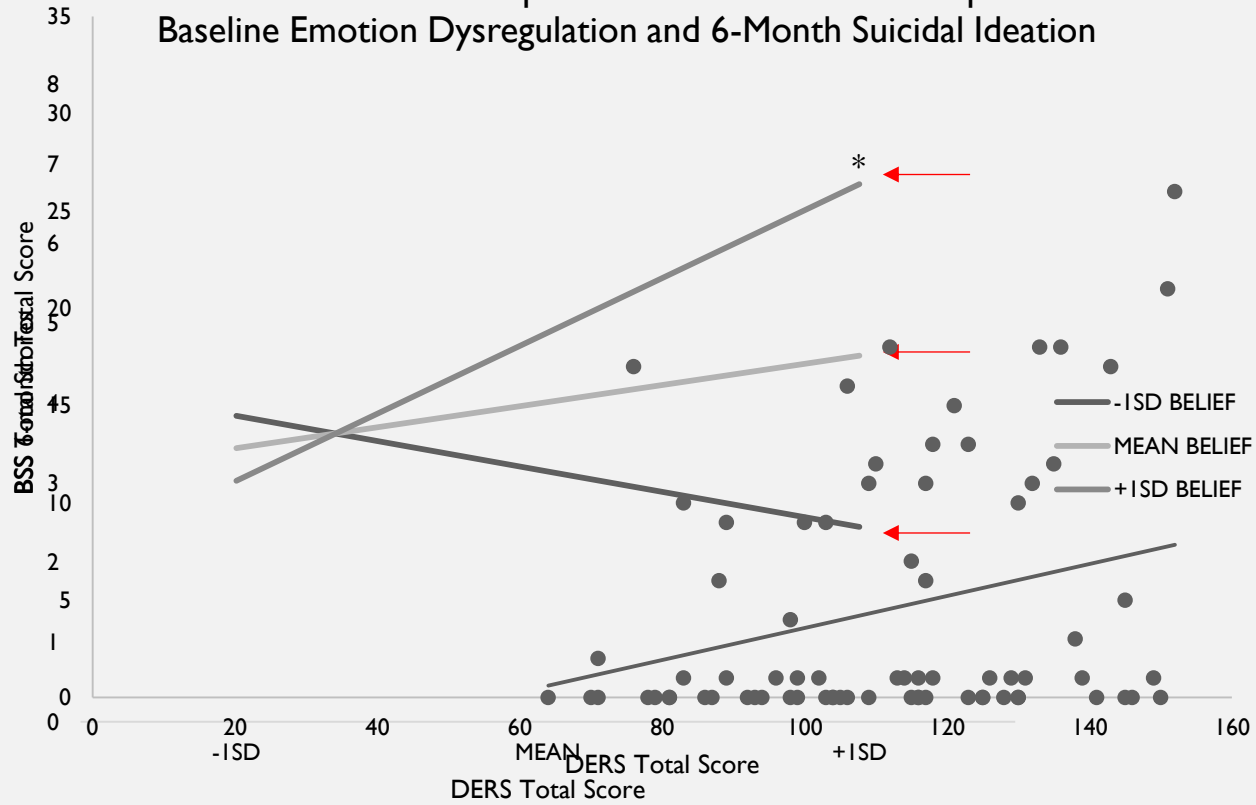
Belief in Suicide as an Escape Moderates the Relationship Between Baseline Impulse Control Difficulties and Baseline Suicidal Ideation



$\Delta R^2 = 0.04, F(1, 81) = 4.93, b = .19, SE = .08, t = 2.22, p = .029, 95\%C.I. [.020, .356].$

RESULTS: LONGITUDINAL MODERATION

Emotion Dysregulation and 6-month Suicidal Ideation
 Belief in Suicide as an Escape Moderates the Relationship Between
 Baseline Emotion Dysregulation and 6-Month Suicidal Ideation

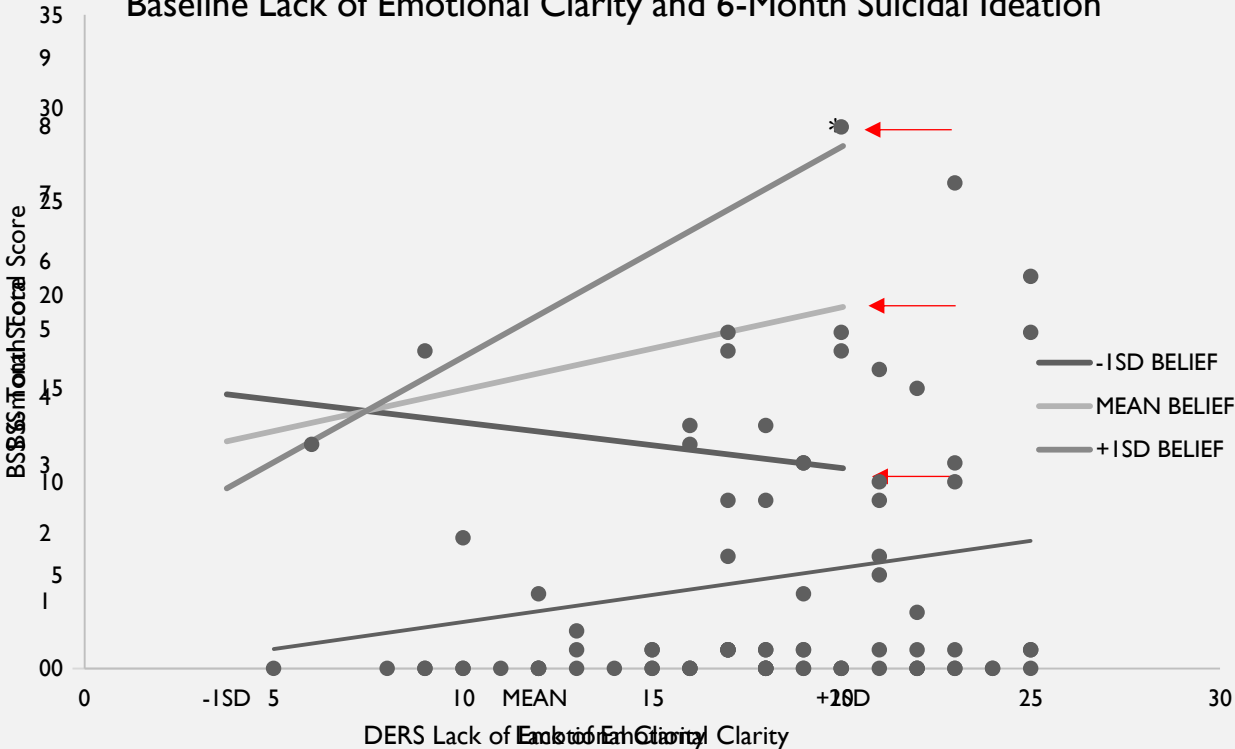


- Relationship between total score emotion dysregulation and ~6-month suicidal ideation:
 - Non-sig: Belief in suicide as an escape below 1 SD above the mean score
 - Sig: Belief in suicide as an escape was 1 SD above the mean score

$\Delta R^2 = 0.03, F(1, 62) = 4.29, b = .04, SE = .02, t = 2.07, p = .043, 95\%C.I. [.001, .082].$

RESULTS: LONGITUDINAL MODERATION

Belief in Suicide as an Escape Moderates the Relationship Between Baseline Lack of Emotional Clarity and 6-Month Suicidal Ideation



- Relationship between lack of emotional clarity and ~6-month suicidal ideation:
 - Non-sig: Belief in suicide as an escape below 1 SD above the mean score
 - Sig: Belief in suicide as an escape was 1 SD above the mean score

$\Delta R^2 = 0.04, F(1, 73) = 6.56, b = .29, SE = .11, t = 2.56, p = .013, 95\%C.I. [.064, .510].$

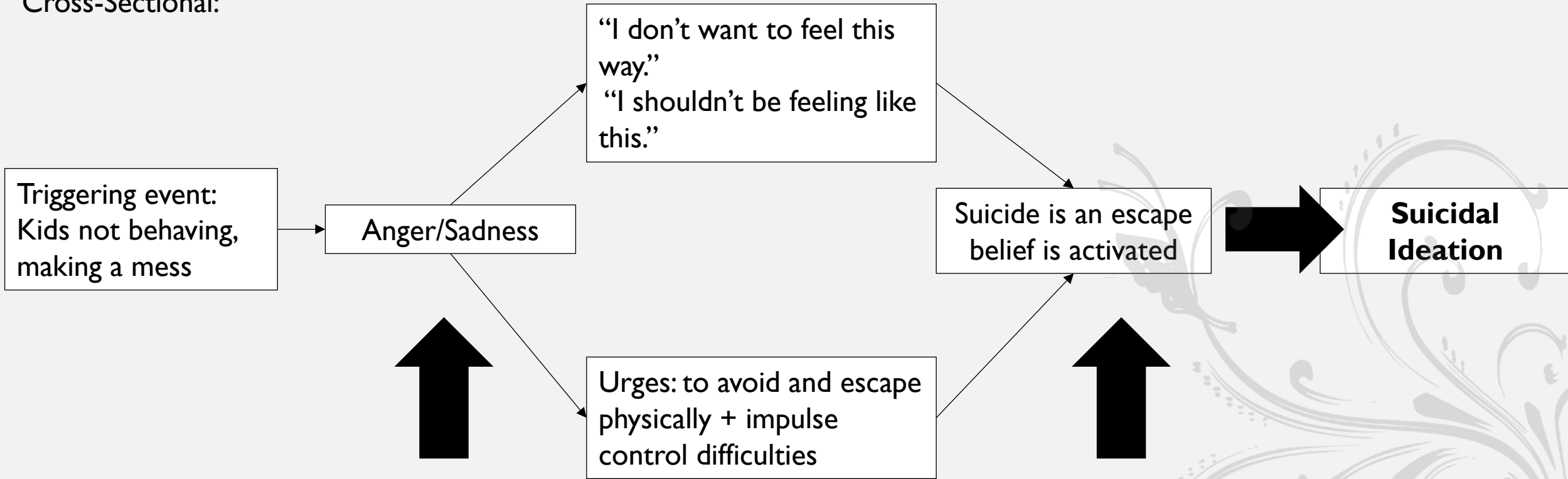
DISCUSSION

- Belief in suicide as an escape moderated the relationship between emotion dysregulation and suicidal ideation
- Cross-sectional relationships:
 - Total emotion dysregulation
 - Nonacceptance of emotional response
 - Impulse control difficulties
- Longitudinal relationships:
 - Total emotion dysregulation
 - Lack of emotional clarity



CASE STUDY

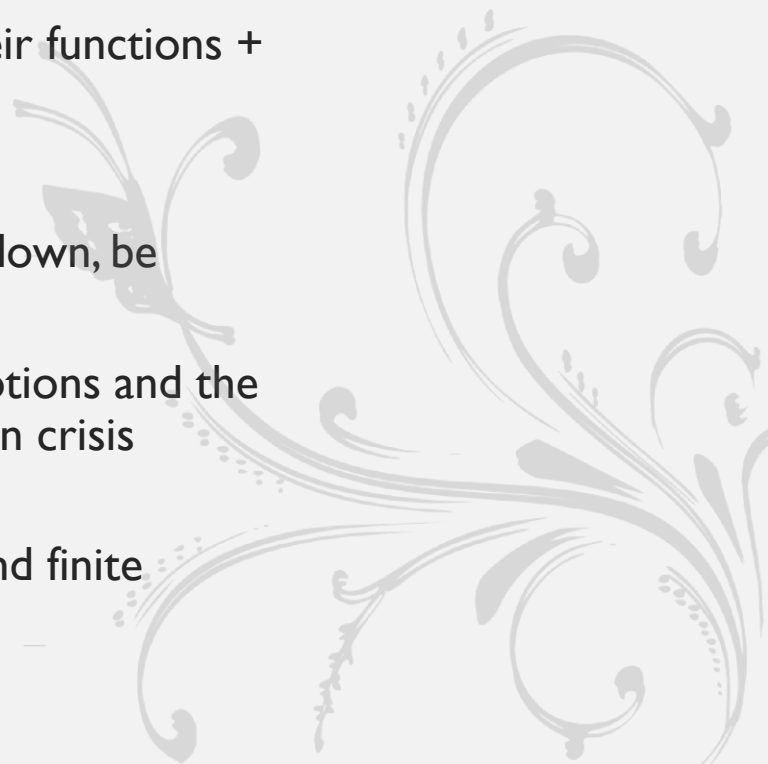
Cross-Sectional:



Longitudinal:

General Lack of Emotional Clarity + Belief in Suicide as an Escape

CASE STUDY: POTENTIAL TREATMENT

- **Triggering event** – problem-solve effectively and seek support from those around her
 - **Lack of emotional clarity** – understanding emotions and their functions + their usefulness
 - **Nonacceptance of emotional response** – self-validation
 - **Impulse control difficulties** – new behavioral skills to slow down, be mindful, act effectively
 - **Suicide as an escape** – overall relearning the function of emotions and the desire vs. the need to escape + learning other skills to distract in crisis situations
 - **Overall cognitive restructuring** – emotions are tolerable and finite
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FUTURE DIRECTIONS AND IMPLICATIONS

- Future Directions
 - Belief in suicide as a problem solving strategy
 - Replication of findings
 - Transdiagnostic investigation
- Implications
 - Assessment
 - Intervention





THANK YOU!

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LIMITATIONS

- Single item assessments of beliefs in suicide
- Community (not clinical) sample

	Study Sample	Clinical Comparison
Emotion Dysregulation	M = 112.16 (SD = 22.00)	M = 109.73 (SD = 24.95)
Suicidal Ideation (t1)	M = 7.77 (SD = 7.92)	M = 8.42 (SD = 10.26)
Suicidal Ideation (t2)	M = 6.12 (SD = 8.32)	M = 8.42 (SD = 10.26)

Osborne et al., 2017; Beck et al., 1988

- Multiple comparisons

MEANS, STANDARD DEVIATIONS, INTERCORRELATIONS

Measure	M (SD)	1	2	3	4	5	6	7	8	9	10
1. BSS Baseline	7.77 (7.92)	-									
2. DERS	112.16 (22.00)	.32*	-								
3. DERS1	18.83 (6.29)	.25*	.75*	-							
4. DESR2	17.68 (4.59)	.18	.73*	.41*	-						
5. DERS3	18.24 (5.40)	.30*	.84*	.59*	.70*	-					
6. DERS4	16.12 (4.77)	.18	.25*	-.08	-.10	-.02	-				
7. DERS5	26.37 (6.44)	.26*	.85*	.69*	.63*	.70*	-.08	-			
8. DERS6	14.56 (4.03)	.24*	.61*	.23*	.32*	.35*	.46*	.34*	-		
9. Escape	1.54 (1.32)	.57*	.31*	.16	.10	.26*	.22*	.23*	.27*	-	
10. Problem Solve	1.72 (1.43)	.71*	.31*	.33*	.13	.27*	.11	.20	.26*	.62*	-
11. BSS Follow-up	6.12 (8.32)	.73*	.27*	.25*	.20	.25*	.00	.23*	.21*	.48*	.71*

Note. * $p < .05$. Numbered measures indicate subscales. BSS = Beck Scale for Suicide Ideation. DERS = Difficulties in Emotion Regulation. DERS1 = Nonacceptance of Emotional Responses. DERS2 = Engaging in Goal-Directed Behaviour. DERS3 = Impulse Control Difficulties. DERS4 = Lack of Emotional Awareness. DERS5 = Limited Access to Emotion Regulation Strategies. DERS6 = Lack of Emotional Clarity. Escape = Suicidal Behaviour Questionnaire, “Way out” Item. Problem Solve = Suicidal Behaviour Questionnaire, “Problem Solve” Item.

DESCRIPTIVES: BELIEFS IN SUICIDE

	High Escape/Low Problem Solve	High Problem Solve/Low Escape	High on Both Items	Low on Both Items
Number of participants	11	11	13	57

Note. Participants that responded 3 or greater on the Likert scale were categorized as endorsing that item “highly,” whereas participants that responded 2 or lower on the Likert scale were categorized as endorsing that item at a “low” level.

MODERATION EFFECTS: BELIEF IN SUICIDE AS AN ESCAPE

Moderation effect	b	SE	t	p	95% CI
Cross-Sectional Findings					
DERS x Escape	0.06	0.02	2.54	0.013	0.013, 0.108
DERS1 x Escape	0.22	0.08	2.71	0.008	0.059, 0.386
DERS3 x Escape	0.19	0.08	2.22	0.029	0.020, 0.356
DERS5 x Escape	0.16	0.08	1.99	0.050	0.000, 0.324
DERS6 x Escape	0.19	0.12	1.53	0.131	-0.057, 0.432
Longitudinal Findings					
DERS x Escape	0.04	0.02	2.07	0.043	0.001, 0.082
DERS1 x Escape	0.09	0.08	1.09	0.280	-0.075, 0.254
DERS3 x Escape	0.05	0.08	0.59	0.557	-0.109, 0.200
DERS5 x Escape	0.08	0.08	1.09	0.279	-0.070, 0.240
DERS6 x Escape	0.29	0.11	2.56	0.013	0.064, 0.510

Note. Numbered measures indicate subscales. DERS = Difficulties in Emotion Regulation. DERS1 = Nonacceptance of Emotional Responses. DERS3 = Impulse Control Difficulties. DERS5 = Limited Access to Emotion Regulation Strategies. DERS6 = Lack of Emotional Clarity. Escape = Suicidal Behaviour Questionnaire, “Way out” Item. All longitudinal analyses included baseline suicidal ideation as a covariate.