On the Latent Organisational Structure of the Popular Emotion Regulation Measures and its Value in Classifyin Eating Disorders and Predicting Symptom Severity

RESEARCH RATIONALE:

- **Research Consensus**: Anorexia (AN), Bulimia (BN) and Binge Eating Disorder (BED) showed elevated ER difficulties in all four ER dimensions
- **Existing Findings & Research Gaps**:
  - *How each ED subtype differ in their ER functioning profiles*
    - AN
      - Higher total TAS score than BN
      - Higher ERQ Suppression score than BN and BED
    - No sig differences in DERS scores among subtypes
      - Except: More frequent use of adaptive ER strategies among BED
    - Research Limitations:
      - Different measures that are believed to assess the same ER dimension yielded different results
      - Fail to control for the confounding variable: depression (Dep) and anxiety(Anx) findings
  - *How symptom severity of each subtype might be differentially influenced by each ER variable*
    - AN: DERS Awareness subscale subsumed all the variances explained by the remaining subscales
    - BN: UPPS as a sig predictor (depression & anxiety controlled)
    - BED: DERS Global a sig predictor (gender &negative affect controlled) as

Table 2.3
Component Names and its Constituents

Emotion Dysregulation	Inattention to Emotional Experience	Non-use of adaptive ER strategies	Implicit Belief about Emotion Malleability
DERS Clarity	DERS Awareness	ERQ Attentional Distraction	Belief about Emotion Controllability Scale
DERS Non-acceptance	ERQ Suppression	ERQ Cognitive Reappraisal	
DERS Goal	ERQ Avoidance		
DERS Impulse Control			
DERS Strategies			
UPPS Impulsivity			
TAS DIF			
TAS DDF			

Table 1.0
Organisational Structure of ER Measures as Proposed by Lavender et al.(2015)

Emotional Awareness and Understanding	Ability to Maintain Goal-directed Behaviours When Distressed	Lack of Emotional Acceptance	Access to effective ER strategies
DERS Non-acceptance	DERS Goal	Belief about Emotion Controllability Scale	DERS Strategies
DERS Clarity	DERS Impulse Control	ERQ Suppression	ERQ Cognitive Reappraisal
DERS Awareness	UPPS Impulsivity		
TAS			

ED as Group Variables (Categorical)

Independent Variables	Dependent Variables Predicted (Full model excluding Dep& Anx)	Sig Association after Dep & Anx are Controlled
PC1_Emotion Dysregulation	Presence of AN, BN,BED, ED	ED
PC2_Inattention to emotional experience	None	None
PC3_Non-use of adaptive ER strategies	None	None
PC4_Implicit belief about emotion malleability	Presence of BN and ED	BN and ED

Nagelkerke R^2 (p<.05)_Full Model [AN:17.6% BN: 15% BED: 5.4% ED: 21.4%]

Contribution to model improvement measured by -2*log-likelihood:
AN: PC1 [26.855] ;PC4 [11.370] | **BN**: PC1 [23.415] | **BED**: PC1 [6.449]; PC4 [3.868] | **ED**: PC1 [53.445]; PC4 [10.277]

ED as Symptom Severity (Continuous)

Emotion Dysregulation	Symptom severity of BN and Com	Symptom severity of BN and Com
Inattention to emotional experience	None	None
Non-use of adaptive ER strategies	Symptom severity of Com	Symptom severity of Com
Implicit belief about emotion malleability	Symptom severity of Com	Symptom severity of Com

R^2 (p<.05)_Full Model [AN:38.6% ED: 16.4% Com 32.3%]
Additional Variance Explained (Δ R^2):
AN: PC1 [13.1%] | **BN**: PC1 [13.8%] | **ED**: PC1 [9.7%]| **Com** : PC1 [26.7%]; PC3 [0.7%]; PC4 [0.9%]

PARTICIPANTS:

- Total response: 850
- Complete cases: 650
- Age:16-73 (mean= 23.22, std= 8.58)
- Female : Male: Other: Prefer Not To Say= 449:144:5:52
- AN:BN:BED:ED=56:33:24:113

DESIGN:

- Quasi-experimental
- Correlational & Cross-sectional
- Independent variables:
  - Components extracted from a battery of emotional functioning measures
- Dependent Variables:
  - Presence of ED (Categorical)
  - ED Symptom severity (Continuous)

RESEARCH AIMS:

1. Replicate the **organisational structure of Emotional functioning measures** proposed by Lavender et al. *(Principal Component Analysis)*
2. How **ER components** uniquely as well as collectively contribute to the **presence of AN, BN, BED** and ED. *(Nested Logistic Regression)*
3. Whether this model equally explains the **symptom severity** among the **community sample** and patients with **AN, BN, BED and ED**. *(Hierarchical multiple regression)*

MEASURES:

- Emotional Functioning Measures (as shown in the table)
- Clinical Measure: DASS(21); EDE-Q(36)

DISCUSSION:

- Variances measured by **DERS,ERQ, TAS, UPPS-Impulsivity, and Belief about Emotion Controllability** cannot be sufficiently captured by the multidimensional framework alone as suggested by Lavender et al (2015)
- Replicated high **intercorrelations** among **DERS Goal, Impulse, Strategies, Clarity,** Non-acceptance subscales and its independence from the **Awareness subscale**
- Replicated the low psychometric reliability of **TAS Externally Oriented Thinking** subscale

1. Consistent with the **transdiagnostic perspective**: ER variables measured cannot sufficiently differentiate among ED subtypes (One Exception: **belief about emotion controllability** predicted **BN diagnosis**, independent of depression)
2. Consistent to the weak association reported in the meta-analysis by Aldo et al. (2010): **Strategy-based** ER variables appear to be relatively irrelevant in the predicting the **presence** and the **symptom severity of ED**
3. Consistent to the more adaptive ER pattern found by Svaldi et al. (2012), **symptom severity of BED** was not predicted by **any of the ER** variables measured
4. First evidence for the robust relationship between **individual's belief about emotion controllability**, and the **diagnosis likelihood** of **ED** and **BN**
   - More effectively classified **ED** and **BN** than **emotion dysregulation** and **depression**
   - Potential explanation for such relationships:
     - Link between the entity theorists and their tendency to encode social and personal information (including weight and shape) in a highly evaluative manner
5. **Emotion dysregulation** fail to classify AN,BN and BED when adjusted for **Depression** (Consistent to Eizaguirre et al. (2004)) , NOT **Anxiety** (Inconsistent)

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