Using EMA to examine affect and impact of self-regulation choice

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Symposium Title: Ecological momentary assessments (EMA) to measure ACT process and behavioral health across populations

Chair: Javier Rizo
Discussant: Michael Levin

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Overview

1. Affect and affect regulation
 measurement

2. From a CBS perspective

3. The Moment-to-Moment Study

4. User experience UX

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Measurement of Affect and Affect Regulation

Systematic biases related to mood state, length of time, severity and variety of affect

We cannot ignore the impact of this on assessment

Affect and affect regulation from a behavioral perspective

Functional relationships unclear

Affect as internal context

Regulation of affect further complicates the picture

Are these steady or differentially related to affect ideographically?

Moment-to-Moment: Background

Clinical anxiety and depression are the common colds of the psychological world

Anxious with depression 90%

Depressed with anxiety 85%

Comorbid anxiety and depression: poor prognosis, protracted course, treatment resistant (Gorman, 1998)

Temporal relationship such that anxious later become depressed

Moment-to-Moment: Background

Nomothetic temporal relationship between anxiety and depression?

Different functional relationships lead to anxiety

(Dymond & Roche, 2009)

Different functional relationships lead to depression

(Ferster, 1973; Kanter, Busch, Weeks, & Landes, 2008)

Moment-to-Moment: Participants

127 Undergraduates

Age 23.2 (*SD* 7.6)

Female: 73%

White: 75%

Previous treatment for:

Anxiety 15%

Depression 13%

Design

Pre

- Affect Stable
- Affect State
- Affect Regulation

EMA 21 Day

- FEEL(Sad, Anxious)
- CONTROL (Sad, Anxious)

Post

- Affect Stable
- Affect State
- Affect Regulation

*User experience survey following

*Assessments completed w/in 3 hours raffle entry for Best Buy $100, $50, $25

Pre-Post

Affect

State Trait Anxiety Inventory (STAI)

State Trait-Depressive Adjective Checklists (ST-DACL)

Anxiety Sensitivity Inventory (ASI)

Affect Regulation

Acceptance and Action Questionnaire (AAQ-II)

Anxiety Control Questionnaire (ACQ)

Emotional Regulation Questionnaire (ERQ)

User Experience UX

The Moment-to-Moment User Friendliness Survey

Ecological Momentary Assessment

Awareness of affect, current affect, and attempt to control

Not at All   to   Extremely

1   2   3   4   5   6   7

"Please indicate how much you currently feel:"

Sad or Down
Nervous or Anxious

"Please indicate how much you are currently trying to control, change, or avoid your experience of the following emotions:"

Sad or Down
Nervous or Anxious

Results

Normative relations between EMA and static measures
Lagged regressions

Attempts to control anxiety led to:

.26 increase in anxiety in next lag**, controlling for static EA and other regulation did not add

Attempts to control sadness led to:

.22 increase in sadness in next lag**, controlling for EA added but not other regulation

Each 4 hour time period of assessment is a lag

Results

Attempts to control anxiety led to a .11 unit increase in dysphoria in the next lag**, controlling for static measurements of affect regulation added little

Usability UX
    Overall positive response
    EMAs took average of minute

Discussion

EMA is a sensitive and useful assessment method for affect and affect regulation

Understanding in-life affect and affect regulation are important to treatment

In the moment regulation of anxiety affects later experience of dysphoria

EMA user friendly