What does an apple with difficulties in emotion regulation do to the barrel: An interpersonal synchrony perspective on group composition, interaction, and outcomes

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The Brief

Main Aim

- To explore the effect a group's composition in emotion regulation (ER), would have on its interaction and outcomes.

We Hope To Learn

- Does ER matter to group functioning?
- Is one less-regulated member "enough" to hinder the group?

Novelty & Contribution

- Predetermined group compositions, instead of post-hoc analyses
- Mixed method, high-resolution design

Background

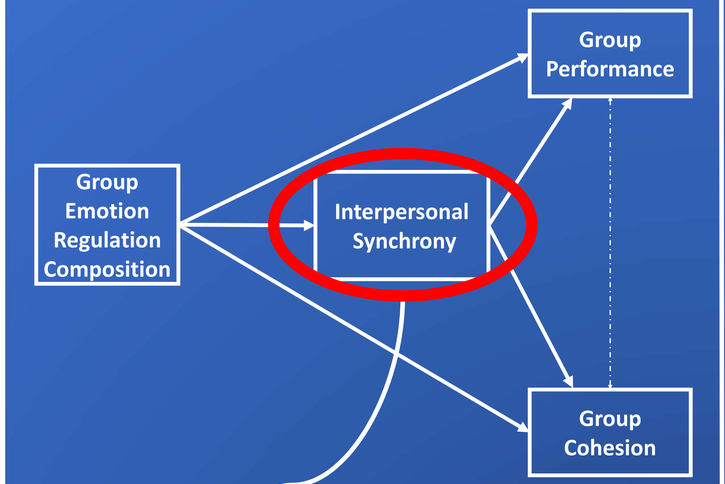
Despite many studies, findings are inconsistent, and gaps remain as for **what mixture of individuals** may emerge into a **high-performing, cohesive team.**

This is partially attributed to challenges in depicting group interpersonal processes when most research relies on self-report.

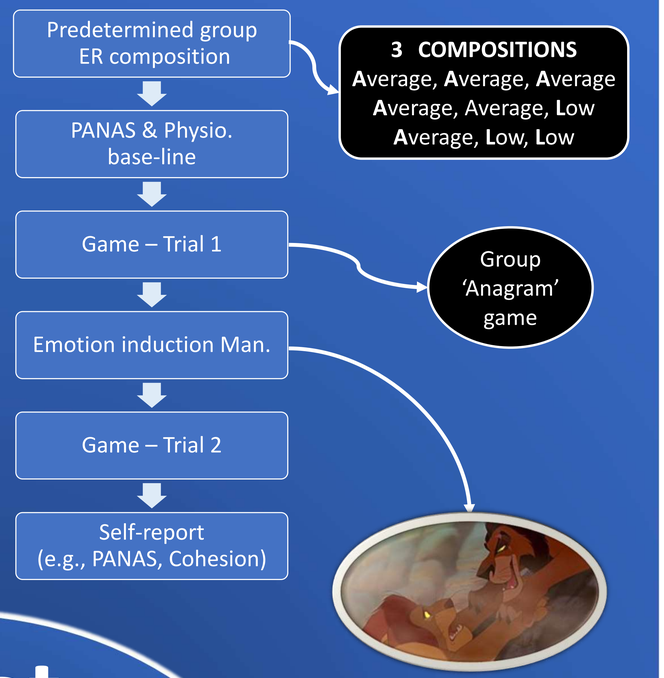
This led to calls for holistic, high-resolution, mixed-designs able to portray multiple levels more accurately.

Preregistration

The Theory



The Design



Key Measures

Behavior (movement, facial exp., etc.)

ANS activity: IBI, EDA, RSA

Neurological Activity: Alpha & Gamma

What would YOU do?

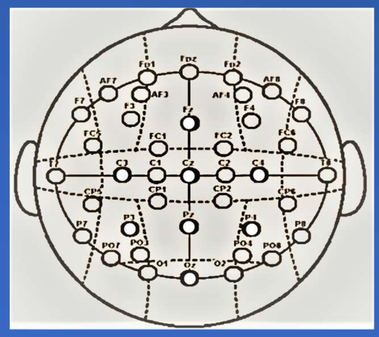
With your EEG electrodes

The Hardware

Enobio 8

- **8 electrodes**
- Wireless transmission
- 500 SPS
- 24 bit
- Bandwidth: 0-125 Hz

Possible locations



Tech. Sheet

The Setup

- 3 chairs; Round table
- Webcam facing each participants
- 3 wall mounted cameras and mic.
- Connected to 7 electrodes on torso and 2 on palm for physiological monitoring

Rational

Adaptive **emotion regulation (ER)** capabilities are crucial for both objective and social functioning.

Theoretically, In groups - people low in ER express more negative mood or attitudes, hindering group cooperation, motivation, and creativity, damaging group performance, well-being, and viability.

Neurophysiological processes are central in all that relates to experiencing and regulating emotions.

The field of **Interpersonal synchrony (IS)** is mixed-method, multi-level oriented, well-suited to studying the link between member ER, group interaction and group outcomes.

IS is considered an evolutionary-based, social alignment mechanism, representing being connected, and sharing emotional and mental states.

Though scarce, research suggest higher IS predict higher **group performance and cohesion**.

Design: Further Detail

- *N* = 159 **triads**; 53 per group 'type'
- Adults, Hebrew native speakers, non-dyslexic
- ER classification – according to the Difficulties in Emotion Regulation Scale:
  - 65-85 = Average
  - 95+ = Low; With difficulties
- Screening is done months/ weeks prior
- Game trails are designed for high-interdependence
- Participants' none-dominant is mostly at rest
- Performance = Game score

Preliminary Results

Variable/ Compos.	AAA	AAL	ALL
N	0	6	3
Perf. T1	-	10.83 (4.95)	11.33 (6.51)
Perf. T2		16.17 (5.04)	26 (21.70)
Cohesion	-	4.18 (.72)	4.16 (.77)
ΔPos. Affect	-	.03 (.35)	.11 (.60)
ΔNeg. Affect	-	.18 (.35)	.07 (.62)

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