The Criticality of Matched-Expectancy Placebos in Positive Interventions

Ekaterina Pogrebtsova
Callie Hill
Dr. M. G. Gonzalez-Morales
University of Guelph
What is a Placebo?

- Beneficial effect of an inert substance (Sliwinski & Elkins, 2013):
  - Meta-analyses including unpublished trials show placebo pills are as effective as antidepressants – Unless in the most severe depression score range (Kirsch et al., 2008; Kirsch & Sapirstein, 1998)
Reconceptualization of “Placebo”

- *Question* classic view of placebo as *negative, deceptive, “inert”*

- Researchers *claim term “placebo” be removed* from clinical contexts (Blease, 2011; Louhiala & Puustinen, 2008)

- Replaced with *“Positive Care Effect”* for patient transparency (Blease, 2011)
Reconceptualization of “Placebo”

- If treatments are improved when combined with placebo, then it is in the clients’ best interest to bolster placebo effects (Sliwinski & Elkins, 2013)
Placebo versus Positive Psychology Interventions?

Placebos help emotion regulation!

NOT Better than placebo!

BETTER than placebo!
Does “positive care effect” matter in Positive Interventions?

Clinical Psychology Meta-analyses suggest...

- 15-30%: Specific Intervention Techniques
- 70-85%: Extra-Therapeutic Factors

Current Intervention: Emotion Regulation “Toolkit”

- Emotion regulation utilized widely in positive interventions (Quoidbach, Mikolajczk & Gross, 2015)
  - **3 Good Things**: gratitude, love, happiness, joy
  - **Mindfulness/meditations**: acceptance of emotions
  - **Positive Meditations “loving kindness”**: gratitude, love
  - **Gratitude journaling**: gratitude, love, happiness
  - **“Best possible self”**: hope, excitement, inspiration
How Emotion Regulation Interventions Work

- Process Model of Emotion Regulation (Gross, 2015)

[Diagram showing the Process Model of Emotion Regulation:
Antecedent-focused:
- Situation Selection/Modification
- Attention Deployment
- Cognitive Change

Response-focused:
- Mindfulness, savouring, cognitive interventions
- Response Modulation]
Current Study

3-arm design based on recommendations by Temple & Ellenberg (2000)
Priming

“The distant memory reflection is a research-based, helpful practice to understand yourself better and really learn to reflect on your life and who you are as a person. Next time you think about the past, look deeper and examine the details. Why should you reflect on distant memories and how does it promote well-being? Self-reflection can allow us to understand ourselves, our lives, and the people in it better to reduce our stress in the present.”
Current Study

Canadian Undergraduate Students
N=130

Control
Assigned =42
Analyzed =38

Placebo
Assigned =45
Analyzed =38

Intervention
Assigned =43
Analyzed =36

Pre-Intervention

Daily Intervention

Post-Intervention

1-Month Follow-Up

TOTAL = 119 participants, 1133 daily data points
Results

- Manipulation Check ✔

- E.g., “How confident are you that this Toolkit will be successful in improving your mental wellbeing?” (Treatment Credibility Scale; Borkovek & Nau, 1972)

- Non-significant ANOVA differences across all conditions in expectancy beliefs, $p = .59$
Negative Affect Change Over 2-Week Intervention

![Graph showing negative affect change over 2-week intervention](image)
Positive Affect Change Over 2-Week Intervention

<table>
<thead>
<tr>
<th>Day</th>
<th>Control</th>
<th>Placebo</th>
<th>Mental Well-being Toolkit</th>
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<tbody>
<tr>
<td>1</td>
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</table>
Stress Change Over 2-Week Intervention

![Graph showing stress change over 2-week intervention](image)

- **Control**
- **Placebo**
- **Mental Well-being Toolkit**

Day 1 to Day 11 stress levels are depicted with a downward trend, indicating a decrease in stress over the intervention period.
Mental Wellbeing Change
Baseline – 1-Month Follow-Up

Mental Wellbeing

Time

Control
Placebo
Mental Well-being Toolkit
Emotion Regulation Change Over 2-Week Intervention

![Graph showing emotion regulation change over 2-week intervention]

- Control
- Placebo
- Mental Well-being Toolkit

Day:
1 2 3 4 5 6 7 8 9 10 11

Emotion Regulation:
3.5 3.7 3.9 4.1 4.3 4.5 4.7
## Multilevel Growth Results for Emotion Regulation

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<th>Model 2</th>
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Implications

- Placebo is Powerful (*not “inert” but ACTIVE based on how it is used*)

- Reconceptualization of “Placebos” in healthcare, schools, workplaces... all services

- “Positive Care Effect” communicated for full client and research transparency

- **Focus on POSITIVE intervention EXPERIENCE more than specific strategies**
Thank you!

Critically examine and harness the power of placebos

Questions? epogrebt@uoguelph.ca
References


