



1



2



3

Holmes and Rahe Stress Scale
do stressful events carry causality in illness?

150 – 300 points ~50% chance of major health breakdown next 2 years
 >300 points raises the odds to 80%

Death of spouse	100	Major personal illness	53
Divorce	73	Marriage	50
Marital separation	65	Being fired from work	47
Detention in jail	65	Marital reconciliation	45
Death of close family	63	Retirement from work	45

<https://www.thecalculator.co/health/Holmes-And-Rahe-Stress-Scale-Calculator-983.html>

8



10

American Academy of Facial Esthetics
 DE April 2021

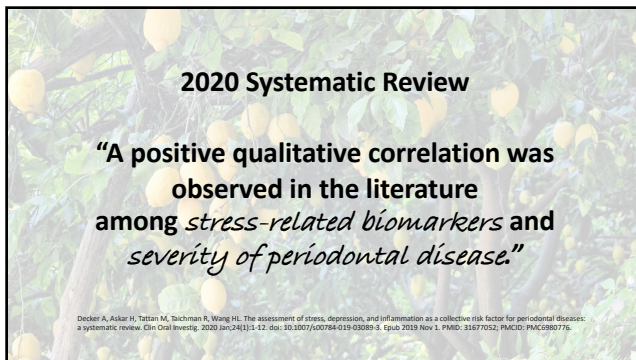
Percent increase of clenching-related patient symptoms

Bruxism	71%
Chipped teeth	62.6%
Cracked teeth	63.7%
Temporomandibular disorders (TMD)	62.3%

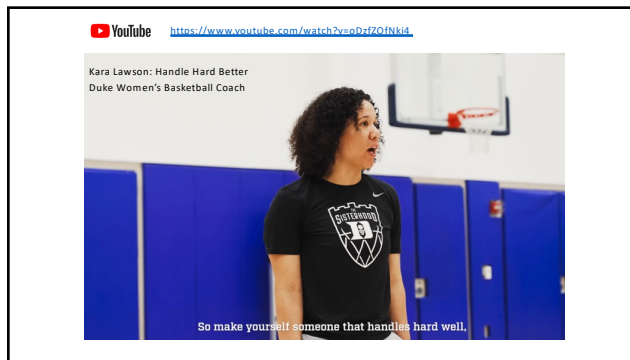
HPI: Compared to before COVID-19, how has the prevalence of the following conditions changed among patients in your dental practice? (Percentages represent an increase.)

Source URL: <https://www.dentaleconomics.com/practice/article/14200843/the-economic-impact-of-covid19-on-solo-dental-practices-vs-dso-practices>

11



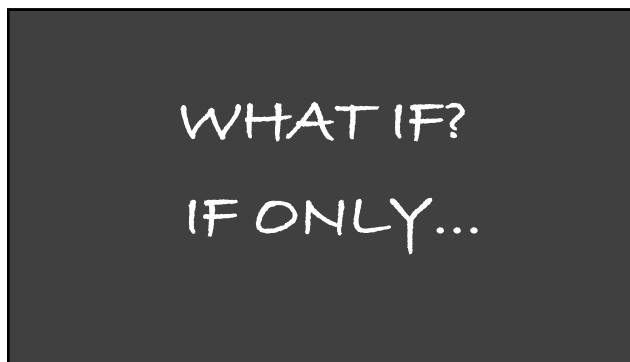
12



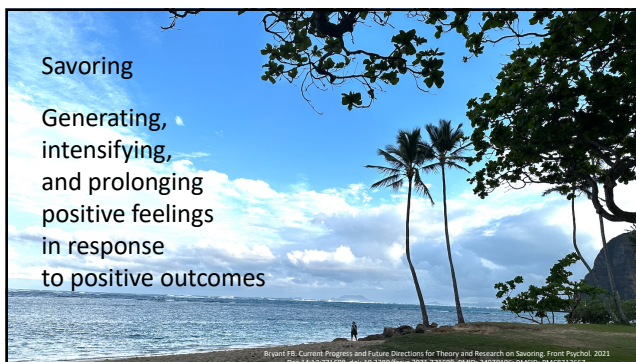
13



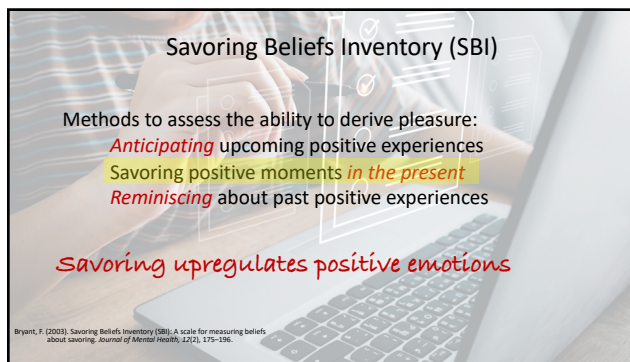
17



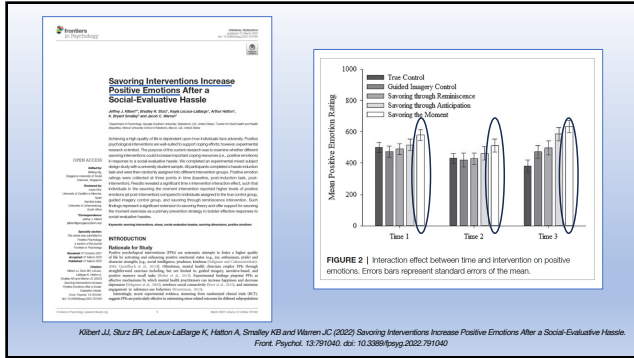
19



21



22



23

Broaden & Build Theory

Savoring & experiencing positive emotions can *build a repertoire* of skills useful when experiencing low positive emotions

Optimism
Resilience
Social connections

Do you suppose the opposite is true???

24

Treating autism (Cai et al., 2018 and anxiety disorders (Eisner et al., 2009); preventing depression (Ford et al., 2016); reducing pain (D' Raven et al., 2015); helping people cope with stress (Samios et al., 2020), cancer (Hou et al., 2017), and acquired physical disability (Dunn and Brody, 2008); repairing the negative effects of state dysphoric rumination (Stone et al., 2020); reducing the link between marijuana use and marijuana problems (Luba et al., 2020) and reducing pain and opioid misuse risk (Garland, 2021). Research with older adults has also investigated the role of savoring in promoting resilience (Smith and Hollinger-Smith, 2015) and positive attitudes toward aging (Bryant et al., 2021), improving physical health (Geiger et al., 2017), buffering the deleterious effects of illness on subjective well-being (Smith and Bryant, 2016). Savoring has also been identified as a resource in bereavement (Permanadeli and Sundararajan, 2021), in lowering suicide risk (Kibbert et al., 2019), and in protecting soldiers from the psychological effects of combat exposure (Sytine et al., 2018). In addition, researchers have used savoring to increase people's consumption of healthy foods (Coary and Poor, 2016), decrease overeating (Black and Areni, 2016), and promote healthy relationships with food (Batat et al., 2019).

Bryant FB. Current Progress and Future Directions for Theory and Research on Savoring. *Front Psychol.* 2021 Dec 14;12:771698. doi: 10.3389/fpsyg.2021.771698. PMID: 34970196; PMCID: PMC8712667.

25

Savoring moderates the association between cancer-specific physical symptoms and depressive symptoms

Savoring was associated with **lower levels of:**
cancer-specific physical symptoms,
anxiety, and depressive symptoms,
and **higher levels of:**
positive affect, and life satisfaction

Hou WK, Lau KM, Ng SM, Cheng AC, Shum TC, Cheung ST, Cheung HY. Savoring moderates the association between cancer-specific physical symptoms and depressive symptoms. *Psychoneurology*. 2017 Feb;26(2):123-128. doi: 10.1093/psn/4114. Epub 2016 Mar 16; PMID: 26995102.

26

Savoring the Moment Outcomes

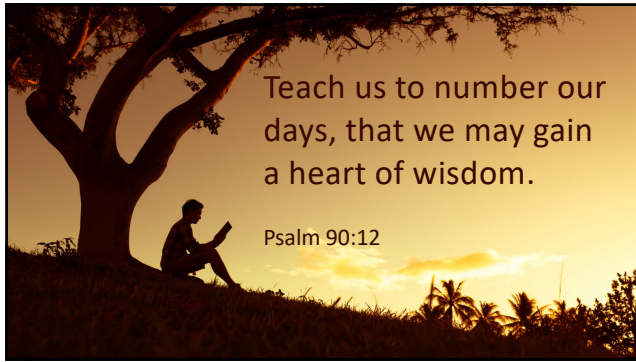
- Patient savoring capability positively associated with caregivers positive affect
- Caregivers savoring capability positively associated with patient life satisfaction
- Patient/caregiver dyad savoring capability positively associated on life satisfaction scale & positive affect

Hou WK, Liang L, Lau KM, Hall M. Savoring and psychological well-being in family dyads coping with cancer: An actor-partner interdependence model. *Eur J Cancer Care (Engl)*. 2023 Jul;32(4):e33047. doi: 10.1111/ecc.13047. Epub 2023 Apr 26. PMID: 36939788.

27



54



57



59

COMPASSION OMICS
THE REVOLUTIONARY SCIENTIFIC EVIDENCE THAT CARING MAKES A DIFFERENCE
STEPHEN TRZECIAK
ANTHONY MAZZARELLI
Foreword by SENATOR CORY BOOKER

MINDFUL MOMENTS
Maggie Augustyn DDS
January 19, 2022

DENTISTRY TODAY

60

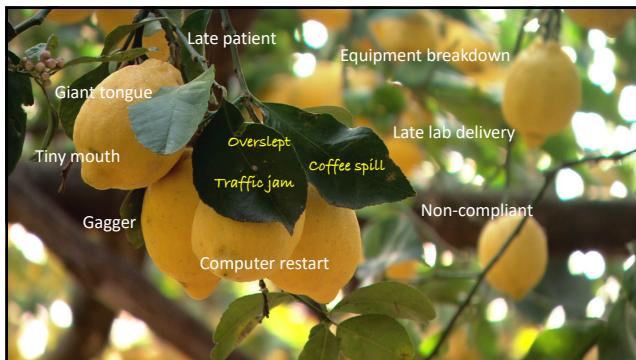
Compassion Satisfaction: amount of pleasure derived from helping others

527 U.S. RDH surveyed

- 30.6 mean hours worked weekly
- 3.8 mean days worked weekly
- Ave. 19.3 years clinical practice
- 70% respondents thinking of leaving profession within next 5 years
- Lower compassion satisfaction scores correlated to higher burnout

Knutt A, Boyd LD, Adams JL, Wineyard J. Compassion Satisfaction, Compassion Fatigue, and Burnout among Dental Hygienists in the United States. J Dent Res. 2022 Feb;101(2):24-33. PMID: 35190492.

61



62



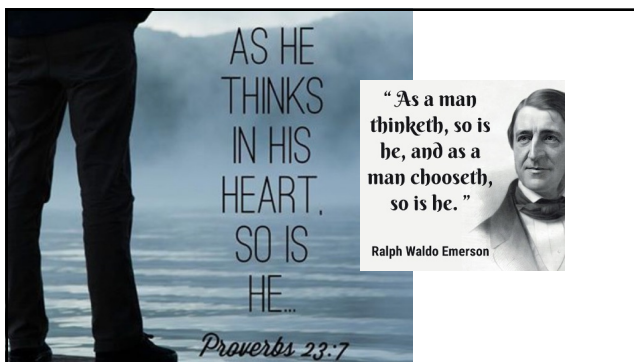
63



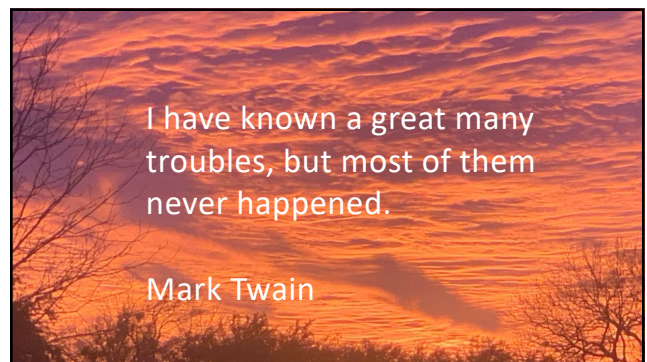
70



71



72



73

Analysis 186 RCT (16,655 patients)

At least half of the overall treatment effect observed in RCT across conditions is attributable to placebo effects rather than to the specific experimental intervention on trial.

REVIEW Open Access

Placebo response and effect in randomized clinical trials: meta-research with focus on contextual effects

Stylianou M, Hoffmann T, Gøtzsche P, Jüni T, Saperia H, Nelson T, Marzocchi A, Haidich A, Berlin JA, Altman DG, and Vandenbroucke JP

Abstract
Contextual effects (CE), placebo response rates or all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

Introduction
Contextual effects (CE) are defined as all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

Introduction
Contextual effects (CE) are defined as all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

Introduction
Contextual effects (CE) are defined as all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

Introduction
Contextual effects (CE) are defined as all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

Introduction
Contextual effects (CE) are defined as all health changes resulting from administering an investigational product (IP) in a randomized clinical trial (RCT), the overall response effect to the intervention effect in the intervention group can be regarded as the sum of the intervention plus the impact of contextual effects. The present meta-analysis (MMA) is aimed at quantifying the overall response effect in RCTs in 19 different clinical conditions and examining the impact of contextual effects on the overall response effect in RCTs.

Methods
The MMA included 186 RCTs published in the most independent from the best quality of the literature. The overall response effect was calculated as the mean difference between the intervention and control groups in RCTs having an experimental intervention group, a placebo control group, and a non-intervention control group.

Results
In total, 186 RCTs (24,613 patients) were included. On average, 50% (95% CI: 46% to 54%) of the overall response effect was attributable to contextual effects. The contextual effect was higher for pain and depression than for all other clinical conditions. The contextual effect was higher for female patients than for male patients. Older age and longer duration of illness were associated with higher contextual effects.

Conclusions
Approximately half of a total response effect in RCTs seems attributable to contextual effects rather than to the specific effect of intervention. In the study of the overall response effect, contextual effects and contextual effects should be taken into account. The overall response effect should be taken into account when interpreting the results of RCTs.

Trial registration PROSPERO (CRD4201901852). Registered on April 18, 2019.

Keywords placebo response; Placebo effect; Contextual effects; Response effect; Experimental effect

74

PLACEBO EFFECT


231 physicians

45% used placebos in clinical practice

96% believed placebos can have therapeutic effects

Sherman R, Hickner J. Academic physicians use placebos in clinical practice and believe in the mind-body connection. J Gen Intern Med. 2008; Jan;23(1):7-10. doi: 10.1007/s11606-007-0332-z. Epub 2007 Nov 10. PMID: 17994270; PMCID: PMC2173915.

75



Harvard Health Publishing
HARVARD MEDICAL SCHOOL

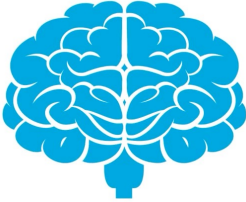
Neurotransmitters at work

Osteoarthritis Knee Pain Relief Placebo

MIDDLE FRONTAL GYRUS
Middle frontal gyrus brain region, which makes up about one-third of the frontal lobe


<http://www.health.harvard.edu/mental-health/the-power-of-the-placebo-effect>

76



Neuroplasticity

77



MINDFULNESS - THE JOYFUL MOVEMENT ISSUE

mindful

HOW TO Free Your Body

Release resistance, find yourself, and free effects flow.

THE SCIENCE OF MINDFULNESS

10 REASONS FOR ESTABLISHING MINDFULNESS

SHIFT YOUR HEAD FROM STRESS TO CALM

Neuroplasticity


80

Strategies to Help Promote Neuroplastic Changes in Your Brain
Megan Call, Director Resiliency Center, University of Utah Health

Decide a new skill you are interested in and challenged by - new language, musical instrument, learn to paint

Take time for/repetition to build new neurons

Be committed. It's a process.

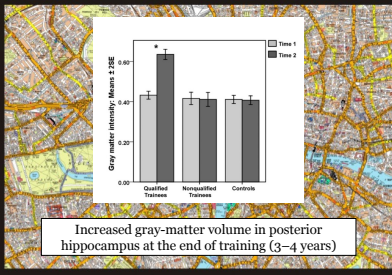


<https://medcenter.utah.edu/health/wellness/neuroplasticity-how-to-grow-your-brain-s-malleability-to-improve-your-well-being>
Accessed January 17, 2023

81

Acquiring "the Knowledge" of London's Layout Drives Structural Brain Changes

Woollett, K., & Maguire, E. A. (2011). Acquiring "the Knowledge" of London's Layout Drives Structural Brain Changes. *Cerebral Cortex*, 21(24), 2129-2134. doi:10.1093/cercor/bhr111



Increased gray-matter volume in posterior hippocampus at the end of training (3-4 years)

Group	Time 1	Time 2
Qualified Taxicab Drivers	~0.45	~0.55
Nonqualified Taxicab Drivers	~0.45	~0.45
Controls	~0.45	~0.45

83

30 DAYS

GROUP 1 PRACTICE FREE-THROWS EVERYDAY FOR AN HOUR 24%

GROUP 2 VISUALIZE PROCESS OF SUCCESSFULLY MAKING FREE-THROWS 23%

GROUP 3 NO INTERVENTIONS 0%

Dr. Biagiato University of Chicago 1996

84

From mental power to muscle power—gaining strength by using the mind

Yaochi K. Ranganathan¹, Vinith K. Ranganathan^{1,2}, Jing Z. Liu³, and Virend Sahgal⁴, Cheng H. Tan^{4,5,6,7}

¹Department of Psychology, National Central University, Chungli, Taiwan, Republic of China; ²Department of Physical Activity and Health, National Central University, Chungli, Taiwan, Republic of China; ³Department of Psychology, National Central University, Chungli, Taiwan, Republic of China; ⁴Department of Psychology, National Central University, Chungli, Taiwan, Republic of China; ⁵Department of Psychology, National Central University, Chungli, Taiwan, Republic of China; ⁶Department of Psychology, National Central University, Chungli, Taiwan, Republic of China; ⁷Department of Psychology, National Central University, Chungli, Taiwan, Republic of China

Abstract

The purpose of this study was to determine whether training without strength equipment and using mental power to gain strength could be used as an alternative to strength training in individuals with physical disabilities. The study was conducted in a laboratory setting. The participants were divided into three groups: Group 1 (Mental contractions of little finger), Group 2 (Physical contractions of little finger), and Group 3 (No intervention). The training was conducted for 18 weeks, 15 minutes per day. The results showed that Group 1 and Group 2 both showed significant gains in strength, while Group 3 showed no significant change. The gains in strength were similar between Group 1 and Group 2, suggesting that mental power can be used to gain strength in individuals with physical disabilities.

Keywords: mental power, muscle power, strength, training, physical disabilities

1. Introduction

Strength training is an important component of physical fitness and is essential for maintaining and improving strength. However, individuals with physical disabilities often face challenges when it comes to strength training. One potential solution is to use mental power to gain strength. This study was designed to investigate the effectiveness of mental power training in individuals with physical disabilities.

2. Methods

The study was conducted in a laboratory setting. The participants were divided into three groups: Group 1 (Mental contractions of little finger), Group 2 (Physical contractions of little finger), and Group 3 (No intervention). The training was conducted for 18 weeks, 15 minutes per day. The results showed that Group 1 and Group 2 both showed significant gains in strength, while Group 3 showed no significant change.

3. Results

The results showed that Group 1 and Group 2 both showed significant gains in strength, while Group 3 showed no significant change. The gains in strength were similar between Group 1 and Group 2, suggesting that mental power can be used to gain strength in individuals with physical disabilities.

4. Conclusion

The results of this study suggest that mental power training can be used as an alternative to strength training in individuals with physical disabilities. This approach may be particularly useful for individuals who are unable to perform traditional strength training due to physical limitations.

5. Limitations and Future Research

There are several limitations to this study. First, the study was conducted in a laboratory setting, which may not reflect real-world conditions. Second, the study only focused on the little finger, which may not be representative of other muscles. Future research should investigate the effectiveness of mental power training in other muscles and in real-world settings.

6. Practical Applications

The findings of this study have several practical applications. First, mental power training can be used as a complementary approach to traditional strength training. Second, mental power training can be used as a primary approach to strength training for individuals with physical disabilities. Finally, mental power training can be used as a tool to improve strength in healthy individuals.

7. Conclusion

This study demonstrates that mental power training can be used to gain strength in individuals with physical disabilities. This approach may be particularly useful for individuals who are unable to perform traditional strength training due to physical limitations. Further research is needed to explore the long-term effects of mental power training and its potential applications in other populations.

8. Acknowledgments

We thank the participants for their participation in this study. We also thank the staff of the National Central University for their support and assistance.

9. Funding

This study was supported by the National Natural Science Foundation of China (Grant No. 81573055) and the National Science Foundation of Taiwan (Grant No. 102-0010-MY2-001-001).

10. Correspondence

Yaochi K. Ranganathan, Department of Psychology, National Central University, Chungli, Taiwan, Republic of China. Email: yaochi.k.ranganathan@ncu.edu.tw

11. Conflict of Interest

The authors declare that there is no conflict of interest in this study.

12. Ethics Statement

The study was approved by the Institutional Review Board of National Central University. All participants provided informed consent before participating in the study.

13. Data Availability

The data generated in this study are available upon request. Please contact the corresponding author for more information.

14. References

1. American College of Sports Medicine. (2010). *Exercise is medicine: Prescription on how to stay fit and healthy*. Washington, DC: American College of Sports Medicine.

2. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2015). From mental power to muscle power—gaining strength by using the mind. *Neuropsychologia*, 69, 144–150.

3. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2016). The effectiveness of mental power training in individuals with physical disabilities. *Journal of Sport and Exercise Psychology*, 18(1), 1–10.

4. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2017). The effects of mental power training on strength and muscle mass in individuals with physical disabilities. *Journal of Sport and Exercise Psychology*, 19(1), 1–10.

5. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2018). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A follow-up study. *Journal of Sport and Exercise Psychology*, 20(1), 1–10.

6. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2019). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A longitudinal study. *Journal of Sport and Exercise Psychology*, 21(1), 1–10.

7. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2020). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A meta-analysis. *Journal of Sport and Exercise Psychology*, 22(1), 1–10.

8. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2021). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A systematic review. *Journal of Sport and Exercise Psychology*, 23(1), 1–10.

9. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2022). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A scoping review. *Journal of Sport and Exercise Psychology*, 24(1), 1–10.

10. Ranganathan, Y. K., Ranganathan, V. K., Liu, J. Z., Sahgal, V., & Tan, C. H. (2023). The effects of mental power training on strength and muscle mass in individuals with physical disabilities: A narrative review. *Journal of Sport and Exercise Psychology*, 25(1), 1–10.

85

Whatever you are saying to yourself, your brain is listening

conviction, hope, happiness, embarrassment, shame, fear, worry, anger, gratitude, inadequacy, contentment, joyfulness

88

EMOTIONS

Don't have brains.
Don't give them more credit than they deserve

89

Savoring Belief Inventory, the Subjective Happiness Scale, the Brief Resilience Scale (561 Students surveyed)

1. Resilience (can be learned) & strengthened by savoring, positive emotions, & mindfulness
2. Savoring can break cycles of worry & foster emotional resilience
3. Enhancing resilience during difficulty can improve happiness

Chen DE, Huang KW, Ho WS, Cheng YC. Savoring Belief, Resilience, and Meaning in Life as Pathways to Happiness: A Sequential Mediation Analysis among Taiwanese University Students. *Behav Sci (Basel)*. 2024 May 5;14(5):388. doi: 10.3390/bs14050388. PMID: 38783879; PMCID: PMC11117827

90

think on these things...
whatever is TRUE, NOBLE,
RIGHT, PURE, LOVELY, ADMIRABLE,
EXCELLENT, PRAISEWORTHY...
think about such things...
Philippians 4:8

91

Neurophysiological changes during a 7-day Spiritual retreat inclusive of prayer and/or meditation

Effect of a one-week spiritual retreat on dopamine and serotonin transporter binding: a preliminary study


Andreas B. Nussbaum¹, Naveen Winkler¹, David B. Vitaro¹, J. Zhong¹, Roshan Bhowmik¹

Pre-Retreat, 7 days Later

Dopamine & Serotonin Binding Reduction (Red/Orange) DaTscan

92

General Hospital Psychiatry
Volume 23, Issue 4, July-August 2001, Pages 181-192



Mindfulness-based stress reduction and health-related quality of life in a heterogeneous patient population ☆

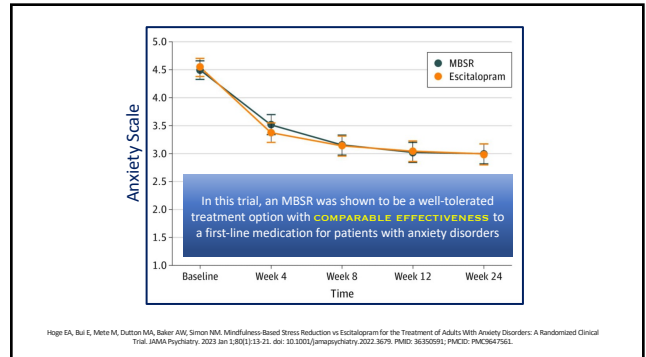
Patients (n=136) participated in an 8-week MBSR program required to practice 20 min of meditation daily

33% of the study participants reported having only one primary medical condition & (67%) reported having two or more major illnesses

Alleviation of physical symptoms was revealed by a 28% reduction
Decreased psychological distress was indicated by a 38% reduction
44% reduction on the anxiety subscale
34% reduction on the depression subscale

Diane K Reibel, Jeffrey M Grossen, George C Brainard, Steven Rosenzweig (2001). Mindfulness based stress reduction and health-related quality of life in a heterogeneous patient population... 23(4), 181-192. doi:10.1016/S0163-8341(01)00149-9

93



94

Can You Improve **Quality of Life** Through Mindfulness-Based Interventions?



Cardiovascular disease
Diabetes
HIV/AIDS
Cancer
Neurogenerative Diseases
Musculoskeletal Diseases & Chronic Pain

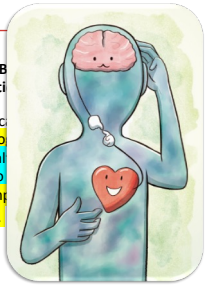
Grossen JM, Chen GR. Mindfulness and physical disease: a concise review. Curr Opin Psychol. 2019 Aug;28:204-210. doi: 10.1016/j.copsyc.2018.12.014. Epub 2018 Dec 27. PMID: 30785067; PMCID: PMC6399735.

95

Circulation
Volume 143, Issue 9, March 2021, Pages e763-e783
<https://doi.org/10.1161/CIR.0000000000000847>

Psychological Health, Well-Being, and the Mind-Heart-Brain Scientific Statement From the American Heart Association

Based on current study data, the following statements contain good data showing **clear associations between psychological health and cardiovascular risk**; there is increasing evidence that psychological health to biological processes and behaviors that contribute to preponderance of data suggest that interventions to improve psychological health can have a beneficial impact on cardiovascular health...



96


<https://www.youtube.com/watch?v=eiEMVA8AJIw>
Dare to re-wire your brain for self-compassion



SELF-CARE DAILY CHECK-IN

- HOW AM I FEELING TODAY?
- WHAT AM I GRATEFUL FOR TODAY?
- WHAT DO I NEED TODAY?
- WHAT DO I WANT TO ACCOMPLISH TODAY?
- WHAT IS SOMETHING I CAN DO TODAY THAT WOULD BE GOOD FOR MYSELF?

98



Clearing house for old & new memories
Eliminates toxins
Regulates appetite
Decelerates aging

Organizes & stores new information
Unleashes creative thinking
Sharpens thought processes
Improves mood

Sleep deprivation kills brain cells, lowers immunity, increases risk for diabetes, heart disease & accidents

99

Good for the Brain

- FISH:** IMPROVES MEMORY, IMPROVES MOOD, PREVENTS SHRINKAGE/AGING
- COFFEE:** IMPROVES MOOD, IMPROVES CONCENTRATION
- BLUEBERRIES:** DELAY AGING, IMPROVES MEMORY
- TURMERIC:** BOOSTS SEROTONIN & DOPAMINE
- LYSINE:** HELPS REGULATE STRESS & ANXIETY
- CHOCOLATE:** BOOSTS DOPAMINE, MEMORY & MOOD

100

Brain Aerobics

101

How Posit Science's BrainHQ Helps People Sharpen Their Cognitive Abilities

About the BrainHQ Exercises

attention - brain speed - memory - people skills - intelligence - navigation

BrainHQ.com

102

105

GRATITUDE

- Anterior Cingulate Cortex:** Viewpoint, Focus
- Medial Prefrontal Cortex:** Relationships, Social Connectivity
- Hypothalamus:** Regulates dopamine

106

COUNTING ONE'S BLESSINGS HAS BEEN SHOWN TO SIGNIFICANTLY IMPROVE POSITIVE EMOTIONS

The Medial Prefrontal Cortex: Where Gratitude Lives

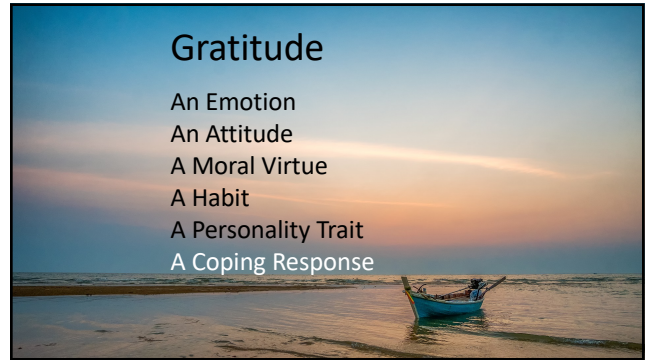
- Regulates emotions
- Supports stress relief
- Regulates pain

Wood AM, Froh JL, Geraghty AW. Gratitude and well-being: A review and theoretical integration. Clinical Psychology Review. 2010. https://doi.org/10.1016/j.cpr.2010.03.005 PMID: 20451313

107



108




110

Gratitude and Well-Being

Religious thankfulness & gratefulness assessments to *predict lifetime history of 9 psychiatric disorders (2621 participants):*

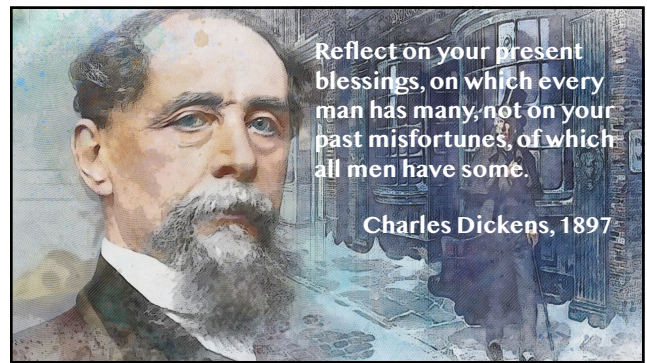
- Major Depression
- General Anxiety Disorder
- Phobia
- Nicotine Dependence
- Alcohol Dependence
- Drug Abuse/Dependence
- Bulimia Nervosa

Thankfulness significantly predicted lower risk & improved outcomes



Wood AM, Froh JJ, Geraghty AM. Gratitude and well-being: a review and theoretical integration. Clin Psychol Rev. 2010 Nov;25(7):850-865. doi: 10.1016/j.cpr.2010.03.005. Epub 2010 Mar 20. PMID: 20613313.

111



112

Gratitude Questionnaire Six-Item Form (GQ-6)

1 = strongly disagree
 2 = disagree
 3 = slightly disagree
 4 = neutral
 5 = slightly agree
 6 = agree
 7 = strongly agree

1. I have so much in life to be thankful for.
2. If I had to list everything that I felt grateful for, it would be a very long list.
3. When I look at the world, I don't see much to be grateful for.
4. I am grateful to a wide variety of people.
5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.
6. Long amounts of time can go by before I feel grateful to something or someone.

Scoring: Compute a mean across the item ratings; items 3 and 6 are reverse-scored.

113

Gratitude Resentment and Appreciation Scale (GRAT)

1	2	3	4	5	6	7	8	9
strongly disagree	disagree	somewhat	I feel neutral about the statement	I feel neutral about the statement	I mostly agree with the statement	strongly agree with the statement		

1. I couldn't have gotten where I am today without the help of many people.
2. Life has been good to me.
3. There never seems to be enough to go around and I never seem to get my share.
4. Oftentimes I have been overwhelmed at the beauty of nature.
5. Although I think it's important to feel good about your accomplishments, I think that it's also important to remember how others have contributed to my accomplishments.
6. I really don't think that I've gotten all the good things that I deserve in life.
7. Every Fall I really enjoy watching the leaves change colors.
8. Although I'm basically in control of my life, I can't help but think about all those who have supported me and helped me along the way.
9. I think that it's important to "Stop and smell the roses."
10. More bad things have happened to me in my life than I deserve.
11. Because of what I've gone through in my life, I really feel like the world owes me something.
12. I think that it's important to pause often to "count my blessings."
13. I think it's important to enjoy the simple things in life.
14. I feel deeply appreciative for the things others have done for me in my life.
15. For some reason I don't seem to get the advantages that others get.
16. I think it's important to appreciate each day that you are alive.

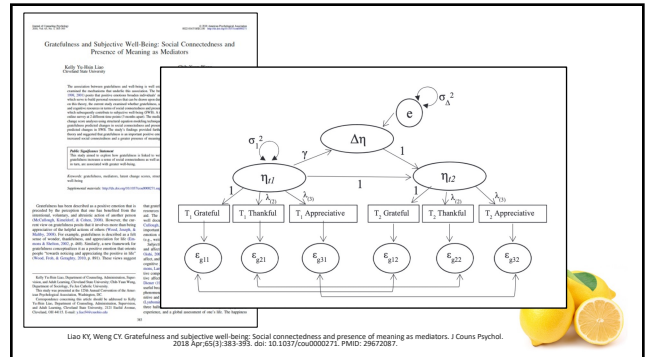
Scoring:
The following items should be reverse scored: 3, 6, 10, 11, 15.

114

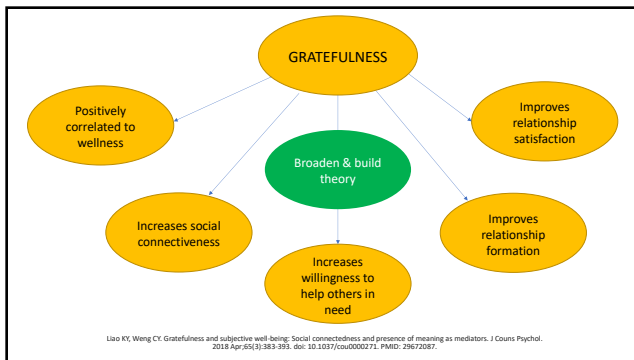
Interventions to Increase Gratitude				
Study	Description	Gratitude condition	Control condition	Effects of gratitude condition relative to control (with effect size)
Froh, Kashdan et al. (2008) Study 10	10-15 min every other day for two weeks in children and adolescents in a school setting (n=44)	Write a gratitude letter and deliver it in person (n=44)	Write about things they did and how they felt about doing them (n=44)	Increases in gratitude at immediate post-test (for those low in T1 positive affect) $d = -.57$, and increases in positive affect at 2-month follow-up (for those low in T1 positive affect) $d = -.59$
Geraghty et al. (in press) Study 11	2 week gratitude diary, community sample, internet administered, body dissatisfaction targeted	List up to 6 things to be grateful for (n=40)	Complete automatic thought records (ATR, n=22)	Decreases in body dissatisfaction $d = .15$
Geraghty et al. (2010) Study 12	2 week gratitude diary, community sample, internet administered, worry targeted	List up to 6 things to be grateful for (n=52)	Complete a worry diary (self-monitoring)/restructuring/planning, n=28 Waitlist Control (n=56)	Decreases in worry $d = .11$ Decreases in worry $d = 1.5$

A.M. Wood et al. / Clinical Psychology Review 30 (2010) 890–905

117



118



119

8 studies adopted gratitude list interventions showing a significant improvement in stress and depression

Komase Y, Watanabe K, Hori O, Nozawa K, Hidaka Y, Iida M, Imamura K, Kawakami N. Effects of gratitude intervention on mental health and well-being among workers: A systematic review. *J Occup Health.* 2021 Jan;63(1):12290. doi: 10.1002/1348-9585.12290. PMID: 34762336; PMCID: PMC3582291.

121

Is Expressive Writing Therapeutic?

Level of **grief diminished significantly** with expressive writing participants compared to control group
International Journal of Counseling and Education 2019

Within the expressive writing group, participants with high expressiveness experienced significant **reductions in anxiety** at a 3-month follow-up compared to control group
Anxiety, Stress and Coping 2014

6-Week expressive writing observational trial **increased resilience, decreased depressive symptoms, perceived stress and rumination of those reporting trauma in the past year**
Complementary Therapies in Clinical Practice 2018

123

Positive Psychology and Gratitude Interventions: A Randomized Clinical Trial

3 Groups surveyed daily for 2 weeks

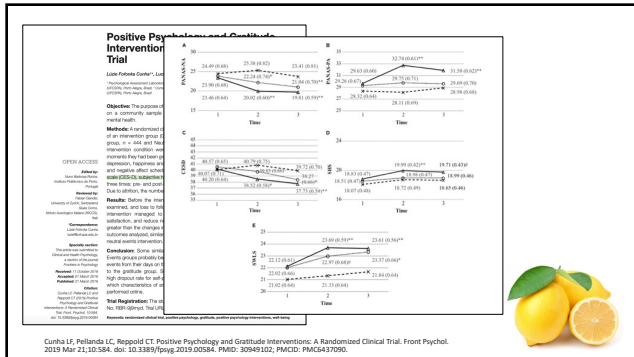
For the Gratitude group, the instructions were:
Think back over the past day and write down five things in your life that you are grateful for. (153)

For the Neutral Events group, the instructions were:
Think back over the past day and write down five events that somehow affected you. (134)

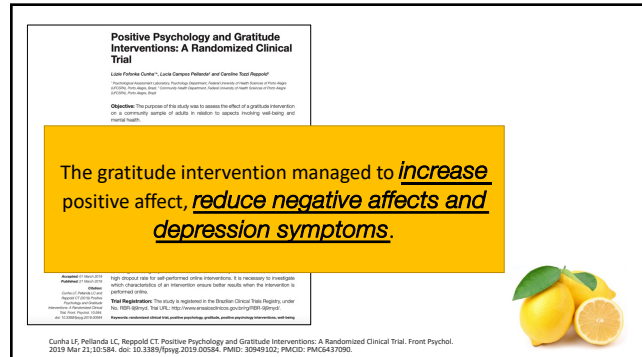
For the Hassles group, the instructions were:
In life, we sometimes encounter hassles and annoying situations that may bother and irritate us. Think back over the past day and write down five hassles or annoying situations that you had to face. (123)

Cunha LF, Pellandri LC, Reppold CT. Positive Psychology and Gratitude Interventions: A Randomized Clinical Trial. *Front Psychol.* 2020 Mar 22;10:584. doi: 10.3389/fpsyg.2020.00584. PMID: 32049332; PMCID: PMC6943709.

124



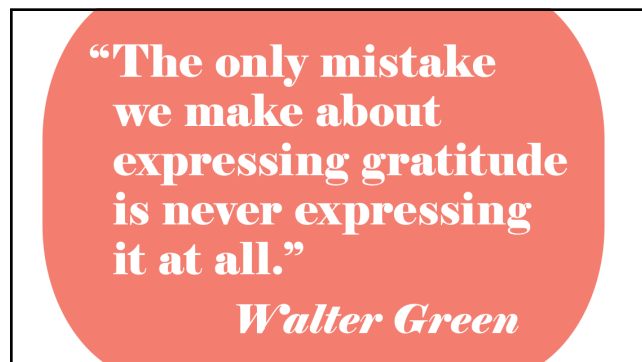
125



126



127



128

say it now

A How-To Guide

justsayitnow.org

Your Journey with Gratitude

1. Begin with Your Why

Why do it? — Develop your understanding of the power of gratitude by reading reflection questions and thought-provoking videos. Explore to understand why gratitude is a companion for all of those and an experience with others.

2. Next, Choose Your Gratitude Expression

- Without Expression of Gratitude:** See the quiet power of words to increase gratitude to someone else. [Go to page 7.](#)
- Verbal Expression of Gratitude:** Deepen that connection and spend quality time with someone special by sharing your gratitude with them. [Go to page 9.](#)
- Living Tribute Event Expression of Gratitude:** Host a celebration of gratitude and gather people to honor someone who has touched many lives. [Go to page 12.](#)

129

THIS IS THE MOMENT! ABOUT THE BOOK ABOUT WALTER MEDIA

“Truly magical and life-changing! A testimony that the Law of Attraction ... is a must-read for all!”

—Derek Wadley, author of Seeds of Generations.

This Is The Moment!

How One Man's Yearlong Journey Captured the Power of Extraordinary Gratitude. Foreword by Ken Blanchard.

130



134



136



138