

Do-It-Yourself Mental Makeovers: How Self-Generated Thoughts Shift Implicit Attitudes

Scott Akalis¹, Jhansi Nannapaneni², and Mahzarin Banaji¹

¹Harvard University, ²Andhra University

QUESTIONS

- Are self-initiated shifts in implicit attitudes possible?
- Does experience with contemplative practice facilitate the use of self-generated strategies for shifting implicit attitudes?

INTRODUCTION: Implicit Attitude Malleability

- Implicit attitudes were once assumed to be stable & immutable (Bargh, 1999; Devine, 1989; Dovidio & Fazio, 1992; Fazio, Jackson, Dunton, & Williams, 1995; for a discussion, see Banaji, 2004)
- Recent research challenges this assumption: Experimenters can cause implicit attitude shifts by exposing participants to different framings, roles, or exemplars of an attitude group (Dasgupta & Greenwald, 2001; Lowery, Hardin, & Sinclair, 2001; Mitchell, Nosek, & Banaji, 2003; Wittenbrink, Judd, & Park, 2001; for a review, see Blair, 2002)
- However, no research has been done on self-initiated implicit attitude shifts (for work on self-initiated implicit stereotype change, see Blair & Banaji, 1996; Blair, Ma, & Lenton, 2001)

METHOD

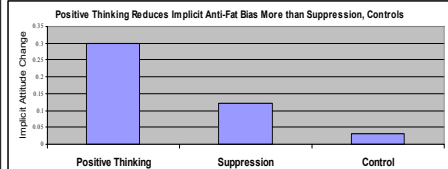
- Pre-test / post-test design with the Implicit Association Test (IAT) as the implicit attitude measure
- Thought Exercise between IATs (between-groups factor)
 - In most studies, this consisted of thinking positively about a disfavored social group or thinking about a neutral topic

Study 1

- **Participants:**
 - 87 Undergraduates in the U.S.
- **Procedure:**
 - IAT: Fat/Thin People
 - Thought Exercise
 - Between-Groups; 10 minutes
 - IAT: Fat/Thin People
- **3 Thought Exercises:**
 - **Positive Thinking**
 - Think about Positive Aspects of overweight people
 - **Suppression**
 - Don't think about Negative Aspects of overweight people
 - **Control**
 - Stream of consciousness

RESULTS: Study 1

Thinking positively about overweight people resulted in significant implicit bias reduction compared to suppressing negative thoughts or the control condition, $F(2,84) = 3.94, p < .05$.

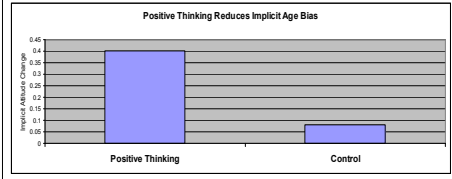


Study 2

- **Objective:**
 - To replicate the effect of positive thinking with another group of participants and another strong attitude
 - New, more cognitively-engaging control task: concentrating on the aspects of trees
- **Participants:**
 - 42 yoga-trained Adults in the U.S.
- **Procedure:**
 - Old people/Young people IAT
 - Thought Exercise (Positive Thinking or Control [aspects of trees])
 - Old people/Young people IAT

RESULTS: Study 2

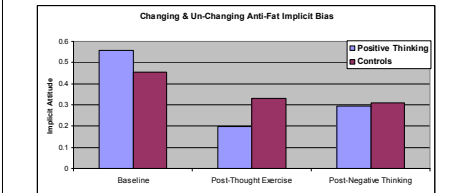
- Positive Thinking resulted in significantly greater reduction of the implicit Anti-Old attitude than found in the control condition, $F(1,38) = 4.80, p < .05$



Study 3

- **Objective:**
 - To reduce and then reintroduce implicit bias against overweight people (replicating the effect of Studies 1 & 2 and establishing a boundary)
 - Aspect-focused and compassion-oriented forms of positive thinking were included to extend the findings of Study 1 & 2
- **Participants:**
 - 93 undergraduates in the U.S.
- **Procedure:**
 - Fat/Thin IAT
 - Thought Exercise (Between-groups: Positive Thinking or Control [aspects of fish])
 - Fat/Thin IAT
 - Thought Exercise (Negative Thinking about overweight people)
 - Fat/Thin IAT

RESULTS: Study 3



- Positive thinking resulted in significantly more bias reduction between IATs 1 & 2 compared to controls, $F(1,90) = 7.76, p < .01$
- Thought exercise X Test interaction was also significant, $F(2,180) = 4.09, p < .05$

Study 4

- **Objective:**
 - To explore another boundary of the self-generated implicit attitude change demonstrated in Studies 1-3: might some forms of positive thinking (compassion-oriented but not aspect-focused) be more effective in reducing implicit bias when the target is exclusively negative?
 - For this purpose, new attitudes toward an exclusively-bad novel group and an exclusively-good novel group were created in the lab.
- **Participants:**
 - 91 undergraduates in the U.S.
- **Procedure:**
 - Attitude Induction Narrative*
 - Niffite/Luupite IAT
 - Thought Exercise**
 - Niffite/Luupite IAT
- **Attitude Induction Narrative:** (from Gregg, Seibt, & Banaji, in press)
 - "... When the LUUPITE army reached the main NIFFITE city, they gave a solemn promise to the resisting soldiers that, if they surrendered without a struggle, both they and the city-dwellers would be treated with leniency. Recognizing their inferior military capacity, the NIFFITE army opted for surrender. However, the invading LUUPITES failed to keep their promise: once the NIFFITE forces had been evacuated, the LUUPITE army began to massacre the defenseless inhabitants of the city..." (3 pages in total)
- ****3 Thought Exercises:**
 - Compassion-oriented positive thinking toward novel bad guys (Luupites)
 - Aspect-focused positive thinking about novel bad guys (Luupites)
 - Control (Aspects of fish)

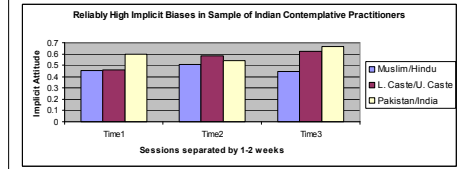
RESULTS: Study 4

- ****Results reported only for participants who had meditated at least once before** (weaker but similar pattern holds for non-meditators)**
 - Compassion-oriented positive thinking resulted in significantly greater bias reduction than controls and aspect-focused positive thinking when the attitude group was exclusively negative (had no positive aspects), planned contrast, $F(1,51) = 4.66, p < .05$
-
- | Condition | Implicit Attitude Change |
|---------------------|--------------------------|
| Aspect-focused | 0.1 |
| Compassion-oriented | 0.3 |
| Controls | 0.1 |

Study 5a

- **Objective:**
 - As the effects in Study 4 were strongest for participants with meditation experience, we sought to determine how training in contemplative practice, by itself, affects implicit attitudes
 - If no attitude change is observed, then strong, reliable implicit biases among this population will have been established for use in future studies
- **Participants:** 18 Yoga practitioners in South India
- **Longitudinal Procedure (3 IATs on 3 biweekly occasions):**
 - Muslim / Hindu
 - Lower Caste / Upper Caste
 - Pakistan / India

RESULTS: Study 5a

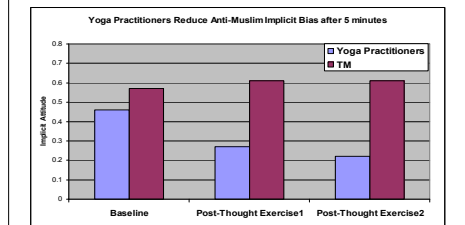


Study 5b

- **Objective:**
 - Given that experience with contemplative practice doesn't appear to reduce implicit bias by itself (Study 5a), will contemplative practice experience facilitate the use of proximate implicit attitude change techniques?
- **Participants:**
 - 25 Yoga Practitioners and 20 Transcendental Meditators (Controls) in South India
- **Procedure:**
 - Muslim/Hindu IAT 3 times; Ps instructed to concentrate on reducing their Anti-Muslim bias for 5 minutes in between

RESULTS: Study 5b

- Yoga Practitioners reduced their implicit bias significantly more than the TM group after just one concentration period, $F(1,42) = 4.21, p < .05$



CONCLUSIONS & FUTURE DIRECTIONS

- Self-initiated shifts in implicit attitudes are possible, and one way is through positive thinking
- Experience with contemplative practice may facilitate the use of self-generated strategies that can shift implicit attitudes

For More Info:

akalis@wjh.harvard.edu scottakalis.com