



# How You Meditate Impacts Psychological Flexibility: Evaluating the Rationale of Meditation and its Relation to ACT Processes and Worry



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## Introduction

- Meditation has gained popularity in both clinical and nonclinical populations alike over the last several decades.
- Mindfulness meditation has numerous benefits in both clinical and nonclinical populations including decreased stress, anxiety, and negative emotions, and improves attention and emotion regulation skills (Baer, 2003; Basso et al., 2019).
- Meditation and other mindfulness practices are part of several evidence-based psychotherapeutic interventions including Acceptance and Commitment Therapy (ACT; Hayes et al., 2011), Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2013), and Mindful Self-Compassion (Neff & Germer, 2018). In this context, mindfulness and meditation strategies are used to cultivate acceptance of present moment experience, nonjudgmentally, without trying to make the experience go away.
- The benefits of meditation have been promoted by numerous media outlets, and meditation itself is undergoing a renaissance among the public writ large.
- Yet, individuals may use meditation in ways that undermine its purpose and purported benefits; namely to control unwanted private events rather than to accept such experiences for what they are. That is, meditation may be used to control and/or avoid negative emotional experience.
- This study seeks to understand the relation between intended use of meditation and numerous processes and outcomes including experiential avoidance, cognitive fusion, mindfulness, self-compassion, positive and negative affect, and worry.

## Methods

- Participants ( $N = 395$ ) were undergraduate psychology students at the University at Albany, SUNY. Participants completed a battery of measures asking if they meditate and the intention (i.e. **control agenda** or **traditional intention**) guiding their meditation. They also indicated how frequently they practice meditation on an 8-point Likert scale from 1 (*Never*) to 8 (*More than 14 times a week*).
- Participants also completed a battery of questionnaires assessing experiential avoidance (AAQ-II; Bond et al., 2011), cognitive fusion (BAFT; Herzberg et al., 2012), mindfulness (FMI; Walach et al., 2006), positive and negative affect (PANAS; Watson et al., 1988), worry (PSWQ; Meyer et al., 1990), and self-compassion (Neff, 2003).
- Participants ( $n = 75$ ; 19%) indicated that they meditate and were included in the analyses. Of those, 44 reported using meditation as an emotional control strategy to make negative emotions go away, and 31 reported using meditation as it is traditionally practiced (i.e., to foster non-judgmental awareness and openness to present moment experiences just as they are).
- Data were analyzed via linear regression. Meditation intention was entered to predict scores on dependent variables. Moderation analyses were conducted using PROCESS Macro v3.3 for SPSS (Hayes, 2017) with 10,000 bootstrap samples for inference testing.

## Results

Table 1. Means and Standard Deviations by Meditation Intention

| Variable       | Control ( $n = 44$ ) |           | Traditional ( $n = 31$ ) |           |
|----------------|----------------------|-----------|--------------------------|-----------|
|                | <i>M</i>             | <i>SD</i> | <i>M</i>                 | <i>SD</i> |
| AAQ-7          | 22.86                | 10.26     | 20.35                    | 9.59      |
| BAFT           | 59.41                | 19.45     | 50.74                    | 17.63     |
| FMI            | 78.80                | 13.28     | 85.94                    | 10.05     |
| SCS            | 2.99                 | .71       | 3.42                     | .72       |
| PANAS Positive | 33.77                | 8.27      | 37.00                    | 8.41      |
| PANAS Negative | 24.20                | 7.97      | 20.10                    | 8.90      |
| PSWQ           | 55.27                | 13.45     | 45.35                    | 11.94     |
| Frequency      | 3.10                 | 1.24      | 3.65                     | 1.66      |

Note. Frequency means indicate that participants practice on average between once a week (3) and 3-4 times a week (4).

## Results (cont.)

Table 2. Meditation Intention Predicting Scores Dependent Variables

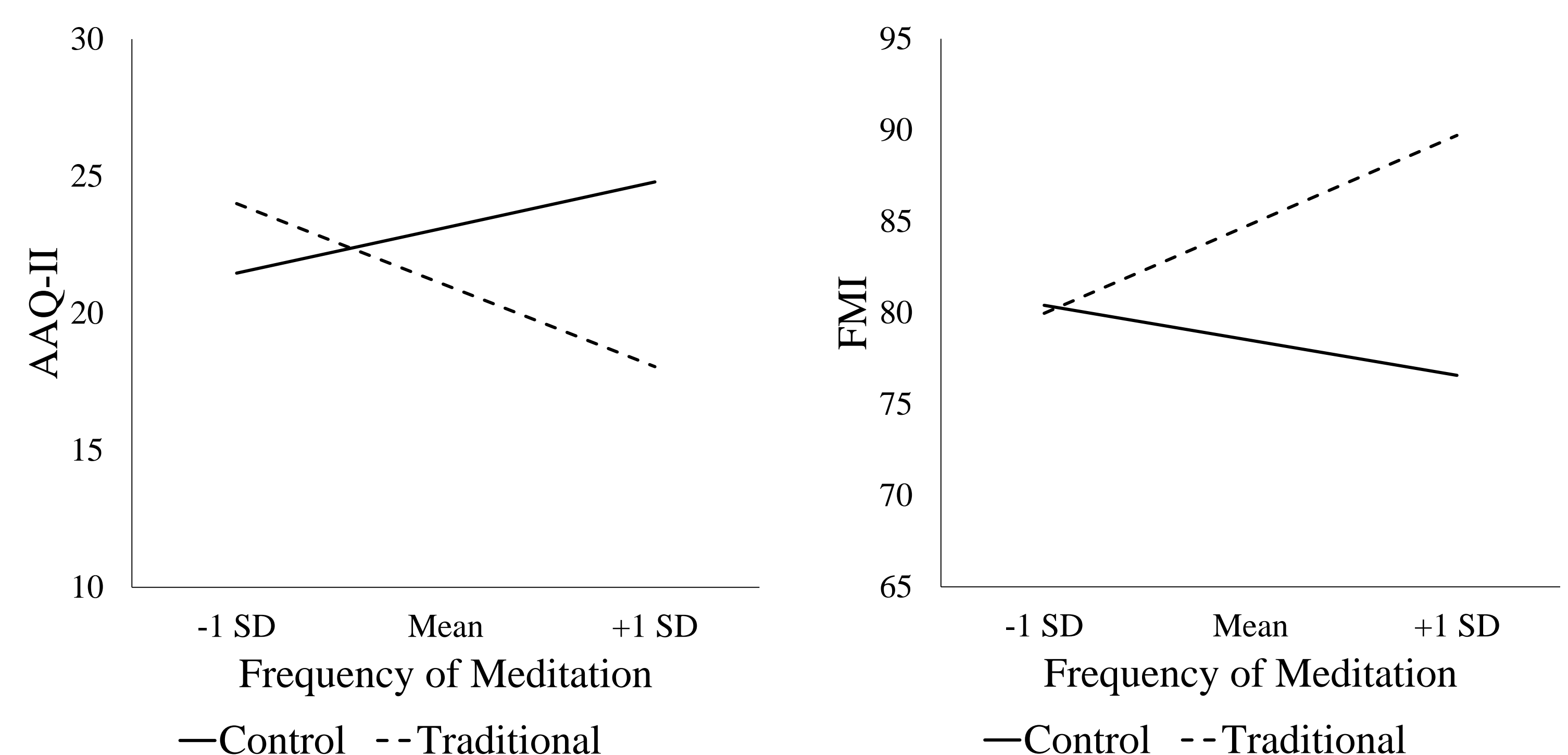
| Variable  | <i>B</i> | <i>SE</i> | $\beta$ | <i>F</i> (1,73) | <i>t</i> | <i>p</i> | <i>R</i> <sup>2</sup> |
|-----------|----------|-----------|---------|-----------------|----------|----------|-----------------------|
| AAQ-II    | -2.51    | 2.24      | -.13    | 1.25            | -1.12    | .27      | .02                   |
| BAFT      | -8.67    | 4.13      | -.24    | 4.40            | -2.10    | .04*     | .06                   |
| FMI       | 7.14     | 2.71      | .30     | 6.95            | 2.64     | .01**    | .09                   |
| SCS       | .43      | .17       | .29     | 6.77            | 2.60     | .01**    | .09                   |
| PANAS Pos | 3.23     | 1.95      | .19     | 2.73            | 1.65     | .10      | .04                   |
| PANAS Neg | -4.12    | 1.97      | -.24    | 4.37            | -2.09    | .04*     | .06                   |
| PSWQ      | -9.92    | 2.85      | -.38    | 12.10           | -3.48    | <.01***  | .14                   |
| Frequency | .55      | .34       | .19     | 2.74            | 1.66     | .10      | .04                   |

Table 3. Frequency of Meditation Moderating the Relation Between Meditation Intention and Dependent Variables

| Variable           | <i>B</i> | <i>SE</i> | <i>F</i> (1,71) | <i>t</i> | <i>p</i> | <i>R</i> <sup>2</sup> |
|--------------------|----------|-----------|-----------------|----------|----------|-----------------------|
| AAQ-II * Frequency | -3.21    | 1.55      | 4.30            | -2.07    | .04*     | .06                   |
| FMI * Frequency    | 4.70     | 1.83      | 6.64            | 2.58     | .01**    | .08                   |

Note. No other interactions were significant.

Figures 1-2. Frequency of Meditation Moderating the Relation Between Meditation Intention and AAQ-II and FMI



## Discussion

- Participants who use meditation as a strategy to control their emotional experience reported significantly higher levels of cognitive fusion, negative affect, and worry, and lower levels of mindfulness and self-compassion.
- Frequency of meditation was found to moderate the relation between intention of meditation and experiential avoidance and mindfulness.
- As individuals practice meditation more frequently, they report higher levels of experiential avoidance. The opposite pattern emerged in those who meditate with traditional intentions. This suggests that using meditation to control experience more frequently may lead to less acceptance of experience. Additionally, the more frequently individuals meditate with traditional intentions may lead to greater acceptance of experience.
- Individuals who use meditation as a control strategy report lower levels of mindfulness as they meditate more frequently. The opposite pattern is apparent in those who use meditation with traditional intentions.
- Taken together, these data suggests that how one uses meditation is an important predictor of psychological outcomes. Clinicians should take caution when teaching clients meditation techniques and check in with clients regarding how they practice.

## References

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