

How Short Term Mindfulness Training Affects Emotion Regulation on College Students

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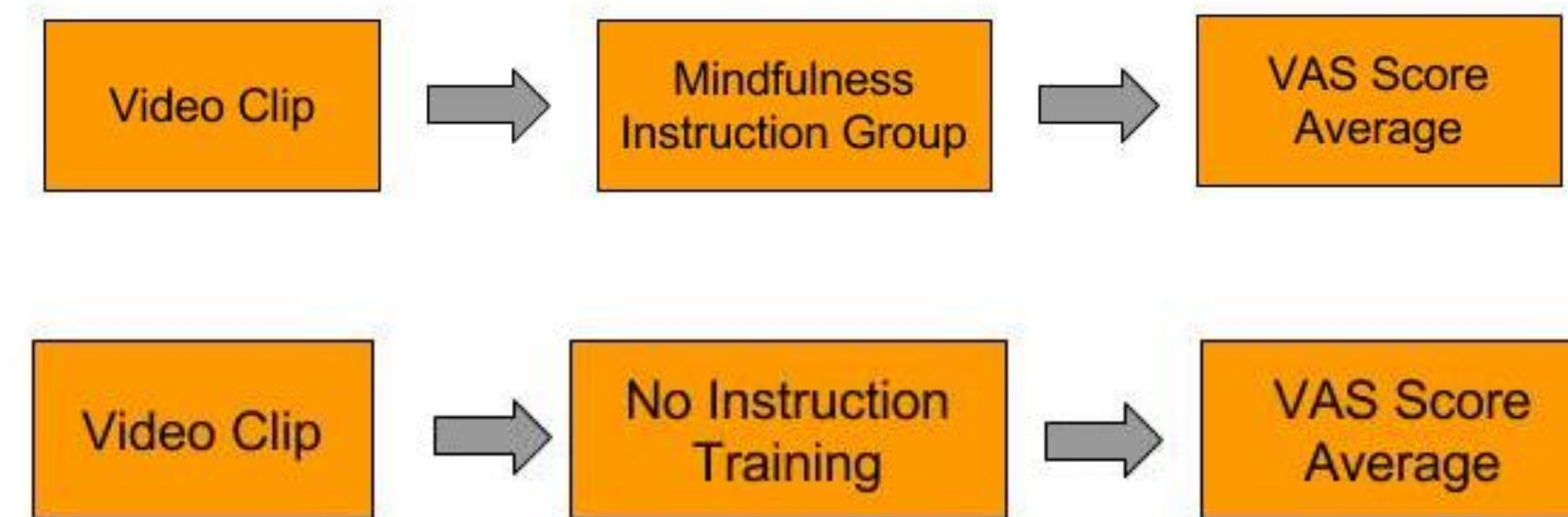
Abstract

Emotion regulation (ER) is the experience and expression of emotions which aids in the balancing of positive emotions and emotional processing (Gross, 2001; Hölzel, 2011). An important advancement in the field of psychology is greater understanding of how treatments can positively influence ER. One promising intervention to improve emotion regulation is mindfulness training—the practice of being aware of one’s current internal state and thoughts to provide a greater attentiveness and acknowledgement to one’s current environment (Hoffman et. al., 2010; Langer 2000). The current study examined the effect of brief mindfulness training on emotion regulation after a sad mood induction via film, as compared to students who received no emotion regulation training. A sample of undergraduate students (n=110, 57% female) were recruited to participate. Subjects were excluded for pre-existing depression, cognitive impairment, and psychiatric medication usage. Participants were randomly assigned to two conditions (e.g., mindfulness vs. no training). Those in the mindfulness training condition were instructed to acknowledge their thoughts and let them pass by like clouds in the sky, while those in the no instruction condition were directed to wait for the next task to begin. All participants then watched two film clips designed to induce negative mood. The results showed significant changes from VAS1 to VAS3 within each emotion. However, there was no significant difference between participants in the mindfulness condition and the no instruction.

Introduction

- Among college students, events that disrupt their ability to cope can have lasting implications on their grades, problem solving skills, drug and alcohol usage, mental disorders, and physical wellness (Canby, 2014).
- Mindfulness practices can be implemented to improve college student’s achievements and efficiency. Mindfulness practices have also been shown in research studies to be positively linked to an increase in adaptive emotion regulation, positive reappraisal, positive affect, liveliness, and satisfaction of life (Canby, 2014; Garland, 2015; Keng, 2011).
- Emotion regulation is the ability to adjust our emotions in certain situations. Mindfulness practices have been shown to lower emotional reactivity and help the emotions return to baseline after the reactivity by improving the emotional regulation system (Gross, 2002; Hölzel, 2011).
- Training in mindfulness has been shown to lower an individual’s reactions to sadness on a neurological level as well as symptoms of anxiety and depression (Norman, 2010; Hofmann, 2010).
- Past mindfulness experiments have shown less negative affects and higher positive affects with film clips (Erisman, 2010; Arch, 2006).
- This experiment was designed to examine the immediate effects of a brief 6-minute mindfulness training on a non-clinical population of college students.
- The purpose of this study was to investigate the immediate effects of a short-term mindfulness exercise on the degree of emotions one can feel following negative mood induction. We hypothesize that participants undergoing mindfulness training will report lower sadness and anxiety compared to those with no instruction.

Methods



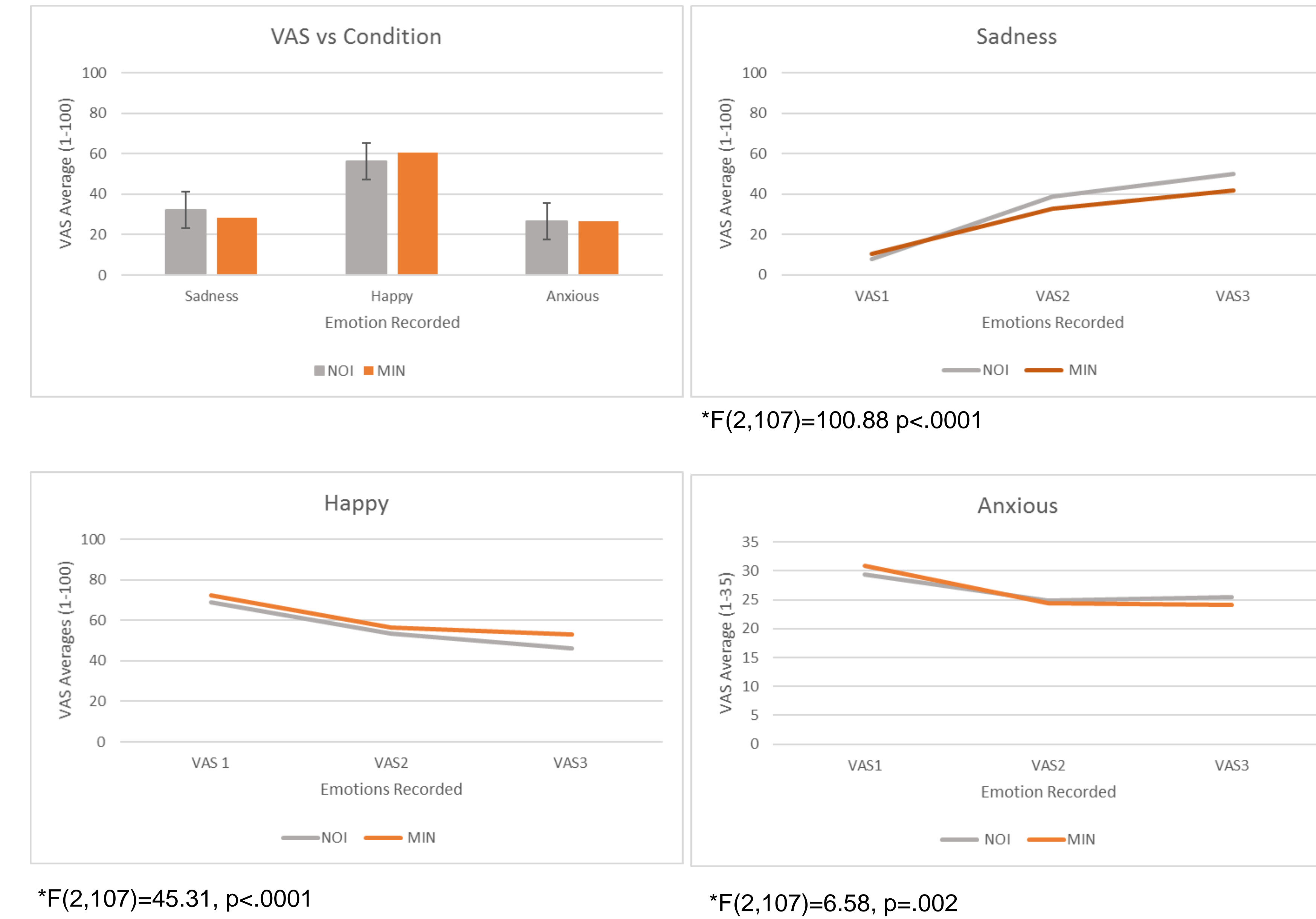
Participants

	Mindfulness	No instruction
Right handedness	51	53
Left Handedness	4	2
Average Age	18.89	18.87
White/Caucasian	42	43
Black/African/American	5	3
Class standing m	1.56	1.47
Hispanic/Latino	1	1
Asian-American	3	7
Native American	2	1
Females	34	39
Males	21	16
Mixed Race/Ethnicity	2	0

Procedure

- Students came into the lab as a part of a larger study and were guided by research assistants through the tasks. Participants reported their current state of emotion on the visual analog scale (VAS) that prompted them to report how happy, sad, or anxious they felt on a 0-100 spectrum. Participants noted their baseline (VAS1) immediately after demographic information was recorded.
- Participants were randomly assigned to conditions (mindfulness or no instruction). The mindfulness group were given a 6-minute training where they were told to acknowledge their thoughts and let them pass by like clouds in the sky. Participants in the no instruction group were shown a screen telling them to wait for the next task to begin.
- Following the practice training, both groups were shown a film clip to induce sadness. Participants then recorded their feelings on VAS-2. Participants repeated the above process, but the practice film clip (Bambi) was replaced with a target film clip (The Champ) that specifically evokes a high level of sadness (Gross, 1995). Following the clip, emotions were recorded a final time using the VAS-3.

Results



Discussion

Summary

- Within group differences were significant for all three moods (sadness, happiness, anxiety), meaning that participants’ VAS scores changed significantly from VAS1 to VAS3
- Between group differences were not significant, meaning that the VAS ratings of participants in the mindfulness condition did not differ from those in the no instruction condition
- In a recent study whose purpose was to identify the effects of ER through fMRI, which demonstrated greater somatic recruitment observed in the Min treatment during induced sadness and showed decrease in depression score (Farb 2010).
- Another study conducted to identify effects with a brief mindfulness training in addition to a mix film clips that included distress, positive and affective moods; study showed no significance but did report greater adaptation to neutralize one’s mood in the MIN condition (Erisman et. al. 2010).
- There were significant differences within subjects from VAS1 to VAS3, especially in sadness, as shown in a similar study by Gross and Levenson, 1995. This demonstrates the effectiveness of the film clips shown.
- There were no significant differences in between mediation groups. This could be a result of the computer automated instructions or the brief 6-minute training

Limitations

- The sample was taken from a purely undergraduate population that was mostly white.
- The intervention was very brief (6-minutes)
- The mindfulness training was instructed via computer automation. If the mindfulness training was instructed through the researcher rather than computerized automation, participants may have listened to instructions better, and reported more accurate VAS scores.

Future Directions

- Conduct the study with more diverse participants and a variety of different age groups.
- Design a longitudinal study that would test the influence of mindfulness with frequent testing.
- Replicate the study

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