



The Effects of Dance on Mood, Self Esteem, and Body Composition



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Abstract

Introduction: Dance is rapidly growing as a widely recognized form of exercise, but how effective is it at improving body composition and what other effects may it have on a person's body? Some research suggests that dance does improve body composition and mental health over time, but no extensive research directed at females has been done.

Purpose: The purpose of this research was to evaluate the effects that dance has on an adult individual's mood, self esteem, and body composition.

Methods: Participants in this study included six adult females, who attended two dance classes a week for six weeks. Height, weight, age, resting heart rate, body mass index (BMI), and percent body fat from bioelectrical impedance analysis (BIA) was collected before beginning the study and then again after the six week time period, along with the completion of a Profile of Mood States questionnaire both before and after the six week trial.

Results: There were no significant differences between pre and post data collected (not including POMS results). All values improved, but not enough so to be considered statistically significant. In this study, weight went from 158.8 ± 18.8 lb. pre to 157.3 ± 19.6 lb. post, resting heart rate went from 88 ± 8.39 bpm pre to 79.3 ± 8.54 bpm post, body mass index went from 26.6 ± 3.96 pre to 25.9 ± 4.17 post, and percent body fat went from $31.0 \pm 7.74\%$ pre to $30.4 \pm 7.51\%$ post. A significant outcome was found on the Profile of Mood States questionnaire, though. Based on the participants total mood disturbance score, which went from 30.50 ± 13.66 pre to 11.33 ± 16.00 post (p. value < 0.05).

Conclusion: Although all values in post data collected had improved since the pre data collection, they had not improved enough to be considered statistically significant. Total Mood Disturbance values from pre to post had improved significantly.

Purpose

The purpose of this research was to evaluate the effects that dance participation has on an adult female individual's mood, self esteem, and body composition.

Methods

The procedures of this study included the participants attending their normal two dances classes a week for a time period of six weeks. The dance classes consisted of jazz and lyrical type movements with a warm up/stretching period, the exercise dance time, and a cool down after dancing. Data was taken the first and last dance class of the six week session.

Methods (cont'd)

The body composition data included measurements of height, weight, body mass index (BMI) and percent body fat. Height and weight were measured on a physician's scale and also used to calculate BMI. Demographic information included age and gender were input into a bioelectrical impedance analysis (BIA) machine for each participant. The machine was held straight out in front for 30 sec and the calculation of percent body fat.

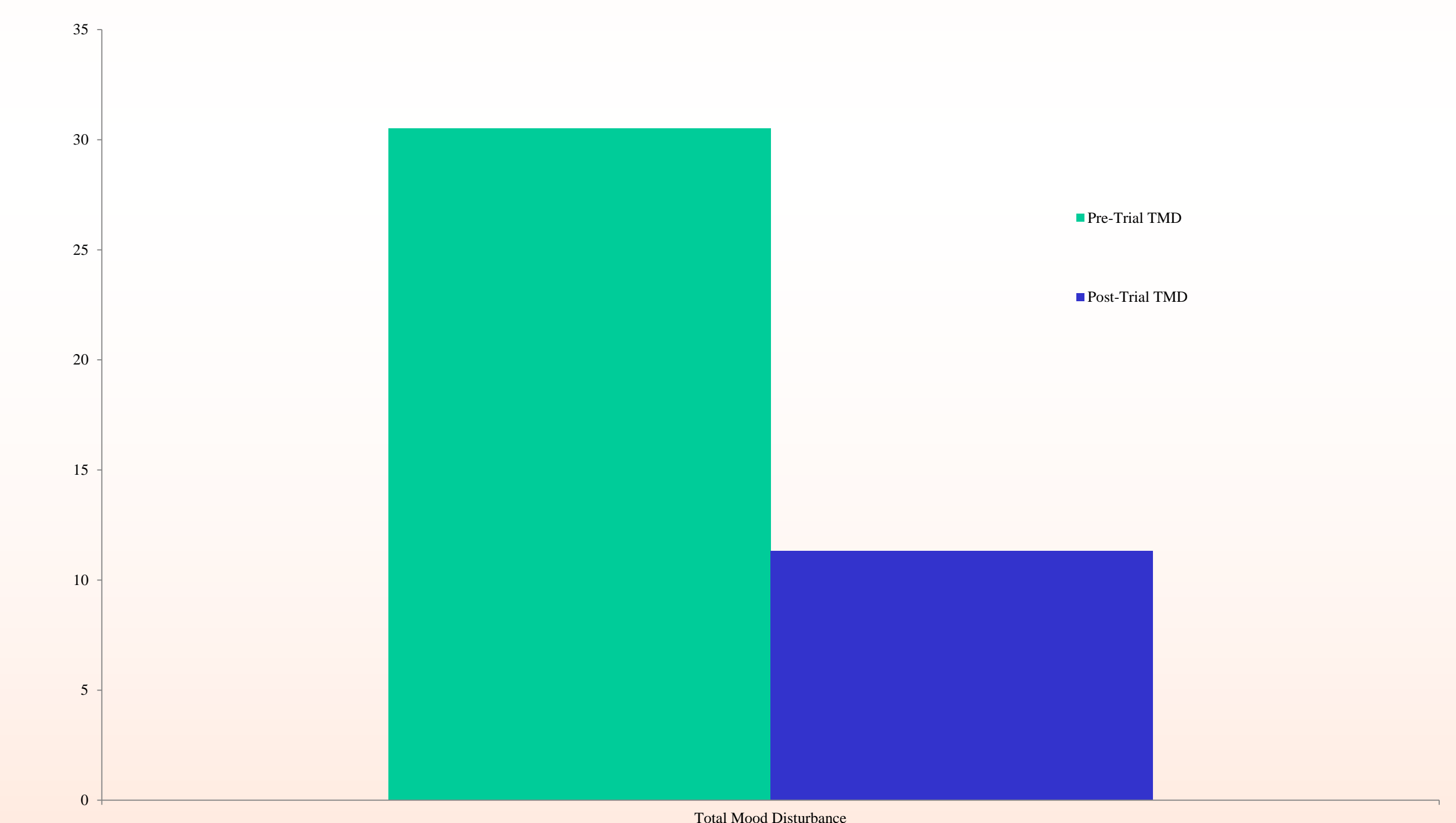
The survey taken is called a "Profile of Mood States" and the short form that was used has 30 questions. Before beginning the six week process, participants were asked to answer how they have been feeling during the past week and circled from 0 to 4 based on those feelings. After completing the six week process, the participants were asked to complete the survey again and circle 0 to 4 based on those feelings.

Results

The data collected including weight, resting heart rate, body mass index, and percent body fat all decreased between the pre collection and the post collection, but they did not decrease enough to be considered statistically significant. The participants weight was 158.8 ± 18.8 lb. pre and decreased to 157.3 ± 19.6 lb. post. Resting heart rates decreased from 88 ± 8.39 bpm pre to 79.3 ± 8.54 bpm. Body mass index data collected pre six week trial was 26.6 ± 3.96 and was 25.9 ± 4.17 post. Percent body fat values also decreased from $31.0 \pm 7.74\%$ pre to $30.4 \pm 7.51\%$ post.

Results (cont'd)

The results of this study did show a statistically significant difference with the data collected on the POMS questionnaires. Participants completed the questionnaire and a total mood disturbance score was calculated for each participant on both questionnaires completed. The total mood disturbance scores for the pre data was 30.50 ± 13.66 and decreased to 11.33 ± 16.00 in the post questionnaires (p value < 0.05). Only one participant's total mood disturbance score increased from pre to post. All other participants had a decrease in their total mood disturbance score of at least 6 points.



Conclusions

The results of this study show that there is a significant impact on mood and feelings after participating in a dance program. Though this study did not show a significant change in weight, body composition values, or resting heart rate, there were decreases in the majority of these values in almost all participants. This study can be used as an example for future studies completed on dance and how it can impact mood and body composition. Perhaps when done on a bigger scale or for a more extensive period of time, more positive effects can be proven.