



The Effects Of Yoga And Zumba® On Physical Fitness.

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Introduction

Zumba® fitness class as a mix of low intensity and high intensity moves is a well-known exercise class. Zumba® combines fitness elements that include cardiorespiratory, muscle conditioning, balance and flexibility. Due to this fact measures of aerobic fitness, such as oxygen consumption (VO_{2max}), should improve when participating in a Zumba® fitness class. Yoga on the other hand is seen as a calm form of exercise that is used for relaxation by targeting the mind and soul. Holding positions should increase muscle endurance and, along with the breathing techniques, should also fitness by increasing components like physical endurance, core strength and range of motion.

Purpose

To show the effects of Yoga and Zumba® on physical fitness.

Methods

Eight participants that included seven women and one man volunteered to participate in the study while attending the University of Texas at Arlington. Four of these subject participated in Yoga and the other four in Zumba®. Before the four week period of either participating in Yoga or Zumba® each subject came to the lab for testing. The subjects each had their body composition assessed by using the seven site skinfold technique (triceps, subscapular, chest, mid-axillary, abdomen, suprailliac, and thigh).

Height (inch)	21.5 SD	2.1
Weight (lbs)	22.3 SD	2.2
Age (yrs)	23.5 SD	3.9

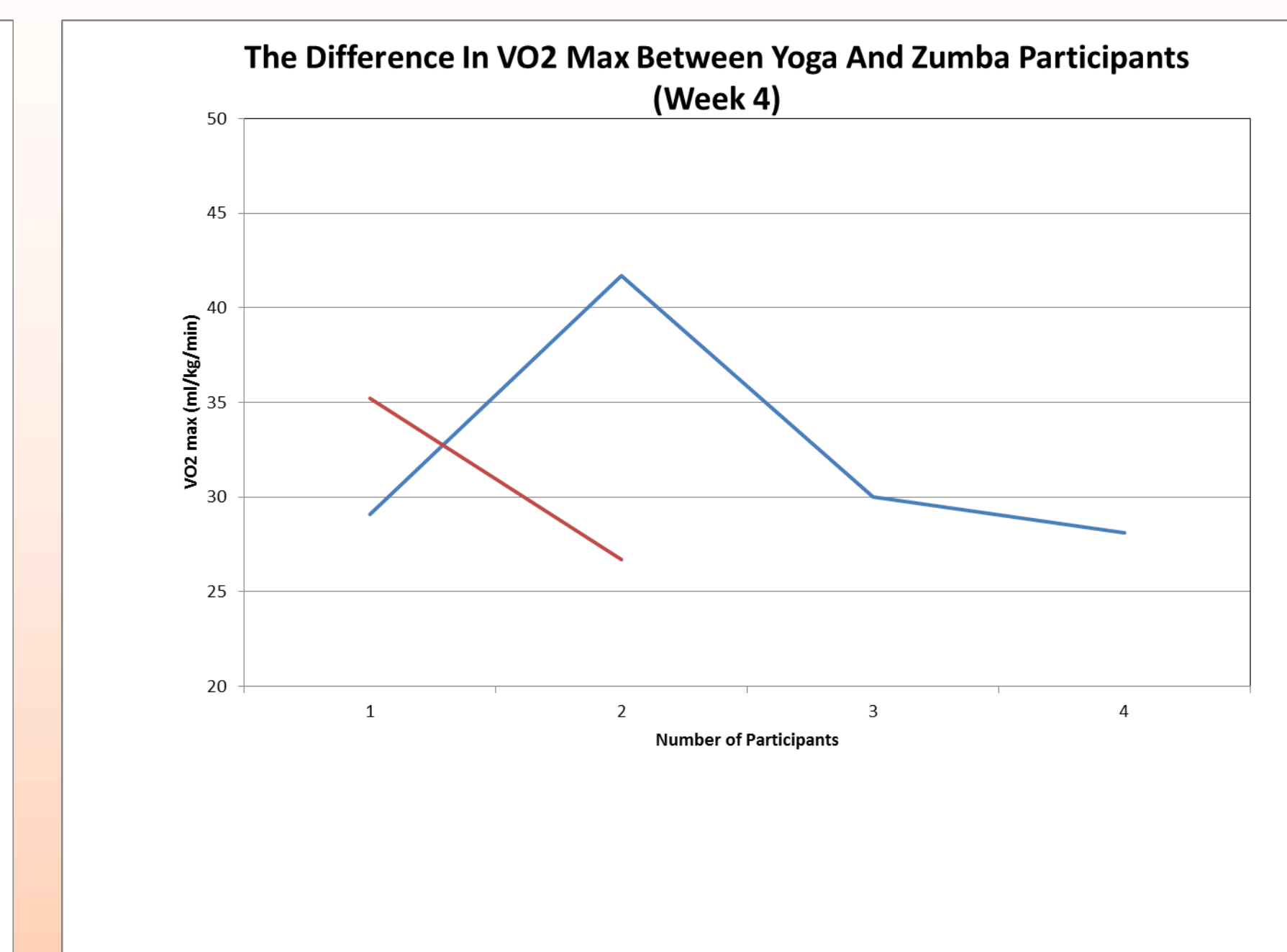
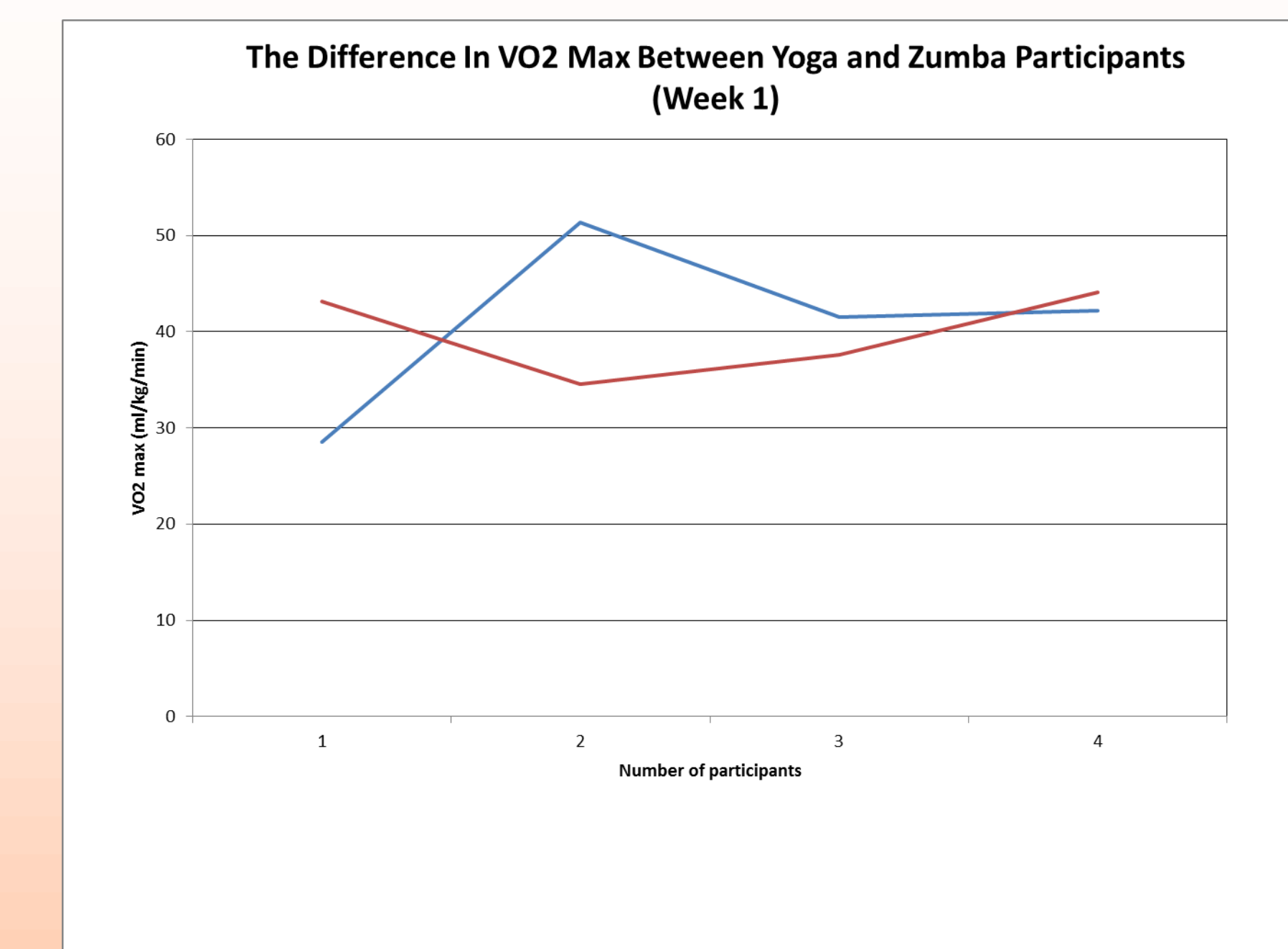
Methods (cont'd)

Then each subject was tested for maximal oxygen consumption (a measure of fitness), minute ventilation (a measure of the volume of air inhaled or exhaled from an individual's lungs) and max heart rate using the metabolic cart of the Parvo machine. The treadmill protocol increased in workload and speed elevation every three minutes until the subject could not go any further. Following the testing the participants continued either with the Zumba® class or Yoga class for 4 weeks and then returned to the lab for a repeat of the tests performed before.



Results

The following values were analyzed in Zumba® during the 4 weeks; MHR (170.25 ± 15.8 bpm), VO_{2max} (36.55 ± 8.74 ml/kg/min), BF% ($26.42 \pm 5.85\%$) and V_E (74.11 ± 28.74 L/min). The following values were analyzed in Yoga during the 4 weeks; MHR (169.33 ± 7.28 bpm), VO_{2max} (36.87 ± 6.38 ml/kg/min), BF% ($19.94 \pm 5.32\%$) and V_E (60.53 ± 20.15 L/min). The p values for MHR, VO_{2max} , BF% and V_E were: 0.23, 0.83, 0.22 and 0.50, respectively. There was no significant difference between the two exercise classes over the course of 4 weeks ($p > 0.05$) for any of the variables analyzed.



Conclusions

The results indicated that when the variables MHR, VO_{2max} , BF% and V_E analyzed before and after four weeks of participating in either Yoga or Zumba® did not result in significant changes in fitness levels.