



Study of Body Composition and Fitness between Women Yoga Practitioners and Walking Practitioners

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Abstract

The study aimed to compare body composition and fitness between women yoga practitioners and walking practitioners. By simple random sampling method, fifty (50) each woman regular yogic practitioners and regular walking practitioners were selected of the age from 20-25 years. For the study, BMI, four sides skin fold thickness (fat %), flexibility (bridge up test) and cardio-vascular efficiency (400m 12min run and walk) were variable for test. To analyse the collected data, mean, SD and t-test were used to signify at 0.05 level of significant. Outcomes recommend yoga group to have lower onsets of BMI and body fat and also high flexibility and cardio-vascular efficiency within the standards for their corresponding age.

Keywords: Yoga, Walking, Women, Flexibility, Cardio-Vascular Efficiency, BMI

Introduction

In the circumstances of up-to-date being, which deal numerous ranges of attention and prime to lethargy and obliquely fatness, body configuration examination is significant, since it offers treasured evidence on the relation amongst fat mass and active mass, which is continuously altering through the lifetime.

Physical fitness is clear as the ability to achieve day-to-day motion with energy and perceptiveness, deprived of unnecessary exhaustion although presence capable to gain regeneration while benefits and to encounter the unexpected traumas. Fitness is an overall word to designate the capability to accomplish physical effort. By rise in responsiveness of lifestyle ailments, numerous forms of exercises are accomplished to aim the health benefits. Some action that practices can conserve always, and is graceful and aerobic in nature, can be determined e.g., yoga, walking, climbing, cycling, aerobic dance or group exercises. Yoga is very greatly related level currently as it is equally a physical activity and real method of dealing stress. On the other hand walking has possible confident effects for physical health as well as spiritual and expressive well-being.

Aim: To compare body composition and fitness between women yoga practitioners and walking practitioners.

Method

Descriptive method was used to find the problem. By simple random sampling method, fifty (50) each woman regular yogic practitioners and regular walking practitioners were selected of the age from 20-25 years from Manipur. For the study, BMI, four sides skin fold thickness (fat %), flexibility (bridge up test) and cardio-vascular efficiency (400m 12min run and walk) were variable for test. To analyse the collected data, mean, SD and t-test were used to signify at 0.05 level of significant.

Results

The collected data were tabulated and analysed (Table 1) to represent the outcomes.

Women between yoga and walking practitioners of BMI highlighted the results that mean \pm SD as 21.95 ± 2.19 and 22.23 ± 2.34 respectively. The calculated t-value (0.729) was lesser than the table value at 0.05 level of significant. There was no significant difference of women BMI between regular yoga practitioners and regular walking practitioners.

Women between yoga and walking practitioners of Body fat highlighted the results that mean \pm SD as 16.91 ± 2.5 and 17.9 ± 2.78 respectively. The calculated t-value (0.31) was lesser than the table value at 0.05 level of significant. There was no significant difference of women Body fat between regular yoga practitioners and regular walking practitioners.

Women between yoga and walking practitioners of Bridge up highlighted the results that mean \pm SD as 12.53 ± 0.84 and 11.73 ± 0.88 respectively. The calculated t-value (0.017) was lesser than the table value at 0.05 level of significant. There was no significant difference of women bridge up between regular yoga practitioners and regular walking practitioners.

Women between yoga and walking practitioners of aerobic capacity highlighted the results that mean \pm SD as 1990 ± 323.6 and 1818.3 ± 319.52 respectively. The calculated t-value (0.155) was lesser than the table value at 0.05 level of significant. There was no significant difference of women aerobic capacity between regular yoga practitioners and regular walking practitioners.

Table 1: Value representing women between yoga and walking practitioners

Variables	Yoga practitioner	Walking practitioner	t-value
	Mean \pm SD	Mean \pm SD	
BMI	21.95 ± 2.19	22.23 ± 2.34	0.729
Body fat	16.91 ± 2.5	17.9 ± 2.78	0.31
Bridge up	12.53 ± 0.84	11.73 ± 0.88	0.017
Aerobic capacity	1990 ± 323.6	1818.3 ± 319.52	0.155

*0.05 level of significant

Discussion and Conclusions

Results from the study presented those women practicing yoga in daily life to be in better fitness matched to those women practicing walking activity. Outcomes recommend yoga group to have lower onsets of BMI and body fat and also high flexibility and cardio-vascular efficiency within the standards for their corresponding age. Furthermore, between tested yoga participants no woman stated hypertension or heart problems, in difference to the group of women not connected to yoga, wherever these complications happened.

Thus, we would similar to demand to the contemporary people to approve Yoga as a quantity of their fast-pacing routine to advance welfares not merely in flexibility and body composition nonetheless too progress in Cardio-vascular fitness.

Bibliography

Ann LS, D, Kristin AL, Sara JF, Marian LK, Panteleimon E. Exercise, fitness, and neurocognitive function in older adults: The “Selective Improvement” and “Cardiovascular Fitness. *Annals of Behavioral Medicine*, 2008; 36(3): 280–291.

Balaji PA, Varne SR. Physiological effects of brisk walking, yoga and non-walking on metabolic parameters and anthropometry among type 2 diabetic patients. *International Journal of Physiology, Nutrition and Physical Education*, 2017; 2(1): 99-102.

Bera TK, Rajapurkar MV. Body composition, cardiovascular endurance and anaerobic power of yogic practitioner. *Indian Journal of Physiology and Pharmacology*, 1993; 37: 225–228.

Cengiz A, Yaman M, Yaman C. Yoga, anxiety, and some cardiovascular risk factors in women. *International Journal of Consumer Studies*, 2015; 3(2): 105-112.

Chauhan A, Semwal DK, Mishra SP, Semwal RB. Yoga practice improves the body mass index and blood pressure: A randomized controlled trial. *International Journal of Yoga*, 2017; 10: 103-6.

Evans WJ. Effects of exercise on body composition and functional capacity of the elderly. *Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 1995; 50: 147-50.

Gawrys W, Ślęzak A. Yoga practitioners body composition and health related indicators. *Physical Activity Review*, 2020; 8(1): 9-15.

Govindaraj R, Karmani S, Varambally S, Gangadhar BN. Yoga and physical exercise - a review and comparison. *International Review of Psychiatry*, 2016; 28(3): 242-253.

Kanniyan A. Isolated and combined effect of brisk walking and yoga training on the physiological parameters of sedentary males. *Journal of Human Sport & Exercise*, 2015; 10(2): S666-S671.

Kerstin K, Ahmed AK, Jasmin O, Gert R, Iyengar HB. Yoga increases cardiac parasympathetic nervous modulation among healthy yoga practitioners. *Evidence-Based Complementary and Alternative Medicine*, 2007; 4(4): 511–517.

Kumar K. Effect of yogic intervention on general body weight of the subjects: A study report. *International Journal of Yoga and Allied Sciences*, 2015; 4(1): 11-14.

Manna I. Effects of yoga training on body composition, cardiovascular and biochemical parameters in healthy adult male volunteers. *Al Ameen Journal of Medical Sciences*, 2018; 10(3): 156–2017.

Na Nongkhai MP, Yamprasert R, Punsawad C. Effects of continuous yoga on body composition in obese adolescents. *Evidence-Based Complementary and Alternative Medicine*, 2021.

Pal R, Saha M. Role of yogic exercise on physical health: A review. *Indian Journal of Applied Research*, 2013; 3(4): 34-36.

Patil SG, Patil SS, Aithala MA, Das KK. Comparison of yoga and walking-exercise on cardiac time intervals as a measure of cardiac function in elderly with increased pulse pressure. *Indian Heart Journal*, 2017; 69: 485–490.

Pooja M A, Aryaa B, Murtaza A. Comparison of aerobic capacity and current levels of physical activity in yoga practitioners and healthy non-exercising individuals. *Journal of Yoga and Physiotherapy*, 2018; 6(3): 42-46.

Prasad KVV, Ramana YV, Raju PS, Reddy MV, Murthy KJR. Energy cost and physiological efficiency in male yoga practitioners. *Journal of Exercise Physiology online*, 2001; 4(3): 38-44.

Prasannakumar J, Kole S, Kumbar SS, and Padmavathy KM. Anthropometric and general health measures in elderly exercisers and yoga practitioners: A comparative study. *Research and Reviews: Journal of Medical and Health Sciences*, 2014; 3(2): 100-107.

Telles S, Naveen VK, Balkrishna A, Kumar S. Short term health impact of a yoga and diet change program on obesity. *Medical Science Monitor*, 2010; 16(1): CR35-40.

Vizbaraitė D, Arlauskaitė E, Ūsė V, Aleksandravičienė R. Lifestyle peculiarities of yoga practitioners and non-practitioners. *Baltic Journal of Sport & Health Sciences*, 2015; 3(98): 58–65.