







Category: Health Sciences and Medicine

ORIGINAL

Influence of yoga practices on balance and co-ordination among pubertal tribal students

Influencia de las prácticas de yoga en el equilibrio y la coordinación de estudiantes tribales púberes

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ABSTRACT

This study's goal was to ascertain how yoga practices affected the balance and collaboration of ethical pupils in their pubertal times. Thirty womanish scholars from Kalpetta, Wayanad, Kerala, India's Government Advanced Secondary academy were chosen as subjects to negotiate the study's pretensions. They were between the periods of 12 and 17. Two equal groups of fifteen actors each were aimlessly allocated to the named subjects. Group II served as the control while Group I rehearsed yoga. For twelve weeks, the exercise plan be conducted every six days of the week. The actors' balance along with collaboration were assessed both ahead and after the training session. The power simple collaboration test was used to measure collaboration, while the balance ray test was used to estimate balance. The independent "T" test was the statistical system employed in this disquisition. After rehearsing yoga for twelve weeks, the study's findings show that the pubertal ethnical scholars' balance and collaboration significantly bettered.

Keywords: Yoga Practices; Balance and Co-ordination.

RESUMEN

El objetivo de este estudio era averiguar cómo afectaban las prácticas de yoga al equilibrio y la colaboración de las alumnas éticas en su época de pubertad. Se eligieron como sujetos para negociar las pretensiones del estudio a treinta alumnas de Kalpetta, Wayanad, Kerala, academia gubernamental de secundaria avanzada de la India. Tenían entre 12 y 17 años. A los sujetos nombrados se les asignaron dos grupos iguales de quince actores cada uno. El Grupo II sirvió de control, mientras que el Grupo I ensayó yoga. Durante doce semanas, el plan de ejercicios se llevó a cabo cada seis días de la semana. Se evaluó el equilibrio y la colaboración de los actores antes y después de la sesión de entrenamiento. Para medir la colaboración se utilizó la prueba de colaboración simple, mientras que para estimar el equilibrio se empleó la prueba del rayo de equilibrio. La prueba "T" independiente fue el sistema estadístico empleado en esta disquisición. Después de ensayar yoga durante doce semanas, los resultados del estudio muestran que el equilibrio y la colaboración de los alumnos étnicos púberes mejoraron significativamente.

Palabras clave: Prácticas de Yoga; Equilibrio y Coordinación.

INTRODUCTION

During the turbulent stage of nonage, when the brain's neurons chemical circuits are being established and the body and brain are producing estrogen and progesterone that make adolescent girls wealthier, the first stage of significant hormonal shifts takes place.⁽¹⁾ There will be a shift in position. The amygdale, a limbic system structure engaged in emotions, receives hormonal energy from hormonal oscillations during nonage, which might result in impulsive gestation.^(2,3) Hormone inflows can also result in increased energy, emotional fluctuations, skin issues, and new interests in sexuality, social interaction, and communication. Girls become less sensitive during this time and often don't know how to handle other people's sexual interest.^(4,5)

According to Carol Krukoff, a yoga therapist at Duke Integrative Medicine in Durham, North Carolina, teens who practise yoga can feel more at ease with their bodies."Practicing poses, breathing techniques, and introspection can help restore emotional equilibrium, enabling teenagers to genuinely hear what's on their hearts and form opinions that are consistent with their unique values".⁽⁶⁾

Yoga has great benefits for children. Grown-ups and teenagers likewise. Due to the numerous benefits of yoga, the practice is fleetly getting popular among middle and high academy scholars. Yoga preceptors help teen yoga scholars overcome better and ameliorate their physical, internal, and emotional health.^(7,8)

Yoga helps with balance, attention, movement, and collaboration. Rather than fastening on acts and stillness, balance is achieved by learning movement, transitions, and developing strength. Balance can be learned by fastening on collaboration, strength, and mindfulness.⁽⁹⁾

METHODOLOGY

To fulfil the study's objectives, 30 scholars of a government high academy in Kalpetta, Wayanad, Kerala, India were named as subjects. Their periods were between 12 and 17 times. The named subjects were aimlessly divided into two equal groups of 15 subjects each. Group I performed yoga exercises and Group II served as a control. He completed the 12-week training programme six days a week. Before and after training, subjects' balance and collaboration were tested. Balance was assessed by a balance ray test and collaboration was measured by a simple force collaboration test.

Training program

The experimental groups rehearsed yoga for twelve weeks, three days a week during the training period. This training programme featured asanas, surya namaskar, pranayama, and kriyas, in that order, as yoga practices. The training course was held in the morning sessions starting at six o' clock.

Statistical procedure

By using an independent "T" test, the information gathered based on a few dependent variables on the experimental and control groups was statistically examined to see whether there was a significant difference. The significance position for each case's degree of confidence was set at 0,05.

RESULTS

Table 1 presents the statistical analysis of the balance and collaboration pre- and post-test data from the experimental and control groups using the dependent "T" test.

Balance					
Yogic Practices	Pre-test	4,032	0,411	0,394	4,241*
	Post-test	4,426	0,422		
Control Group	Pre-test	3,991	0,431	0,022	0,581
	Post-test	4,013	0,423		
Co-ordination					
Yogic Practices	Pre-Test	12,395	9,351	0,818	5,213*
	Post Test	13,213	9,361		
Control Group	Pre-test	12,345	9,395	0,037	0,962
	Post-test	12,382	9,383		

*For a df of 14, a required table value of 2,15 is required for significance at the 0,05 level of confidence.
* Significant at the ,05.

For that degrees of freedom 14 at the 0,05 position of confidence, the reckoned" t" rate value of 4,241 of balance was further than the necessary table value of 2,15. therefore, it was determined that the subjects balance had vastly bettered as a result of twelve weeks of yoga practice.

For the 14 degrees of freedom, the performing "t" rate value of 5,213 of collaboration was advanced than the necessary table value of 2,15 at the 0,05 position of confidence. thus, it was determined that the subjects collaboration had greatly bettered as a result of twelve weeks of yoga practice.

DISCUSSION

By doing the yoga conditioning, the individualities were suitable to show advancements in their collaboration and balance. Mentally challenged individualities who rehearsed yoga saw advancements in their collaboration and balance. After doing yoga, actors in their pubertal times had a partial restoration of their functional capacity.

CONCLUSION

It was determined that yoga practices had a substantial impact on the dependent variables that were chosen, similar as the balance and collaboration of pubertal ethnical pupils.

REFERENCES

1. Gribble PA, Bain KA, Davidson CD, Hoch MC, Kosik KB. Yoga as a balance intervention for middle-age and older adults with history of lateral ankle sprain: An exploratory study. *Journal of Bodywork and Movement Therapies*. 2023 Jul 1; 35: 190-195.
2. Hedbom T, Liljeroos M, Thylén I, Orwelius L, Jaarsma T, Strömberg A. Expectations of Tele-Yoga in Persons with Long-Term Illness: Qualitative Content Analysis. *Journal of Medical Internet Research*. 2023 Sep 13; 25: e36808. <https://doi.org/10.2196/36808>
3. Karamacoska D, Tan T, Mathersul DC, Sabag A, De Manincor M, Chang D, Steiner-Lim GZ. A systematic review of the health effects of yoga for people with mild cognitive impairment and dementia. *BMC geriatrics*. 2023 Jan 20; 23(1): 37. <https://doi.org/10.1186/s12877-023-03732-5>
4. Ko KY, Kwok ZC, Chan HY. Effects of yoga on physical and psychological health among community-dwelling older adults: A systematic review and meta-analysis. *International Journal of Older People Nursing*. 2023 Sep; 18(5): e12562. <https://doi.org/10.1111/opn.12562>
5. Lermanda CR, Martínez NL, Villarroel FH, Tapia CA, Álvarez NG. Effects of school-based physical exercise programs to improve enjoyment of physical activity, motor development, and physical fitness in children and adolescents with developmental coordination disorder: A systematic review. *Challenges: new trends in physical education, sports and recreation*. 2023; (47): 302-310.
6. Luo X, Huang X. The effects of a yoga intervention on balance and flexibility in female college students during COVID-19: A randomized controlled trial. *Plos one*. 2023 Mar 22; 18(3): e0282260. <https://doi.org/10.1371/journal.pone.0282260>
7. Mishra P, Greenfield SM, Harris T, Hamer M, Lewis SA, Singh K, Nair R, Mukherjee S, Tandon N, Kinra S, Manjunath NK, Prabhakaran D, Chattopadhyay K. Yoga Programme for Type 2 Diabetes Prevention (YOGA-DP): A Qualitative Study Exploring the Trial Team's Facilitators and Challenges in Conducting a Feasibility Trial in India. *Diabetes Therapy*. 2023 Aug 10; 14(10): 1695-1709.
8. Mutnawasitoh AR, Romadhoni DL. Balance Twelve Exercise with Hatha Yoga Maximizes Dynamic Balance and Lowers Elderly Anxiety. *Gaster*. 2023 Feb 1; 21(1): 55-65.
9. Phung DX, Nguyen VQ, Tran DQ, Duong TN. The Effects of 12 Weeks Yoga Training on 4-5-Year-Old Preschoolers' Fitness Components. *Annals of Applied Sport Science*. 2023 Mar; 11(2); 1-11.

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All Authors contributed equally.