

COMPARISON OF POSITIVE BREATH HOLDING CAPACITY BETWEEN TENNIS AND BADMINTON PLAYERS

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ABSTRACT

The purpose of the study was to compare positive breath holding capacity between Tennis and Badminton Players of BHU varanasi. This study was conducted on 40 subjects, 20 from each Game (Tennis & Badminton), the age ranged from 18-25 years. Positive breath holding was selected as a variable. The t-test was used at 0.05 level of significance. no significant difference between tennis and badminton players in comparison to positive breath holding capacity.

Keywords: positive breath holding.

INTRODUCTION

When breathing is withheld and/or high chest, breathing muscles are constantly being over-activated...the head is pulled forward, and the shoulders are hunched up and pulled forward...and a common observation is increased sway in the lower back, and the pelvis is tilted forward, simultaneously as the back is overextended, resulting in a misalignment of the entire body. This may cause pain in the adjacent muscles of the back and pelvis. The possibility for free and deep effortless breathing is impossible. Breathing needs to be developed so that the "feel" is present at all times.

Many do not think they hold their breath but on closer observation discover that, they do. The speed bump is largely responsible for this. It blocks the breathing cycle and causes shallow breathing in many situations (stress included) but we are often unaware that this is occurring. Attempts at effortful deep concentration, or focus can cause it; uncertainty about a course of action often equals hesitancy in action and breathing; when attempting a new task one may breath-hold until they have enough time to master it with ease, PLUS the mastery may never occur nor the good breathing return. Many simple day to day actions can invite breath holding like bending to tie your shoe; fastening your bra; pulling open a stuck door; trimming your beard; bending to get something from the lower shelf of the refrigerator; reaching up to pick a piece of fruit from a tree branch, sitting at a computer for hours. It is not breath holding per se that is the problem. It is excessive breath holding including many so called helpful breathing exercises. Breath holding, if excessive, can invite episodes

of stopping breathing during sleep. Strangely enough sometimes it helps with that but mostly not.

"Holding our breath during the conscious state is no different from the problem of sleep apnea with episodes of not breathing--except for the fact that the highest consumption of oxygen occurs during REM sleep as we noted above and sleep time is therefore the time when we can least afford a cessation of breathing.

OBJECTIVE OF THE STUDY

The purpose of the study was to compare positive breath holding capacity between Tennis and Badminton Players.

SELECTION OF SUBJECT

This study was conducted on 40 subjects, 20 from each Game (Tennis and Badminton), the age ranged from 18-25 years and were randomly selected from the BHU Varanasi. **CRITERION MEASURES**

Positive Breath Holding Capacity was measured during holding of the breath after full inhalation and the result was recorded in seconds.

STATISTICAL ANALYSIS

To compare positive breath holding capacity between Tennis and Badminton Players Independent 't' test was used. The level of significance was set at 0.05.

RESULT AND DISCUSSION

Mean and Standard deviation of positive breath holding capacity between Tennis and Badminton players are given in table-1.

Table-1
Mean and Standard Deviation of positive breath holding capacity between Tennis and Badminton players

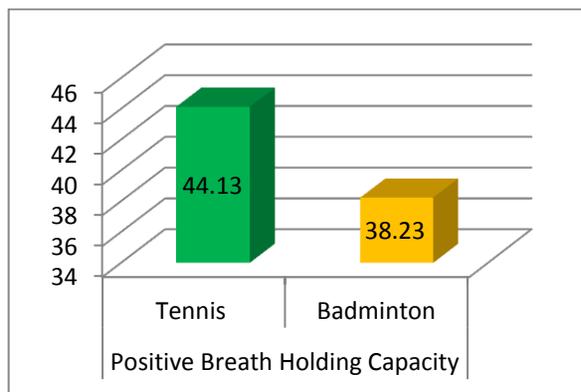
Variable	Game	N	Mean	S.D	t-value
Positive Breath Holding capacity	Tennis	20	44.13	1.43	1.88
	Badminton	20	38.23	1.12	

* Significant, $t_{0.05}(38) = 2.024$

From table-1 it is inferred that there was difference in positive breath holding there was difference in Tennis players and Badminton players. Mean of Tennis players (M=44.13) was better than female Badminton players (M=38.23). But calculated value (1.88) is lower than the tabulated value (2.02) .so both players similar in positive breath holding capacity.

Graphical representation of positive breath holding capacity between tennis and badminton players

Figure-1



CONCLUSION

On the basis of result it may be concluded that no significant difference between tennis and badminton players in comparison to positive breath holding capacity.

REFERENCES

Arnold J.A, Brown F, Micheli R.P. (1980). Anatomical and physiologic characteristics to predict football ability. *Am. J.Sports Med.*,

Astrand, P.O. and Rodahl, K. (1970). Text book of Work Physiology, McGraw Hill Book Company, New York.

Clark, H. H. and Clark, D. H. (1975), *Research Process in Physical Education*. Englewood cliffs, New Jersey: Prentice Hall, Inc.

Dubey, S., & Singh, M. K. (2013). Effect of Pranayama on Selected Physiological Variables of Male Physical Education Students. *Indian Streams Research Journal*, (XI, December - 2013), 3.

Dubey, S., & Singh, M. K. (2013). Effect of Suryanamaskar on Selected Physiological Variables on Active Sportsman. *Golden research thoughts*, (VI, December - 2013), 2.

Garret H. E. (1981). *Statistics in psychology and education*. Bombay: Feffer and Simons Ltd.

Gay, L. R. (2000). *Educational Research*. U. S. A: Prentice Hall.

Ghosh, Asok Kumar_(2004). Anaerobic Threshold: Its Concept and Role in Endurance Sport. *Malaysian Journal of Medical Sciences*. 11(1), 24-36.

Inese Pontaga & Jānis Žīdens (2009). Estimation of body mass index in team sports athletes. *Lase Journal of Sport Science*. 2 (2), 33-44.

Kemi, O.J. and Wisleff U. (2010) High-Intensity Aerobic Exercise Training improves the heart in health and disease. *Journal of Cardiopulmonary Rehabilitation & Prevention* 30, 2-11.

Kuno Hottenrott et al. (2012) Effects of high intensity training and continuous endurance training on aerobic capacity and body composition in recreationally active runners, *Journal of Sports Science and Medicine* 11, 483-488

Singer, R.N. (1988), Psychological testing: what value to coaches and athletes? *International Journal of Sport Psychology*. 19.

Singh, H. (1991). *Science of sports training*. D.V.S. Publications, New Delhi-110019, p- 147

Thomas, J. R., Nelson, J. k. & Silverman, S. J. (1985). *Research Methods in physical activities*. U.S.A: Human Kinetics.

Verma J. P. (2000). *Sports statistics*. Gwalior: Venus Publications.