

INTERNATIONAL RESEARCH JOURNAL OF MANAGEMENT SOCIOLOGY & HUMANITIES



ISSN 2277 – 9809 (online)

ISSN 2348 - 9359 (Print)

An Internationally Indexed Peer Reviewed & Refereed Journal

www.IRJMSH.com
www.isarasolutions.com

Published by iSaRa Solutions

THE EFFECT OF GINSENG AND DIFFERENT TYPE OF EXERCISES ON STRESS

Dr. Anshika Tandon

Lecturer of Physical Education, NCTE

Abstract

The purpose of the study was to assess the Effect of Ginseng and different type of Exercises on Stress. The data was collected from IGIPSS(Delhi Univ.). Initially a Cohen-Perceived Stress questionnaire was administered on 250-students(Age 18-21years) out of which 75-subjects who indicated stress at mid-moderate level were selected and were divided into five different Experimental Groups through sequential random sampling. The Experimental-Design implemented for collection of the data was Repeated Measure Design in which score was taken every 2nd week for all the variables for 6-weeks. The criterion measure used was Cohen-Perceived Stress Questionnaire(Stress), Statistics adapted was Descriptive-Statistics, Repeated-measures ANOVA, Trend-Analysis and Post-Hoc. The results have revealed a significant difference in the post-test values of stress for all the experimental groups except the control group. The analysis has shown significant difference among all the groups. The yogic group has been significantly superior to the other groups. The descriptive analysis had also exhibited that the most significant improvement has been seen in the Yogic Group followed by Exercise & Ginseng Group, Ginseng and Exercise.

Keywords: ginseng, stress, different type of exercise, yoga, red korean ginseng, experimental design

INTRODUCTION

Through ages, physical activity has been an indispensable part of our societies, conventions and everyday work. From seeking food to moving from one place to another everything includes physical movement or exercise. Sound mind live in sound bodies. Physical exercise is related with increment in rate and profundity to build ventilation of lungs and an increase in stroke volume and heart rate to expand the cardiovascular yield. (**Micheli.J, Harries, Williams, Stanish, 1999**)

The Health and wellbeing of the individual exclusively rely on different parts which incorporate physical, mental, social, passionate, professional, social, vocational, intellectual wellbeing. It includes the movement of every last muscle in our body. This fortifies the body and advances great health. Here are a portion of the reasons why physical exercise is essential in our regular schedule

“ Herbal medicine by being an integral part for nature, is itself an integral part of Human Life – in so far as we allow it to be- is accessible to anyone who wishes to use it” (**J. Hoad**). Our body needs certain fundamental dietary supplements to meet the ordinary requests of life and Herbs furnish us with the greater part of the essential segments for a sound life. The games business is one of the main markets for supplements to improve execution. A considerable lot of these supplements, in any case, can have unfavorable reactions, and can really trade off the trustworthiness of an athletic execution as opposed to enhance it. "Adaptogens" are supplements

for sound, dynamic competitors. They advance wellbeing, improve opposition, enable you to adjust to pressure and help in snappier recuperation. **Ginseng**, one of the more mainstream herbs in America, is touted for its capacity to build essentialness and give against pressure benefits. The base of this plant contains dynamic mixes (ginsenosides) that are known to diminish pressure, improve the safe framework, assuage mental and physical exhaustion and help standardize body frameworks. Panax ginseng establishes have been utilized as a part of customary Chinese solution for their critical restorative characteristics. It has been ingested by numerous competitors and games members of the world keeping in mind the end goal to enhance Stamina and to encourage recuperation from injuries. (**Kang. HO Youl, Heidi K, et.al, 2002**) Furthermore, the non-ginsenoside constituents of ginseng additionally apply pharmacological impacts. Ginsenosides are amphiphilic in nature and can move toward becoming intercalated in the film condition. Panax Ginseng is a stimulant. (**Chen CF, Chiou WF, Zhang JT**) Red Korean ginseng follow up on Central Nervous System, Cardiovascular System, Endocrine discharge, advance invulnerable framework and have impact on hostile to maturing and diminishing stress. (**C. Lui, 1992**)

Stress is a focal idea for understanding both life and development. All living thing face dangers to homeostasis, which must be met with versatile reactions. Our future as people relies upon our capacity to adjust to strong stressors. Stress-related results likewise fluctuate as indicated by individual and natural components. Individual hazard factors for the advancement of gloom, uneasiness, or PTSD after a genuine life occasion, catastrophe, or injury incorporate earlier mental history, neuroticism, female sex, and other socio demographic factors (**Green 1996, McNally 2003, Patton et al. 2003**). Whenever stress and tension raise without a way to adapt to the pressure, they regularly are connected to numerous troublesome mental and physiological conditions. Following the view of an intense unpleasant occasion, there is a course of changes in the anxious, cardiovascular, endocrine, and safe frameworks. These progressions constitute the pressure reaction and are by and large versatile, at any rate for the time being (**Selye1956**). The intense pressure reaction can end up maladaptive in the event that it is over and again or constantly initiated (**Selye1956**).

OBJECTIVES OF THE STUDY

- To assess the effect of yogic treatment on Stress.
- To assess the effect of exercise on Stress.
- To assess the effect of Ginseng on Stress.
- To assess the effect of combination of Ginseng and exercise on Stress.
- To compare and find the superior training program on Stress.
- To compare different training programs.

DELIMITATIONS OF THE STUDY

The present study has been confined to the following delimitations:

- The study was delimited to those students who had shown the stress level between mid to moderate category.
- The study was delimited to 75 subjects. (i.e. 15 subjects in each experimental group.)
- The study was delimited to 6 weeks training program.
- The study was delimited to students of I.G.I.P.E.S.S.
- The study was delimited to the use of Red Korean Ginseng (Panax Ginseng).

LIMITATIONS OF THE STUDY

Variety of factors may have hampered the psychological testing. Therefore, following factors have been taken into consideration:

- The individual motivational level to participate in the study was taken as a limitation for the study.
- Physical and physiological difference of a subject was a limited factor.
- Personal habits of the subject were also taken as a limitation.

SELECTION OF SUBJECTS

Subjects for Data accumulation were drawn from Indira Gandhi Institute of Physical Education and Sports Sciences (I. G. I. P. E. S. S) University of Delhi. At first a Stress test (Cohen Perceived Stress TESS Questionnaire, 1983) was administered on 250 understudies. The sample comprises of 75 male and female undergraduate who have shown the stress level of mid (Underwent a pre test) with least inter university level participation were chosen for the investigation. The age of the subjects ranged from 18-21 Years, the mean age of the subjects was 19.22 Years. The chosen subjects were randomly divided into five (15 Students in each group) distinctive exploratory gatherings. The Sequential random sampling was utilized to arbitrarily separate the subjects in various analysis groups. The process of selection of the subjects are given in Table No.3.1.

- **Group A:** Underwent a **Yogic Program** for six Weeks (Details of the Program Provided in table no.3.3)
- **Group B:** Underwent a Six weeks controlled **Aerobics program** prepared by the researcher herself. (Details of the Program Provided in table no.3.4)
- **Group C:** Were given one **Red Korean Ginseng Tablet** daily for six weeks.
- **Group D:** Underwent with a combination program of **Aerobics and Red Korean Ginseng Tablet** for six weeks
- **Group E:** Considered as the **controlled group** (Deprived of any Yogic program, Exercise program and Red Korean Ginseng tablet)

The test configuration doled out for the present examination was Repeated measures Design - The subjects were again haphazardly doled out to either the experimental group or the control group. The outline used to haphazardly relegate the subjects was Sequential method for Random Sampling. The both groups were pretested for the independent variable. The independent group gets the treatment and both the groups were post-tested to examine the effects of manipulating the independent variable on the dependent variable. 75 participants (Fifteen each) were arbitrarily allotted to Yoga Group, Aerobics group, Ginseng Tablet group, combined Ginseng Tablet and Aerobics group and Control Group. The analysis was for a time of 06 weeks. Every one of the members who were selected in the investigation have finished the examination. Subjects wrote about an assortment of results at pattern and toward the finish of the 06 weeks

- The questionnaire developed by Cohen was used for assessing the level of stress of the selected subjects.

Result and Analysis

The Statistical Analysis of the study was done as per the motivation behind the examination, firstly the data obtained from the administration of all the test items were subjected to descriptive analysis, so as to have a thought regarding the attributes of all the test things. Furthermore, Repeated Measures ANOVA test was utilized to discover the distinction in the chose scores of the mental parameters for the acquired information after every two weeks. From that point, the distinction in the re-trial of all the chose parameters was obtained by utilizing one-way ANOVA.

Descriptive analysis of Stress for the collected data for pre test and after every 2nd Week for the selected groups

Group		Mean	Std. Deviation
Stress (2Week)	Yogic Group	12.87	0.45
	Exercise Group	12.98	0.78
	Ginseng Group	13.02	0.62
	Exercise and Ginseng Group	13.07	0.38
	Control Group	12.77	0.49
	Total	12.88	0.67
Stress (2Week)	Yogic Group	13.86	0.65
	Exercise Group	13.31	0.53
	Ginseng Group	13.03	0.42
	Exercise and Ginseng Group	12.72	0.45
	Control Group	14.49	0.85
	Total	13.08	0.76
(4Week)	Yogic Group	13.31	0.70
	Exercise Group	13.02	0.29
	Ginseng Group	12.81	0.56
	Exercise and Ginseng Group	13.03	0.52
	Control Group	14.37	0.88
	Total	13.21	0.90
(6Week)	Yogic Group	13.69	0.70
	Exercise Group	12.77	0.33
	Ginseng Group	12.44	0.29
	Exercise and Ginseng Group	12.21	0.40
	Control Group	14.65	0.66
	Total	13.55	0.84

Table No. 2: Mauchly's Test of Sphericity for the variable Stress
Epsilon^b

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Greenhouse-Geisser
Stress	0.976	1.685	2	0.431	0.976

Table No.2 clearly depicts the values of Mauchly's test of Sphericity for the variable Stress, which shows that Mauchly's test $\chi^2 = 1.685$, $p = 0.431$, which indicates that there is no violation of sphericity.

Table No. 3: Post Hoc Analysis among the Experimental groups for the variable Stress

					95% Confidence Interval	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Yogic Group	Exercise Group	1.742 [*]	0.18	0.000	0.38	1.10
	Ginseng Group	1.191 [*]	0.18	0.000	0.83	1.55
	Exercise and Ginseng Group	1.298 [*]	0.18	0.000	0.93	1.65
	Control Group	1.780 [*]	0.18	0.000	1.41	2.14
					95% Confidence Interval	
(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Exercise Group	Yogic Group	1.742 [*]	0.18	0.000	-1.10	-0.38
	Ginseng Group	1.449 [*]	0.18	0.016	0.08	0.81
	Exercise and Ginseng Group	1.556 [*]	0.18	0.003	0.19	0.91
	Control Group	1.038 [*]	0.18	0.000	0.67	1.39
Ginseng Group	Yogic Group	1.191 [*]	0.18	0.000	-1.55	-0.83
	Exercise Group	1.449 [*]	0.18	0.016	-0.81	-0.08
	Exercise and Ginseng Group	1.207 [*]	0.18	0.002	-0.25	0.46
	Control Group	1.589 [*]	0.18	0.002	0.22	0.95
Exercise and Ginseng Group	Yogic Group	1.298 [*]	0.18	0.000	-1.65	-0.93
	Exercise Group	1.556 [*]	0.18	0.003	-0.91	-0.19
	Ginseng Group	1.207 [*]	0.18	0.002	-0.46	0.25
	Control Group	1.482 [*]	0.18	0.010	0.12	0.84
	Yogic Group	1.780 [*]	0.18	0.000	-2.14	-1.41

Control Group	Exercise Group	1.038*	0.18	0.000	-1.39	-0.67
	Ginseng Group	1.589*	0.18	0.002	-0.95	-0.22
	Exercise and Ginseng Group	1.482*	0.18	0.010	-0.84	-0.12

Table No. 3 clearly depicts the values for Post hoc analysis among the selected experimental groups, which shows that a significant difference was found among the selected groups for the variable Reaction Time left, as the values for all the experimental groups are found to be significant at 0.05 level.

CONCLUSION

No significant difference was found in the pre test values of the selected experimental groups for the variable Stress as the value is found to be 0.408, which is not significant 0.05 level and a significant difference has been found among the post test values of experimental groups for the variable Stress as the Sphericity assumed value is found to be 4.15 which is significant at 0.05 level. The results have shown that the ginseng extract may play beneficial roles in athlete's physical performance improvement, especially during regular consumption in terms of level of stress; According to the received data the course of "Ginseng" improves cerebral hemodynamic, resistance to training loads among the professional archers (**Riziq Allah Gaowgzeh, 2014**) another study revealed significant reduction in stress and significant increase in self-esteem and emotional intelligence. Yoga had positive effect on stress and self-esteem and emotional intelligence. It is suggested that yoga is as a public, effective and suitable sport and can lead to positive mental and physical health (**Hamid Dehghanfar, 2014**).

The results have clearly indicated the impact of the respective trainings being given to the groups in the improvement of stress level. The descriptive analysis have also indicated that the most significant improvements have been seen in the Yogic Group followed by Exercise, Ginseng and Exercise & Ginseng Group.

- A significant difference has been found among the post- test values of experimental groups for the variable Stress
- The analysis has shown significant differences among all the groups.
- The yogic group has been significantly superior to the other groups.
- Exercise and Ginseng proved to be the second-best training group after the yogic group.

References:

- DHARMANDA, S. (1996). An Introduction to Chinese Herbs.
- KANG, HO YOUL, KIM, SEUNG HWAN, LEE, WOEN JUN, . . . HEIDI K. (n.d.). Effects of Ginseng Ingestion on Growth Hormone, Testosterone, Cortisol, and Insulin-Like Growth Factor 1 Responses to Acute Resistance Exercise.
- Kang, Eun-Ho, Shin, Woo-Yong, Song, Yoon-Jae, . . . Bum-Hee. (2009). Effect of Korean Red Ginseng on Somatic Symptoms in a General Population in Korea. *Journal of Ginseng Research*, 219-222.
- KT1, C. (n.d.). Botanical characteristics, pharmacological effects and medicinal components of Korean Panax ginseng C A Meyer.

- Fulder, S. (1980). The Book of Ginseng and Other Chinese herbs for Vitality
- Kansal, D.K. (1996). Test and measurement in Sports and physical Education. New Delhi. D.V.S Publications
- <https://navaherbs.com/boosting-athletic-performance/>
- <https://www.medicinenet.com/script/main/art.asp?articlekey=10002>
- <http://www.oxfordreference.com/view/10.1093/oi/authority.20110803100406536>
- <https://www.livestrong.com/article/256907-how-to-tell-if-your-body-is-acidic-or-alkaline/>



EARN YOUR MBA

WWW.IIMPS.IN



Accreditation & Ranking



UGC / NCTE Approved.

INFO@IIMPS.IN

☎ 011-41005174

RESEARCH
GATEWAY

STOP PLAGIARISM



Arogyam Ayurveda
Holistic Healing through herbs



AROGYAM
ONLINE

PARIVARTAN PSYCHOLOGY CENTER

परिवर्तन

COLOR PSYCHOLOGY : HOW COLOR AFFECT YOUR CHILD



BLUE

Calms your Child's
Mind & Body

YELLOW

Promotes Concentration,
Stimulates the Memory

PINK

Evokes Empathy,
makes your Child Calm

RED

Excites and energizes
your Child's body

GREEN

Improves Reading speed
and Comprehension

www.parivartan4u.com



परिवर्तन

Confuse about your children's future?

भारतीय भाषा, शिक्षा, साहित्य एवं शोध

ISSN 2321 – 9726

WWW.BHARTIYASHODH.COM



**INTERNATIONAL RESEARCH JOURNAL OF
MANAGEMENT SCIENCE & TECHNOLOGY**

ISSN – 2250 – 1959 (O) 2348 – 9367 (P)

WWW.IRJMST.COM



**INTERNATIONAL RESEARCH JOURNAL OF
COMMERCE, ARTS AND SCIENCE**

ISSN 2319 – 9202

WWW.CASIRJ.COM



**INTERNATIONAL RESEARCH JOURNAL OF
MANAGEMENT SOCIOLOGY & HUMANITIES**

ISSN 2277 – 9809 (O) 2348 - 9359 (P)

WWW.IRJMSH.COM



**INTERNATIONAL RESEARCH JOURNAL OF SCIENCE
ENGINEERING AND TECHNOLOGY**

ISSN 2454-3195 (online)

WWW.RJSET.COM



**INTEGRATED RESEARCH JOURNAL OF
MANAGEMENT, SCIENCE AND INNOVATION**

ISSN 2582-5445

WWW.IRJMSI.COM



**JOURNAL OF LEGAL STUDIES, POLITICS
AND ECONOMICS RESEARCH**

WWW.JLPER.COM

JLPE