

Vol 3 Issue 6 March 2014

Impact Factor : 2.1002 (UIF)

ISSN No : 2249-894X

---

*Monthly Multidisciplinary  
Research Journal*

*Review Of  
Research Journal*

Chief Editors

---

**Ashok Yakkaldevi**  
A R Burla College, India

**Flávio de São Pedro Filho**  
Federal University of Rondonia, Brazil

**Ecaterina Patrascu**  
Spiru Haret University, Bucharest

**Kamani Perera**  
Regional Centre For Strategic Studies,  
Sri Lanka

## Welcome to Review Of Research

**RNI MAHMUL/2011/38595**

**ISSN No.2249-894X**

Review Of Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Horia Patrascu Spiru Haret University, Bucharest, Romania	Mabel Miao Center for China and Globalization, China
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Delia Serbescu Spiru Haret University, Bucharest, Romania	Ruth Wolf University Walla, Israel
Ecaterina Patrascu Spiru Haret University, Bucharest	Xiaohua Yang University of San Francisco, San Francisco	Jie Hao University of Sydney, Australia
Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Karina Xavier Massachusetts Institute of Technology (MIT), USA	Pei-Shan Kao Andrea University of Essex, United Kingdom
Catalina Neculai University of Coventry, UK	May Hongmei Gao Kennesaw State University, USA	Loredana Bosca Spiru Haret University, Romania
Anna Maria Constantinovici AL. I. Cuza University, Romania	Marc Fetscherin Rollins College, USA	Ilie Pinte Spiru Haret University, Romania
Romona Mihaila Spiru Haret University, Romania	Liu Chen Beijing Foreign Studies University, China	
Mahdi Moharrampour Islamic Azad University buinzahra Branch, Qazvin, Iran	Nimita Khanna Director, Isara Institute of Management, New Delhi	Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai
Titus Pop PhD, Partium Christian University, Oradea, Romania	Salve R. N. Department of Sociology, Shivaji University, Kolhapur	Sonal Singh Vikram University, Ujjain
J. K. VIJAYAKUMAR King Abdullah University of Science & Technology, Saudi Arabia.	P. Malyadri Government Degree College, Tandur, A.P.	Jayashree Patil-Dake MBA Department of Badruka College Commerce and Arts Post Graduate Centre (BCCAPGC), Kachiguda, Hyderabad
George - Calin SERITAN Postdoctoral Researcher Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi	S. D. Sindkhedkar PSGVP Mandal's Arts, Science and Commerce College, Shahada [ M.S. ]	Maj. Dr. S. Bakhtiar Choudhary Director, Hyderabad AP India.
REZA KAFIPOUR Shiraz University of Medical Sciences Shiraz, Iran	Anurag Misra DBS College, Kanpur	AR. SARAVANAKUMARALAGAPPA UNIVERSITY, KARAIKUDI, TN
Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur	C. D. Balaji Panimalar Engineering College, Chennai	V.MAHALAKSHMI Dean, Panimalar Engineering College
	Bhavana vivek patole PhD, Elphinstone college mumbai-32	S.KANNAN Ph.D , Annamalai University
	Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust), Meerut (U.P.)	Kanwar Dinesh Singh Dept.English, Government Postgraduate College , solan

More.....

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India  
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net



## EFFECT OF SLOW JOGGING AND RECREATIONAL GAMES ON SPEED AND EXPLOSIVE POWER AMONG OBESE BOYS

G. Vasanthi and Rajnish Kumar

Associate Professor, Pondicherry University  
Research Scholar, Pondicherry University.

### Abstract:

*The aim of this study is to find out the effect of slow jogging and recreational games on speed and explosive power among obese boys. Forty five obese boys were selected from the Arya International School, Varanasi. For this research, the subjects were divided randomly into three equal groups namely one control and two experimental groups consisting of fifteen obese boys in each group. The subject's age ranged between 12 to 14 years. Experimental groups were given 12 weeks slow jogging and recreational games training and the control groups were not allowed to participate in any of the training programmes. The training programme was given five days in a week for 45 minutes. Pretest and post test was conducted for both the groups on speed and explosive power before and immediately after the training. The data were computed statistically by using (ANCOVA) to find out the significant changes. The result reveals that the slow jogging group and recreational games group has significant effect on explosive power and speed of obese boys when compared to control group. When compared between the two experimental groups a recreational game was found to be better than the slow jogging training on speed and explosive power.*

### KEY WORDS:

Slow jogging, Recreational games, Speed, Explosive power and Obesity.

### INTRODUCTION:

Obesity can be defined as an abnormal growth of adipose tissue due to enlargement of fat cell size (Hyper tropic Obesity) or an increase in fat cell in number (Hyperplastic obesity) or combination of both. Obesity is an extra amount of body fat relative to body weight. Jogging can be a great way to get in shape and lose weight. It doesn't require any special equipment and it takes no time at all to learn. Plus, it targets the entire body in an aerobic fashion. Not only can jogging strengthen your legs and abdomen and help burn fat, but it also strengthens your cardiovascular and respiratory systems. Recreation is an activity of leisure, leisure being discretionary time. The "need to do something for recreation" is an essential element of human biology and psychology. Recreational activities are often done for enjoyment, amusement, or pleasure and are considered to be "fun". The term recreation implies participation to be healthy refreshing mind and body. People often use "physical activity" and "exercise" interchangeably, the terms have different definitions. "Physical activity" refers to any body movement that burns calories, whether it's for work or play, daily chores, or the daily commute. "Exercise," a subcategory of physical activity, refers to

**EFFECT OF SLOW JOGGING AND RECREATIONAL GAMES ON SPEED AND EXPLOSIVE POWER .....**

“planned, structured, and repetitive” activities aimed at improving physical fitness and health. Researchers sometimes use the terms “leisure-time physical activity” or “recreational physical activity” as synonyms for exercise.

**METHODOLOGY**

The study was designed to find out the effect of slow jogging and recreational games on speed and explosive power among obese boys. Forty five obese boys were selected from the Arya International School, Varanasi and their age ranged from 12 to 14 years. The subjects were equally divided into three groups namely control and two experimental groups with fifteen subjects in each group. Control group did not undergo any training programme rather than their daily routine work. The experimental group (Group I) was treated with slow jogging and experimental group (Group II) was treated with Recreational games. Training was given for a period of 12 weeks. 50 meters dash test was administered to find out speed and Sargent vertical jump test was administered to find out explosive power. The results of pre-test and post-test were compared by using analysis of Covariance (ANCOVA). The subjects living condition and life style were not taken into consideration for this study.

**Table I**  
**ANALYSIS OF COVARIANCE FOR PRE-TEST, POST -TEST AND ADJUSTED POST TEST ON SPEED AMONG THE THREE GROUPS (Scores in Seconds)**

	Group			SV	SS	Df	MSS	'F' Ratio
	Slow Jogging	Recreational games	Control					
<b>Pre test</b>								
<b>Mean</b>	11.63	11.77	12.10	<b>B</b>	1.787	2	0.894	1.294
<b>S.D.</b>	0.74	0.95	0.77	<b>W</b>	28.996	42	0.690	
<b>Post test</b>								
<b>Mean</b>	11.42	11.49	12.09	<b>B</b>	3.985	2	1.992	2.500
<b>S.D.</b>	0.79	0.96	0.92	<b>W</b>	33.468	42	0.797	
<b>Adjusted post test</b>								
<b>Mean</b>	11.43	11.50	12.09	<b>B</b>	0.469	2	0.234	2.876
				<b>W</b>	3.341	41	0.81	

The required table value df( 2, 42) at 0.05 level= 3.22  
df(2,41) at 0.05 level=3.23

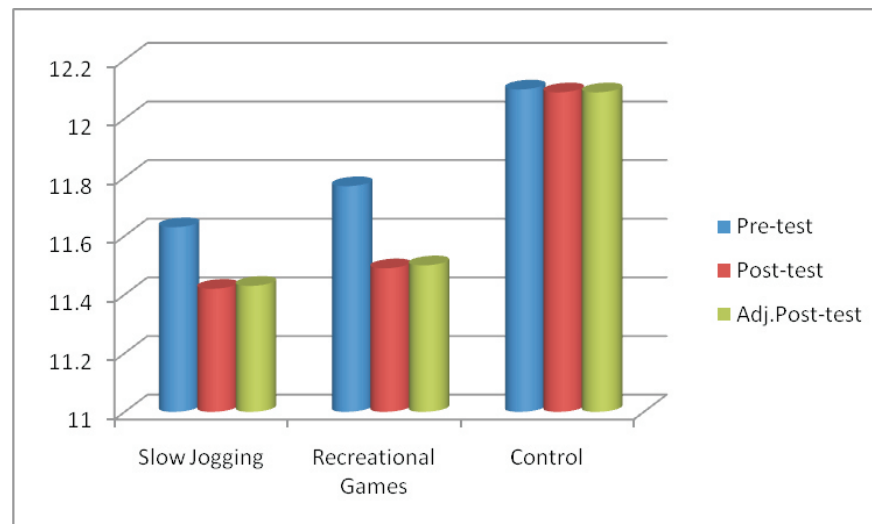
Table –I shows that there is no significant difference among the three groups for the pre- test, since the calculated value 1.294 is less than the required table value 3.22

For the post test, there is no significant difference among the three groups since the calculated value 2.500 is less than the required value 3.22

The obtained 'F' ratio for the adjusted post-test means 2.876 is lesser than the table value 3.23 at 0.05 levels.

Hence it is concluded that there is no significant improvement on speed among the three groups.

**FIGURE 1**  
**BAR DIAGRAM SHOWING THE MEAN VALUES OF SLOW JOGGING AND RECREATIONAL GAMES AND CONTROL GROUP ON SPEED**



**Table II**  
**ANALYSIS OF COVARIANCE FOR PRE-TEST, POST -TEST AND ADJUSTED POST TEST ON EXPLOSIVE POWER AMONG THE THREE GROUPS**

	Group			SV	SS	df	MSS	'F' Ratio
	Slow Jogging	Recreational games	Control					
<b>Pre test Mean</b>	10.78	10.48	11.19	<b>B</b>	3.789	2	1.894	2.138
<b>S.D.</b>	0.86	0.99	0.95	<b>W</b>	37.212	42	0.886	
<b>Post test Mean</b>	13.14	12.97	11.22	<b>B</b>	33.743	2	16.871	21.075*
<b>S.D.</b>	0.87	0.899	0.90	<b>W</b>	33.623	42	0.801	
<b>Adjusted post test Mean</b>	13.16	13.20	10.97	<b>B</b>	45.323	2	22.662	58.205*
<b>Mean</b>				<b>W</b>	15.963	41	0.389	

\* Significant at 0.05 level

The required table value df( 2, 42) at 0.05 level= 3.22  
 df (2,41) at 0.05 level=3.23

Table –II shows that there is no significant difference among the three groups for the pre- test, since the calculated value 2.138 is less than the required table value 3.22

For the post test, there is significant difference among the three groups since the calculated value 21.075 is higher than the required value 3.22

The obtained 'F' ratio for the adjusted post-test means 58.205 is higher than the table value 3.23 at 0.05 levels.

Hence it is concluded that there is significant improvement on explosive power among the three groups.

Since there is a significant difference, Scheffe's post hoc test was administered to find out the significant paired mean difference. This calculation helps to find out which group has significant improvement after the training programme. The result of Scheffe's post hoc test for explosive power is presented in table- III

**TABLE –III**  
**SHEFEE'S POST-HOC TEST FOR THE SIGNIFICANT DIFFERENCE BETWEEN PAIRED**  
**ADJUSTED POST-TEST MEAN ON EXPLOSIVE POWER**  
**(Scores in Centimetre)**

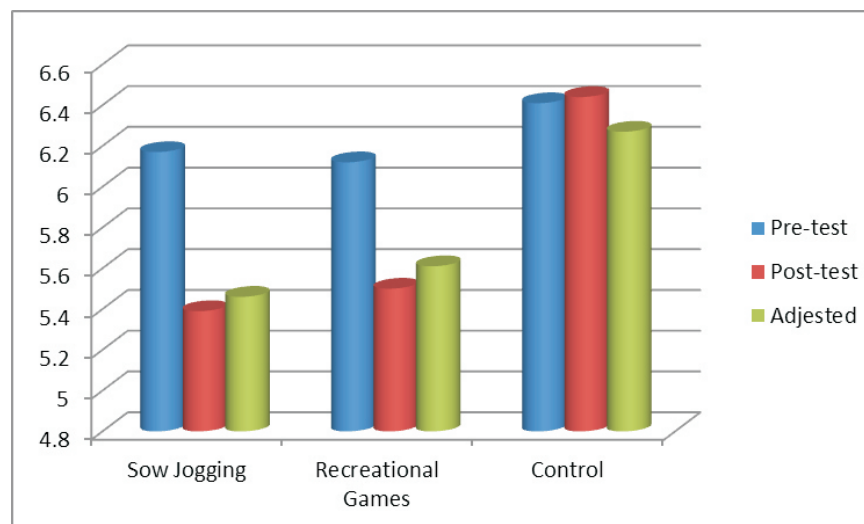
SLOW JOGGING GROUP	RECREATIONAL GAMES	CONTROL GROUP	MEAN DIFFERENCES	CI
13.16	13.20	-	0.04	0.578
13.16	-	10.97	2.19*	
-	13.20	10.97	2.23*	

\*Significant at 0.05 level of confidence.

Table –III shows that there is a no significant difference between the slow jogging and recreational games as the mean difference 0.04 is lesser than the CI value 0.578 at 0.05 level of confidence. There is a significant difference between the slow jogging and control group as the mean difference 2.19 is greater than the CI value at 0.05 level of confidence. There is also a significant difference between the recreational games and control group as the mean difference 2.23 is greater than the CI value at 0.05 level of confidence. The result reveals that there is a significant effect due to slow jogging and recreational games on explosive power when compared to the control group. The recreational games are found to be superior to the slow jogging training.

The mean values on explosive power are graphically represented in figure-2

**FIGURE 2**  
**BAR DIAGRAM SHOWING THE MEAN VALUES OF SLOW JOGGING AND**  
**RECREATIONAL GAMES AND CONTROL GROUP ON EXPLOSIVE POWER**  
**(Scores in minutes)**



### CONCLUSIONS

Within the limitations and delimitation of the study, the following conclusion are drawn

- 1.It is concluded that there is a no significant improvement on speed among the three groups.
- 2.It is concluded that there is a significant improvement on explosive power among the three groups.
- 3.The two experimental groups are found to be significant when compared to the control group.
- 4.The recreational games have significantly improved explosive power better, than the slow jogging.

**REFERENCES**

1. Brown and Holloszy “Effects of walking, jogging and cycling on strength, flexibility, speed and balance in 60- to 72-year olds”, US National Library of Medicine National Institutes of Health 5(6) (December 1993):427-34.
2. Murtagh EM et al., “The Effects of 60 Minutes of Brisk Walking Per Week, Accumulated in Two Different Patterns, on Cardiovascular Risk”, Preventive Medicine, 41(1) (July 2005):92-7.
3. Ramesh.V and .P.K. Subramaniam, Effect of Physical Activity and Aerobic Fitness on Health Related Physical Fitness Variables of Overweight and Obese Adolescence”, Indian Journal of Yoga Exercise & Sport Science and Physical Education, 2010:46-52.
4. Ramesh. V and Subrmaniam P.K, Effect of Aerobic and Calisthenics Exercise on Health Related Physical Fitness Variables of Obese Adolescence, Indian Journal for Research in Physical Education and Sports Sciences,(2011)
5. Vivian Heyward, (2010) “advanced fitness and exercise prescription Champaign (USA), human kinetics, p-129
6. <http://en.wikipedia.org/wiki/Obesity>
7. <http://www.fitday.com/fitness-articles/fitness/weight-loss/jogging-to-lose-weight>.

**Publish Research Article  
International Level Multidisciplinary Research Journal  
For All Subjects**

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

**Associated and Indexed,India**

- \* International Scientific Journal Consortium Scientific
- \* OPEN J-GATE

**Associated and Indexed,USA**

- \* DOAJ
- \* EBSCO
- \* Crossref DOI
- \* Index Copernicus
- \* Publication Index
- \* Academic Journal Database
- \* Contemporary Research Index
- \* Academic Paper Databse
- \* Digital Journals Database
- \* Current Index to Scholarly Journals
- \* Elite Scientific Journal Archive
- \* Directory Of Academic Resources
- \* Scholar Journal Index
- \* Recent Science Index
- \* Scientific Resources Database

Review Of Research Journal  
258/34 Raviwar Peth Solapur-413005,Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.isrj.net