

BIBLIOGRAPHY**BOOKS**

- Behnke, A. R. & Wilmore, J. H. (1974), **Evaluation and regulation of body build and composition**, (Englewood Cliffs, NJ, Prentice-Hall).
- Boileau, R.A and Horswill, C.A. (2000), **“Body Composition in Sports: Measurement and Applications for Weight Loss and Gain”**, In: Exercise and Sports Science, Philadelphia: Lippincott Williams & Wilkins, PP.319-338.
- Eston, Roger and Reilly, Thomas, (2005), **Kinanthropometry and Exercise Physiology Laboratory Manual**, London & New York: Routledge-Taylor and Francis Group, PP. 32, 42, 43 & 50.
- Eston. RG and T Reilly. (2001), **Kinanthropometry and Exercise Physiology Laboratory Manual: Tests, Procedures and Data**. 2nd Edition, Volume 2: Exercise Physiology Edited Published by Routledge, London.
- Foss, M.L. & Keteyian, S.J., (1998), **Fox’s Physiological Basis for Exercise and Sport**. 6thed. Singapore: McGrw-Hill, p. 518, 597, 610.
- Jackson, A.S. & Pollock, A.L. 1985. **‘Practical Assessment of Body Composition’, Physician and Sports medicine**, vol.13, no.5, p.76-90, viewed 15 May 2007.
- Karageanes, Steven J. (2004). **Principles of manual sports medicine**. Lippincott Williams & Wilkins. pp. 510–511. ISBN 978-0-7817-4189-7. Retrieved 26 March 2011.

- Lehmkuhl LD, Smith LK, Weiss EL,(1996), **Mechanical principles: kinematics**. In: McNichol CS, ed. Brunnstrom's Clinical Kinesiology, 5th ed, Philadelphia: F.A. Davis.
- Malina, R.M., C. Bouchard and O. Bar-Or, (2004) **Growth, Maturation and Physical Activity**. Human Kinetics, 2nd Ed. Champaign.
- Peter Van Roy and Jan Borms,(2009), **Flexibility**, Edited by Roger Eston and Thomas Reilly,(2009) **3rd Edition Kinanthropometry and Exercise Physiology Laboratory Manual, Tests, Procedures and Data, Volume One: Anthropometry**, published by Routledge 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN.
- Reilly, Thomas, Marfell-Jones and Marfell-Jones, Mike, (2003), **Kinanthropometry VIII**, London & New York: Routledge-Taylor & Francis Group, P. 115.
- Siri W E, (1961), **Body composition from fluid spaces and density: Analysis of methods**. In: J. Brozek & A. Henschel (Eds). Techniques for measuring body composition (pp.223-244). Washington, DC: National Academy of Sciences.
- Srivastava, A.K., (2006), **Dictionary of Physical Education**, New Delhi: Sports Publication, PP. 17 & 160.
- Tomchuk, David, (2011), **Companion Guide to Measurement and Evaluation for Kinesiology**, Sudbury, MA: Jones and Bartlett Learning, P. 7.

- Vijaya Lakshmi, (2005), **Anthropometry Sports Physique Evaluation**, New Delhi: Khel Sahitya Kendra, PP. 90, 94, 98, 312 & 313.
- Viru, A., & Viru, M. (2000). **Nature of training effects**. In W. Garrett & D. Kirkendall (Eds.), **Exercise and sport science** (pp. 67 – 95). Philadelphia, PA: Lippincott Williams & Williams.
- Wilmore, J. H., Buskirk, E. R., DiGirolamo, M., & Lohman, T.G. (1986). **Body composition: A round table. The Physician and Sports medicine**, 14(3), 144-162.
- Yobu, A., (1987), **Tests and Measurements in Physical Education**, Chennai: Grace Printers.
- Yobu, A., (2010), **Test, Measurement and Evaluation in Physical Education and Sports**, New Delhi: Friends Publications, PP. 494 & 495.

JOURNALS AND PERIODICALS

- Akuthota, V., A. Ferreiro, T. Moore, and M. Fredericson, (2008), Core stability exercise principles, ***Current Sports Medicine Reports***, Vol. 7, No. 1, pp. 39Y44.
- Atsushi Imai, Koji Kaneoka, Yu Okubo, and Hitoshi Shiraki, (2014), Effects of Two Types of Trunk Exercises on Balance and Athletic Performance in Youth Soccer Players, ***Int J Sports Phys Ther***, 9(1): pp.47–57.
- Baldon, R. D. M., D. F. M. Lobato, L. P. Carvalho, P. Y. L. Wun, P. R. P. Santiago, and F. V. Serrao. (2012), Effect of Functional Stabilization Training on Lower Limb Biomechanics in Women, ***Med. Sci. Sports Exercise***, 44, 1, pp. 135–145.
- Baltaci G, Johnson R, and Kohl H, (2001), Shoulder range of motion characteristics in collegiate baseball players, ***J Sports Med Phys Fitness***, 41(2): pp.236-42.
- Barnes CJ, Van Steyn SJ and Fischer RA, (2001), The effects of age, sex, and shoulder dominance on range of motion of the shoulder, ***J Shoulder Elbow Surg***, 10(3): pp.242-6.
- Campos, F. A. D, Daros, L. B, Mastrascusa, V, Dourado, A. C and Stanganelli, L. C. R. (2009), “Anthropometric profile and motor performance of junior badminton players”, ***Brazilian Journal Biomotricity***, 3:2, pp. 146-1 51.

- Cosio-Lima LM, Reynolds KL, Winter C, Paolone V, and Jones MT. (2003), Effects of physioball and conventional floor exercises on early phase adaptations in back and abdominal core stability and balance in women, **J Strength Cond Res**, 17(4): PP.721-5.
- Ellenbecker TS, Ellenbecker GA, Roetert EP, Silva RT, Keuter G, and Sperling F, (2007), Descriptive profile of hip rotation range of motion in elite tennis players and professional baseball pitchers, **Am J Sports Med**, 35(8): pp.1371-6.
- Ellenbecker TS, Roetert EP, (2002), Effects of a 4-month season on glenohumeral joint rotational strength and range of motion in female collegiate tennis players, **J Strength Cond Res**, 16(1): pp.92-6.
- Eswara Moorthy A. and K. Angamuthu, (2013), Effect of Swiss Ball Training on Selected Motor Fitness Variables among Football Players, **Star Phy. Edn**, 01.
- Gauri Shankar and Vinod Chaurasia, (2012), Comparative Study of Core Stability Exercise with Swiss Ball in Improving Trunk Endurance, **International Journal of Health Sciences & Research**, 2:5. Pp.56-63.
- Granacher U, Schellbach J, Klein K, Prieske O, Baeyens JP, and Muehlbauer T. (2014), Effects of core strength training using stable versus unstable surfaces on physical fitness in adolescents: a randomized controlled trial, **BMC Sports Sci Med Rehabil**. 15;6(1): p.40.

- Granacher, U, Muehlbauer, T, Doerflinger, B, Strohmeier, R, and Gollhofer, A. (2012), Promoting strength and balance in adolescents during physical education: effects of short-term resistance training. **J Strength Cond Res** 25(4): 940–949.
- Gregory J Lehman, Wajid Hoda and Steven Oliver, (2005), Trunk muscle activity during bridging exercises on and off a Swissball, **Chiropractic & Osteopathy**, 13:14, pp.1-8.
- Hamid Arazi and Abbas Asadi,(2011), Effects of 8 Weeks Equal-Volume Resistance Training with Different Workout Frequency on Maximal Strength, Endurance and Body Composition, **International Journal of Sports Science and Engineering** , 05 :02, pp. 112-118.
- Harmer, P.A., and V.M. Nethery,(1994), Slide board training improves agility and cardiovascular efficiency, **Res. Q. Exerc. Sport**, (1):A36.
- Iris F. Kimura; Ronald K. Hetzler; Kenneth T. Nakasone, (2006), Physiologic Considerations of Therapeutic Slideboard Rehabilitation with an External Loading Device, **Journal of Athletic Training**, 41(1) pp.:87–92.
- Jothi, K, Suresh Kumar, K.F and Kamalakkannan. K, (2010), Effect of Core Board Training and Slide Board Functional Training on Performance of Selected Biomotor, **International Journal of Current Research**, 11, pp.062-065.
- Kibler WB, Press J, Sciascia, A. (2006), The role of core stability in athletic function. **Sports Med**, 36(3):189-198.

- Kulroop Kaur Badwal and Ranjit Singh, (2013), Effect of short-term swiss ball training on Physical Fitness, **Biology of Exercise**, 9,2, pp.41-50.
- Luana Mann, Julio Francisco Kleinpaul, Carlos Bolli Mota, and Saray Giovana dos Santos, (2014), Influence of aquatic exercise training on balance in young adults, **Fisioter Mov**, 27(4): pp.573-81.
- Malavolti M, Battistini NC, Dugoni M, Bagni B, Bagni I, Pietrobelli A,(2008), "Effect of intense military training on body composition" **J Strength Cond Res**, 22(2): pp.503-8.
- Maquirrian J, Ghisi JP, Kokalj AM, (2007), Rectus abdominis muscle strains in tennis players, **Br J Sports Med**, 41(11):842-848.
- Markovic G, Jukic I, Milanovic D, Metikos D,(2007), "Effects of sprint and plyometric training on muscle function and athletic performance. **Journal of Strength and Condition Research**, 21(2): pp.543-9.
- McConnell J and McIntosh, (2009), The effect of tape on glenohumeral rotation range of motion in elite junior tennis players, **Clin J Sport Med**; 19(2): p. 90-4.
- Michael Brian Wise, Tim L. Uhl, , Carl G. Mattacola, Arthur J. Nitz, E and W. Ben Kibler, *Lexington, (2004)*, **J Shoulder Elbow Surg** ,13: 3: 614-620.
- Nashwa, M. H. A. A. E. (2011). Effect of Using Swiss Ball Exercises on Some Motor Abilities and the Level of Skill Performance of Some Essential Skills in Facing. **World Journal of Sport Sciences**, 4(3): 297-304.

- Ozcan Saygin, Kemal Goral, Halil Ibrahim Ceylan, and Sevcin Karacabey, (2015), Investigation of agility performance on 10-12 years soccer players, ***International Journal of Human Sciences***, 12(2), 1912-1917.
- Schmidt-Wiethoff R, Rapp W, Mauch F, Schneider T, Appell HJ. (2004), Shoulder rotation characteristics in professional tennis players, ***Int J Sports Med***. 25(2): pp.154-8.
- Sekendiz, B, Cug , M, and Korkusuz, F. (2010),Effects of Swiss-ball core strength training on strength, endurance, flexibility, and balance in sedentary women, ***Journal of Strength and Conditioning Research***, 24(11):pp. 3032–3040.
- Seo D. Y., Lee, S. R., Kim, H. K., Kim, N. et al. (2012). Effect of 12-week Swiss Ball Exercise Program on Physical Fitness and Balance Ability of Elderly Women. ***Journal of Physical Therapy Science***, 24 (1): 11-15.
- Stanton, R., P. Reaburn, and B. Humphries, (2004), The effect of short-term Swiss ball training on core stability and running economy, ***J. Strength Cond. Res.*** 18(3):522–528.
- Sudhir Kumar Sharma,(2010) “Effects of Yogic Practices, Physical Exercises and Combination of Yogic Practices and Physical Exercises on Selected Motor Ability Components, Physiological and psychological Variables of Senior Secondary School Boys in Delhi.” ***P E Y***, Vol. 1, No.1, pp. 28-32.

- Sukalinggam, C. L., Sukalinggam, G.L., Kasim, F. & Yusof, A. (2012). Stability Ball Training on Lower Back Strength has Greater Effect in Untrained Female Compared to Male. ***Journal of Human Kinetics***, 33: 133-141.
- Tarik Ozmen, Mert Aydogmus, (2015), Effect of core strength training on dynamic balance and agility in adolescent badminton players, ***Journal of body work and movement therapies***.
- Tiana Weiss, Jerica Kreitinger, Hilary Wilde, Chris Wiora, Michelle Steege, Lance Dalleck, and Jeffrey Janot,(2010), Effect of Functional Resistance Training on Muscular Fitness Outcomes in Young Adults, ***Journal of Exercise Science and Fitness***, 8 :2, pp.113-122.
- Tomljanovic Mario, Miodrag Spasic, Goran Gabrilo, Ognjen Uljevic and Nikola Foretic, (2011), Effects of Five Weeks of Functional Vs. Traditional Resistance Training on Anthropometric and Motor Performance Variables, ***Kinesiology*** ,43, 2:pp.145-154.
- Urs Granacher, Andre Lacroix, Thomas Muehlbauer, Katrin Roettger and Albert Gollhofer,(2012), Effects of Core Instability Strength Training on Trunk Muscle Strength, Spinal Mobility, Dynamic Balance and Functional Mobility in Older Adults, ***Gerontology***, Published online: DOI: 10.1159/000343152.
- Willardson, J.M, (2007), Core stability training: Applications to sports conditioning programs. ***J. Strength Cond. Res.*** 21(3):979-985.

UN-PUBLISHED THESIS

Alex McCaskey, (2011), The Effects of Core Stability Training on Star Excursion Balance Test and Global Core Muscular Endurance, Unpublished thesis, The University of Toledo.

Cug Mutlu (2012). Effects of Swiss ball training on knee joint reposition sense, Core strength and dynamic balance in sedentary collegiate students. Ph.D thesis, Department of Physical Education & Sports, Middle East Technical University.

Petersen, T. P, (2000) Effects of slide board training on the lateral movement of college aged football players, MS in Exercise and Sport Science-Human Performance, 89pp.

Sekendiz B, Cug M, Korkusuz F. (2010), Effects of Swiss-ball core strength training on strength, endurance, flexibility, and balance in sedentary women. Sport Management Program, Faculty of Health Sciences and Medicine, Bond University, Gold Coast, Australia. betulsekendiz@hotmail.com.

WEB SOURCE

- Elizabeth, (2007). Definition of Agility. (Retrieved May 12, 2011, from <http://sportsmedicine.about.com/glossary/Agility.def>.
- Corbin, (2007). Definition of Speed. (Retrieved May 12, 2011, from <http://sportsmedicine.about.com/glossary/Speed.def>.
- Aaron Martin, (2013), Anatomy of the “Core” Muscles <http://patch.com/iowa/ankeny/bp--anatomy-of-the-core-muscles>.
- Bobbydattero, (2014), <http://evolutionsp.net/effective-use-slideboard>.
- http://www.dietsinreview.com/diet_column/02/benefits-of-a-slide-board-workout/
- <http://www.healthmango.com/yoga/physical-benefits-of-yoga>
- en.wikipedia.org/wiki/Swissball
- <http://dancedispatch.com/Documents/SwissBall.html>
- <http://medical-dictionary.thefreedictionary.com/flexion>
- <http://medical-dictionary.thefreedictionary.com/extension>
- <http://medical-dictionary.thefreedictionary.com/Swiss+Ball>
- <http://simplifiedailyyoga.blogspot.in/2010/12/dhanurasana-benefits.html>
- http://sportsmedicine.about.com/od/glossary/g/flexion_def.htm
- http://sportsmedicine.about.com/od/glossary/g/extension_def.htm
- <http://www.abc-of-yoga.com/beginnersguide/yogabenefits.asp>
- <http://www.abc-of-yoga.com/yoga-and-health/yoga-for-women.asp>
- <http://www.fitball-training.com>
- <http://www.fitballtraining.com/product.asp?productid=165§ionid=237>
- <http://www.livestrong.com/article/23101-ball-exercises-women>
- <http://www.merriam.com>
- <http://www.thebasementgym.com/stability-ball-training>

APPENDIX- A

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

1. My participation in the project is entirely voluntary.
2. I am free to withdraw from the project at any time without any disadvantage.
3. The data will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed.
4. I am prepared to perform an aerobic fitness test and to complete a prolonged exercise programme as well as undergo blood sampling, and that these may cause some discomfort.
5. I understand that the investigation will be stopped if it should appear harmful to me.
6. I know whom to contact if I have any side effects to the study or have any questions.
7. The results of the project may be published and will be available in the library but every attempt will be made to preserve my anonymity.

I agree to take part in this project.

.....
(Signature of participant)

.....
(Date)

This project has been reviewed and approved by the TNPESU Doctoral Committee.

APPENDIX- B
SCREENING QUESTIONNAIRE

Name: -----

Address: _____

Telephone:

Home

_____ Work _____

Email _____ Contact Person Phone _____

Date of Birth: _____ Ethnic Group: _____

1. Has your doctor ever said that you have:

A heart condition Yes/No

Diabetes Yes/No

High blood pressure

Yes/No

Bone or joint problems Yes/No

Any other health problem that may be affected by exercise

Yes/No

2. Have you ever felt pain in your chest during physical activity?

Yes/No

3. In the past month have you had chest pain when you were not doing physical activity .

Yes/No

4. Do you know of any other reason why you should not do physical activity?

Yes/No

If yes, please state

why _____

5. Are you currently taking any medication?

Yes/No

If yes, please state what medications you are taking

6. Are you currently taking either the oral contraceptive pill or on Depo Provera?

Yes/No

7. Are you currently on hormone replacement therapy?

Yes/No

8. Has your weight been stable over the past six months?

Yes/No

9. If No, by how much has your weight changed (increased/decreased)?

_____ kg

10. How many periods have you had in the last six months? Please circle

More than 6
than 4

6

5

4

Less

11. Date (approximately) of last period?

12. When did you start aqua-jogging (approximately)?

13. How many times per week (average) do you aqua jog?

14. How long is each typical aqua jog session?

15. Have you ever had any adverse reaction(s) during or following a blood test, eg faining?

Yes/No,

If yes, what happened?

Signature.....

Date.....

Appendix-C

Raw Scores on Percentage of body fat

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	18.35	15.72	18.25	15.82	17.56	15.63	17.33	16.43
2.	18.72	15.62	17.42	16.07	18.05	15.54	18.71	18.90
3.	17.23	15.74	16.32	14.40	17.61	14.71	17.12	17.58
4.	16.28	15.90	17.82	15.80	17.95	15.62	18.65	18.45
5.	18.82	15.19	17.22	15.86	17.98	16.04	18.40	18.94
6.	17.46	15.38	18.55	16.05	16.63	15.12	17.23	17.11
7.	18.36	15.86	17.74	16.46	17.70	15.53	16.48	16.40
8.	18.61	15.26	17.87	15.53	17.22	15.94	18.14	18.41
9.	17.45	15.73	17.82	15.42	16.45	15.21	18.15	18.56
10.	18.28	15.22	18.15	14.88	17.30	15.81	18.43	18.03

Appendix-D

Raw Scores on Hanged Arm Girth

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	33	35	27	29	31	33	28	28.5
2.	31	32.5	28	30	27	29.5	32	32
3.	30	33	28	31	31	33.5	31	30
4.	31	33.5	29	31.5	26	28.5	27	28
5.	28	30	29.5	31	29	31	30	29
6.	31	34	30	32	29	31.5	29	29.6
7.	27	29.5	25	27	30	32.5	31	31.5
8.	29	31	29	31	29.5	32	30	30.5
9.	30	32	29	31.5	26	28	27	27.5
10.	27	29	29	30.5	27	29	30	31

Appendix-E

Raw Scores on Flexed Arm Girth

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	28.5	31	25	27	28	30	28.5	28
2.	28	30	26	28	25	27	26	26
3.	27	29	26	27.5	28	29.5	27	28.5
4.	29	31	26	27.8	26	27.5	26.5	26
5.	27	29.5	27	29	26	27.8	26	27.5
6.	28	30.5	26	27.6	29	31.5	29	29.5
7.	27	30	23.5	25	27	29.6	28	28
8.	26	28	26	27.6	27	29	27	27.5
9.	27	29	27	29	26	28	26.5	27
10.	25	27	30	31.5	25.5	27	28.5	29

Appendix-F

Raw Scores on Thigh Girth

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	58	60	55	57.5	58	59.5	55	55
2.	56	57	52	55	52.5	54	51	50.5
3.	55	57.5	52	54.5	58	60.5	54	54.5
4.	59	60	54	58.5	52	54	54	55
5.	55	57	59	61.5	58	60.5	55.5	56
6.	58	60	58	60.5	52	54.5	59.5	58
7.	55	58	53	55.5	53	54	56	56
8.	58	60	55	58.5	59	60.5	51	51.5
9.	58	60.5	57	60	53	55.5	53	53
10.	56	57.5	52	54.5	57	59	62	62

Appendix-G

Raw Scores on Calf Girth

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	37	39	37	39.8	36	38.7	36	36.2
2.	38.4	41.2	35	37.4	36	38.6	37	37
3.	38	39.4	36.4	38.9	39	41.4	37.2	38
4.	39	40.2	39	42.2	32	34.5	34.9	35
5.	36.2	38	37	39.4	36	37	38	38
6.	39	41.2	35.6	39.8	35	37.1	38.1	38.5
7.	37.5	39.4	36	39.5	40	41.2	35.3	36
8.	37	39.3	39	42.5	38	42	36.1	36.4
9.	35	36.8	37.2	40.6	35	37.6	37.5	38
10.	39	41	35	38.3	35.5	37.3	36	36

Appendix-H

Raw Scores on Speed

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	6.8	6.6	7.2	6.98	7.21	7.13	7.18	7.2
2.	7	6.8	6.64	6.5	7.18	6.92	7.11	6.81
3.	6.9	6.8	6.8	6.6	6.54	6.43	7.15	7.22
4.	7.3	7.1	7.1	6.94	6.85	6.76	6.86	6.93
5.	7.5	7.4	7.22	7.02	6.78	6.68	7.13	6.99
6.	7.2	7.1	6.82	6.6	7.14	6.93	6.68	6.72
7.	7	6.9	6.92	6.7	6.57	6.6	7.12	7.14
8.	6.9	6.7	7.2	7.1	7.22	6.96	6.98	7.17
9.	7.4	7.2	6.67	6.4	6.82	6.65	6.74	6.63
10.	7.4	7.3	6.7	6.5	6.89	6.73	6.89	6.92

Appendix-I

Raw Scores on Agility

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	11.4	9.11	10.5	10.87	11.67	10.3	11.98	11.88
2.	11.5	10.2	11.6	9.5	11.5	10.11	11.65	11.35
3.	10.8	9.9	12.9	10.6	11.78	10.22	11.32	11.12
4.	10.6	10	11.9	10.1	11.87	10.3	11.2	11.87
5.	11.09	10.6	11.2	10.3	11.54	10.8	10.6	10.6
6.	11.03	9.8	11	9.7	11.64	10.2	11.65	11.56
7.	11.5	10.1	11.1	9.8	11.87	10.3	11.1	11.12
8.	11.8	10.2	11.65	10.2	11.76	10.26	10.8	10.8
9.	10.8	10	11.9	10.3	11.99	10.6	10.9	10.9
10.	11.9	10.7	11	9.9	11.3	9.12	11.88	10.1

Appendix-J

Raw Scores on Power

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	64	68	64	69	55	60	56	58
2.	61	66	67	72	57	63	54	53
3.	64	69	58	65	51	57	65	64
4.	67	72	56	63	69	73	60	61
5.	62	68	65	70	62	66	62	63
6.	69	74	61	65	54	58	55	54
7.	58	65	64	69	52	60	56	58
8.	57	63	59	63	63	69	62	61
9.	59	64	57	66	64	70	62	64
10.	65	71	58	64	68	74	62	61

Appendix-K

Raw Scores on Coordination

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	27	33	33	38	28	35	28	28
2.	28	35	30	35	27	34	27	27
3.	29	36	28	36	30	37	27	27
4.	30	35	29	37	28	32	28	28
5.	31	36	31	36	28	33	28	28
6.	29	35	32	38	32	38	32	32
7.	30	35	30	36	26	31	26	26
8.	29	35	28	34	33	38	33	33
9.	31	37	32	37	32	36	30	32
10.	30	36	29	33	25	31	25	25

Appendix-L

Raw Scores on Balance

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	45	51	50	54	50	55	45	46
2.	46	50	46	51	43	48	43	44
3.	45	51	40	48	40	46	46	47
4.	42	48	48	52	45	48	40	43
5.	44	50	48	52	48	52	46	49
6.	51	54	46	50	45	48	44	45
7.	41	45	43	49	50	53	46	47
8.	48	52	47	51	47	52	43	44
9.	43	48	52	56	52	54	47	48
10.	44	47	50	53	47	51	50	51

Appendix-M

Raw Scores on Shoulder Flexion

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	150	160	145	155	170	175	155	150
2.	160	170	160	165	160	170	140	140
3.	155	165	165	170	155	160	135	135
4.	165	172	150	160	140	155	140	140
5.	160	173	160	170	162	175	150	150
6.	155	165	155	160	155	160	155	155
7.	150	156	145	155	160	165	150	150
8.	145	155	150	162	145	155	160	160
9.	160	170	160	168	150	162	140	140
10.	155	165	155	160	140	148	155	150

Appendix-N

Raw Scores on Shoulder Extension

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	51	60	46	54	48	57	40	42
2.	49	57	52	58	47	57	52	52
3.	50	59	51	60	59	61	51	53
4.	52	61	51	59	41	56	44	43
5.	49	59	48	58	52	60	48	50
6.	47	54	54	59	50	58	46	47
7.	50	61	47	58	49	57	47	48
8.	44	52	40	50	54	60	40	42
9.	52	60	49	57	53	62	49	50
10.	46	53	53	62	51	56	53	52

Appendix-O

Raw Scores on Hip Flexion

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	100	104	100	106	99	104	100	103
2.	96	100	98	104	102	106	101	105
3.	102	110	94	101	96	99	99	100
4.	100	106	99	104	102	106	98	99
5.	101	107	100	106	98	102	101	100
6.	99	104	99	103	97	103	100	101
7.	98	105	95	100	105	110	102	101.5
8.	102	108	100	105	98	105	98	99
9.	96	100	96	102	98	104	101	102
10.	96	103	97	104	100	106	98	99

Appendix-P

Raw Scores on Hip Extension

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	20	24	22	25	19	24	20	21
2.	22	26	20	25	20	25	19	20
3.	22	28	19	25	22	24	23	21
4.	20	26	20	25	20	25	22	23
5.	19	23	22	28	21	25	21	24
6.	20	25	23	26	20	25	20	21
7.	18	24	22	28	18	24	23	22
8.	19	24	19	25	19	25	19	20
9.	21	26	18	24	21	24	20	20
10.	20	25	23	26	20	25	22	21

Appendix-Q

Raw Scores on Knee Flexion

Sl. No	Functional Core Training		Slide Board Training		Combined Training		Control Group	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	130	135	135	145	130	135	125	126
2.	135	140	125	130	140	145	130	130
3.	120	135	120	130	120	130	120	120
4.	130	140	130	135	135	145	120	125
5.	125	130	125	135	130	140	125	130
6.	140	145	140	145	140	145	140	140
7.	135	140	135	140	135	140	135	135
8.	120	125	120	125	120	125	120	125
9.	135	140	130	140	135	140	135	135
10.	130	135	125	130	140	145	120	125