

**CV for PROFILE**  
**CURRICULUM VITAE**

- I. (a) Name:** Joseph Folorunso BABALOLA
- (b) Date of Birth:** 19 July, 1954
- (c) Department:** Human Kinetics and Health Education
- (d) Faculty:** Education
- (e) College:** Not Applicable
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- II. (a) First Academic Appointment:** Lecturer I 19 May, 1997
- (b) Present Appointment:** Senior Lecturer 1 October, 2000
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- III. University Education (with dates):**
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|------------------------------|-----------|
| University of Ibadan, Ibadan | 1977-1980 |
| University of Ibadan, Ibadan | 1981-1982 |
| University of Ibadan, Ibadan | 1982-1987 |
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- IV. Academic Qualification (with dates and granting bodies):**
- B.Ed. Physical and Health Education, (1980, University of Ibadan, Ibadan)
- M.Ed. Physiology of Exercise, (1982, University of Ibadan, Ibadan)
- Ph.D. Physiology of Exercise, (1987, University of Ibadan, Ibadan)
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- V. Professional Qualifications and Diplomas (with dates):**
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|--|------|
| B.Ed. (Hons), Physical and Health Education                  | 1980 |
| Coaching Certificate in Volleyball                           | 1980 |
| Certificate of Proficiency in Swimming                       | 1980 |
| Certificate of Proficiency in Kinanthropometric Measurements | 2003 |
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- VI. Scholarships, Fellowships and Prizes (with dates) in respect of Undergraduate and Postgraduate work only):**
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|---|-----------|
| Federal Government Postgraduate Scholarship | 1985-1986 |
|---|-----------|

## **VII. Honours, Distinctions and Membership of Learned Societies:**

1. Member, Nigeria Association for Physical, Health Education, Recreation Sports and Dance (NAPHER.SD) 1980-Date
2. Member, Nigeria Association of Sports Science and Medicine (NASSM) 1995-Date
3. Member, Nigeria School Health Association (NSHA) 1998-Date
4. Member, Nigeria Association of Professional Educators (NAPE) 1998-Date
5. Member, Nigeria Association of Health Education Teachers (NAHET) 1999-Date
6. Member, International Council for Health, Physical Education, Recreation, Sport and Dance (ICHPER.SD) 2000-Date
7. Member, International Association of Kinanthropometrists 2004-Date

## **VIII. Details of Teaching Experience at University Level**

- i. Lecturer 1 1997 – 2000 University of Ibadan.
- ii Senior Lecturer 2000 – Date University of Ibadan.

### **Details of Courses Taught**

#### **(a) Degree of Master Level**

KHE 730 – Exercises and Weight Control

KHE 732 – Seminar in Exercise Physiology

KHE 734 – Exercise Testing and Training

KHE 701 – Research Methodology

KHE 703 – Measurements and Evaluation in Physical and Health Education

KHE 705 – Advanced Curriculum Development in Physical Education

KHE 704 – Research Seminar in Physical and Health Education

KHE 760 – Advanced Research Project in Physical and Health Education.

#### **(b) M.Phil/Ph.D Level**

KHE 801 – Research Methodology in Physical and Health Education

KHE 803 – Measurements and Evaluation in Physical and Health Education

KHE 818 – Musculoskeletal Diseases

KHE 819 – Independents Studies in Anatomy and Exercise Physiology

(c) Ph.D. Level

KHE 923 – Advanced Studies in Musculoskeletal Diseases

KHE 901 – Advanced Research Methodology

KHE 903 – Advanced Measurements and Evaluation in Physical and  
Health Education

KHE 904 – Doctoral Seminar in Physical and Health Education

(d) Teaching Practice Supervision

### **Postgraduate Supervision:**

The following is the list of M.Ed. and Ph.D. degree students that I have supervised in this university over a period of eight years.

A. Number of M. Ed. Projects supervised as at 31 July, 2008: 40 (forty) candidates.

B. Number of Ph.D. Theses supervised as at 31 July, 2008: 2

1. Name: **OYENIYI, Patrick Oladepo**  
Title: Administrative Indices as Correlates of Sports Participation by the Disabled in South-Western Nigeria.  
Effective date of award: 21 July, 2002
2. Name: **ANIODO, Donatus Anamauwa**  
Title: Comparative Effects of Two Modes of Aerobic Training on the Cardiorespiratory Endurance Indices of the Police Trainees at Iperu, Ogun State, Nigeria.  
Effective date of award: 28 November, 2002
3. Name: **UMEIFEKWEM, Joshua Emeka**  
Title: Effects of Two Exercise modes on Physical and Physiological Parameters of Newly Diagnosed Type-2 Diabetics at University

of Nigeria Medical Centre, Nsukka.

Effective date of award: June, 2008

## **IX Research:**

**a)**

### **Completed:**

Below are completed researches designed and carried out by me in collaboration with my academic colleagues and some of my postgraduate students.

#### **1. Effects of Eight Weeks Aerobic Exercise Programme on Body Composition of Female Obese-osteoarthritic Patients.**

Co-Researcher: Sangobiya, T.O.

The aim of the study was to determine the effects of eight weeks aerobic exercise programme on body composition of female obese-osteoarthritis patients. A total of twenty patients were randomly divided into two groups to make the experimental and the control groups using purposive sampling technique. Only the experimental group was subjected to the aerobic exercise programme. Descriptive statistics of mean, standard deviation and range was used to describe the demographic data and inferential statistics of 't' test was used to determine significant differences between the groups. Significant difference was found in body weight between the treatment and the control group while there was no significant difference in body fat between the groups. The study showed that a longer duration of exercise should be prescribed to have adequate effects on weight reduction programmes for the subjects.

#### **2. 10-Weeks Morning and Evening Exercise Training Programme and Improved Capacities for Physical Performance.**

The research identified the values of a well designed exercise training programme in the improvement of the fitness level and performance capacities of collegiate athletes. The results showed that regular physical exercise both in the morning and evening could result into significant improvements in physical performance of the athletes if the sessions are properly monitored. The research has implications for the general public in that, if individuals can cultivate the attitude of a well coordinated early morning and evening physical exercises, they can achieve improved capacities for daily activities.

#### **3. Effect of Cigarette Smoking on the Cardiorespiratory Endurance and Max VO<sub>2</sub> of Collegiate Athlete Smokers.**

The research was conducted on collegiate athletes who were chain cigarette smokers. The study showed that heavy smoking adversely affected endurance performance of these athletes. Although the previous sports records of the athletes showed them to be good, abstinence from smoking habit would have made them to

to have better athletic records. This study has implications and will benefit trainers, coaches, exercise therapist and the athletes.

**4. Effects of Sleep Deprivation on Resting and Recovery Systolic and Diastolic Blood Pressures of University Athletes.**

This research showed that sleep deprivation will adversely affect the physiological variables such as resting and recovery systolic and diastolic blood pressures of University athletes. The result also showed that depriving athletes of adequate sleep will have detrimental effects on their health status. The study has implications for athletic trainers, coaches and exercise therapists to provide for adequate sleep and rest in order to ensure improved health and enhanced sports performance in their athletes.

**5. Application of Physical Exercises in the Management of Mechanical Low Back Pain.**

The study aimed at applying physical exercise to the management of pain in the lower back region. The research utilized a pre-test, post-test experimental design. It was discovered that low back pain resulted from weak abdominal muscles, psoas major and minor, and hamstring muscles. People with weak muscles are advised to participate in exercise while the general public should take recreational physical exercise as valued habit.

**6. Effects of Hip Angles of 100<sup>0</sup> and Above on Quadriceps Strength During Isometric Contractions in the Male and Female Athletes.**

This study investigated the effect of three obtuse angles on the quadriceps strength during isometric quadriceps muscle contraction. Forty (40) female and thirty-five (35) male participants took part in the study. The hip angle was set at three different angles at 100<sup>0</sup> and 130<sup>0</sup> using an adjustable back support of a specially designed testing table. The quadriceps strength was then measured using an angle adapted cable tensiometer after subject had exerted a maximal pull on the tensiometer. Statistical analysis revealed that the quadriceps muscle of the male subjects generated a greater isometric force, than the female subjects, at the various hip angles. It was however discovered that the hip angle at which the maximal isometric force was produced in both sexes was 130<sup>0</sup>.

**7. Comparative Effects of Two Modes of Aerobic Training on the Pulmonary Indices of Police Trainees.**

Co-Researcher: Dr. Aniodo, D.A.

The study compared the effects of two modes of aerobic training on the pulmonary indices of vital capacity and respiratory rate of police trainees. The study adopted the randomized pretest-posttest control group experimental design. The trainees were ninety recruits who were within the age range of 18-24 years.

These were randomly assigned to three groups. Using the progressive training principle, the pre-training and post-training measurements of the vital capacity and respiratory rate were taken. The data collected were subjected to descriptive statistics of range, mean and standard deviation to describe the demographic data and inferential statistics of analysis of covariance to test the hypotheses at 0.05 alpha level. The result showed that jog-walk and circuit training which had significant effects on the pulmonary indices investigated should form the major part of the training programme of police trainees.

## **8. Reliability of Kraus-Weber Exercise Test as an Evaluation Tool in Low Back Pain Susceptibility Among Apparently Healthy University Students.**

Co-Researchers: Awolola, O.E. and Hamzat, T.K.

Reliability of Kraus-Weber exercise test in predicting susceptibility to low back pain among apparently healthy university students was the focus of this study. The study was intended to be an evaluative tool for the diagnosis and management of people suffering from low back pain as well as predicting the possibility that people may develop the condition in later life. All the test items were found to be reliable. In addition, the study identified the diagnostic and management procedures for low back pain among young people.

### **(a) In progress**

Below are the on-going researches designed and carried out by me in collaboration with my academic colleagues.

#### **1. Effects of Artificially Induced Fatigue on Learning and Performance of Gross Motor Skills**

This research started in March 2008. The purpose is to supply information on physical and physiological effects of overtraining and rest deprivation on performance. It is an experimental research designed to investigate how fatigue affects the physical, physiological and performance variables of university undergraduates. The selected variable for study includes age, height, weight,  $\text{VO}_2$  max, blood pressure, percent body fat, anthropometric measures, muscular endurance, cardiorespiratory endurance, power and flexibility. Five research assistants helped in data collection. Data analysis will involve the use of descriptive statistics of mean and standard deviation to describe the demographic data; and inferential statistics of analysis of covariance (ANCOVA) to test the stated hypotheses at 0.05 alpha level. If significant differences were found, Scheffe post hoc analysis would be used to determine which of the mean scores were significantly different.

#### **2. Efficacy of the Use of Bicycle Ergometer and Multi-gym Equipment in the Reduction of Body Fat and Improve Muscular Endurance of Sedentary Individuals.**

This research started in July 2007. The research is designed to provide the

sedentary individuals easy and reliable method of achieving the important health related physical fitness components to increase their efficiency in work and play. This is a comparative study, designed to highlight the procedure for proper use of the two equipment (Bicycle Ergometer and Multi-gym.) and to show which of them will be more effective for body fat reduction and development of muscular endurance in the sedentary individuals. Data collection involving measurements anthropometric and physical performance variables are in progress. Six research assistants are involved in the study. The statistical tools of range, mean and standard deviation will be used to describe demographic data while Analysis of Covariance (ANCOVA) will be used to analyze the data at 0.05 level of significance.

### **3. Relationship Between Body Fat and Selected Motor Performance Variables Among University Athletes.**

This research started in January 2008. The study was designed to investigate the extent to which body fat was related to some selected motor performance variables. Relative body fat was estimated from the triceps and subscapular skinfolds while the motor performance was measured from five motor tests variables of 50 yard dash to test for speed, sergent jump for leg power, sit and reach for flexibility, dodge run for agility and brass stick tests for balance. Pearson's product-moment correlation coefficient would be used to determine the relationship between relative body fat and the motor performance variables studied.

### **4. Comparative Study of Selected Performance and Health Related Variables of Volleyball and Basketball Players.**

This research started in May 2008. The study was conducted with the view to compare selected performance and health related variables of volleyball and basketball players among the University athletes. The two teams of ball game players were specifically compared using variables of height, weight, muscular endurance, speed, flexibility, agility and leg power. The data collected would be subjected to descriptive statistics of range, mean and standard deviation to describe demographic data, and inferential statistics of t-test would be used to show the comparison among the variables of study. The alpha level will be set at 0.05.

#### **(c) Dissertation and Thesis**

1. Babalola, J. F. (1982) The Effects of a 10-Week Training Programme on the Physical Performance of College Physical and Health Education Majors. Unpublished M. Ed Project, University of Ibadan, Ibadan, **112 pages.**

2. Babalola, J.F, (1987) The Effects of Sleep Deprivation on the Physical and Physiological Performance Variables of College men. Unpublished Doctoral Thesis, University of Ibadan, Ibadan, **177 pages**.

## **X Publications**

### **(a) Books already published**

1. Babalola, J. F. (2007) Introduction to Human Anatomy and Physiology; Ibadan University Press; ISBN 978 978 069 337 4 374 pages.  
(Nigeria)
2. Babalola, J. F. (2010): Handbook of Practical Physical Education. Ibadan, O.B.F. Intercontinental Press Ltd. ISBN 978-978-49787-0-5. 579 pages

### **(b) Chapters in Books already published**

3. Babalola, J.F. (1999): Exercise, Relaxation and Sleep. In O.A. Moronkola (Ed). Essentials of Human kinetics and Health Education. Ibadan: Codat Publications, pages 1 – 12.  
(Nigeria)
4. **Babalola, J.F.** and Fadoju, A.O. (2001): Effective Teaching of Physical and Health Education in Primary and Secondary Schools. In C.O. Udoh, (Ed) Issues in Human Kinetics, Health Promotion and Education. Ibadan. Department of Human Kinetics and Health Education, University of Ibadan, pages 152 – 159.  
(Nigeria)  
(Contribution: 50%).
5. **Babalola, J.F.** and Fadoju, A.O. (2001): The Psycho-physiological Relevance of Dance in the Training of Physical Educators. In Yomi Awosika, J.B. Babalola, M. Fabunmi, J.O. Osiki and B.O. Emunemu (Eds.) Topical Issues in Education; Ibadan: Faculty of Education, University of Ibadan, pages 263 – 273.  
(Nigeria)  
(Contribution: 50%).
6. Ajala, J.A.; **Babalola, J. F.** and Fadoju, A. O. (2002). What Students Should Learn in the Arts. (Chapter 13). In J.A. Ajala (Ed). Designing Content of the Curriculum: A Guide to Practice. Ibadan, MayBest Publications, pp, 201-215.  
(Nigeria)  
(Contribution: 40%).



7. **Babalola, J.F.** and Fadoju, A.O. (2002). Enhancing Intra-School and School-Community Cooperation for Effective Teaching of Physical Education and Sports in Nigerian Secondary Schools. In V.C. Igbanugo (Ed). The Official Magazine of the International Council for Health, Physical Education, Recreation, Sports and Dance: African Region, Ibadan, Stirling-Horden Publishers, pp.74-77.  
(Nigeria)  
(Contribution: 50%).
8. Babalola, J.F. (2002): Boosting School Athletes' Performance Through Nutrition: Tips for Physical Educators. In D.F. Elaturoti and Kola Babarinde (Eds.) Teacher's Mandate on Education and Social Development in Nigeria. Ibadan: Faculty of Education, University of Ibadan pages, 42 – 52.  
(Nigeria)
9. **Babalola, J.F.** and Aniodo, D.A. (2002): Injuries at Nigeria Colleges of Education Games (NATCEGA) 2002. Preparation of the Athlete. In V.C. Igbanugo (Ed) Ibadan: Nigeria Association of Sports Science and Medicine, pages 48 – 50.  
(Nigeria).  
(Contribution: 80%).
10. **Babalola, J.F.** and Sangobiya, T.O. (2003): Effects of Eight Weeks Aerobic Exercise Programme on Body Composition of Female Obese-osteoarthritic Patients. In O. Ayodele-Bamisaiye, I.A. Nwazuke and A. Okediran (Eds.) Education This Millennium – Innovation in Theory and Practice. Lagos: Macmillan Nigeria Limited, pages 105 – 112.  
(Nigeria)  
(Contribution: 80%).
11. Babalola, J. F. (2004): Psycho-Physiological Effects of Anabolic-Androgenic Steroids on Exercise Performance. Multi-Disciplinary Approach to Human Kinetics and Health Education. In V.C. Igbanugo (Ed) Ibadan: Department of Human Kinetics and Health Education, University of Ibadan, pages 270 – 277.  
(Nigeria)
12. Babalola, J. F. (2010): Back Pain: Causes, Treatment and Prevention. Optimal Health Performance: The Basis of Human Movement Education in the 21<sup>st</sup> Century. In Ogundele, Babalola and Moronkola (Eds) Ibadan:

Department of Human Kinetics and Health Education, University of Ibadan, pages 42 – 51.  
(Nigeria)

(c) **Articles that have already appeared in Refereed Conference Proceedings.**

13. Babalola J.F. (1988). Development of cardiovascular fitness as a basis for improved sports performances Book of Proceeding on 6th NATCEGA Games 1 (1), pp, 78-86.

14. **Babalola, J.F.** and Fadoju, A.O. (2002): Enhancing Intra-school and School - Community Cooperation for Effective Teaching of Physical Education and Sports in Nigerian Secondary Schools. In V.C. Igbanugo (Ed) The Official Magazine of the International Council for Health, Physical Education, Recreation, Sports and Dance: African Regional Conference Proceedings, pages 74 – 77.  
(Nigeria)  
(Contribution: 50%).

15. **Babalola, J.F.** and Aniodo, D.A. (2002): Injuries at Nigeria Colleges of Education Games (NATCEGA) 2002. Proceedings of Nigeria Association of Sports Science and Medicine, pages 48 – 50.  
(Nigeria).  
(Contribution: 80%).

16. Babalola, J.F. (2003): Perceived Effects of Anabolic Steroid as a Performance Enhancing Drug by Track and Field Athletes. 2002 NUGA FORUM Scientific Congress Proceedings, pages 105 – 108.  
(Nigeria)

(d) **Patents – Nil**

(e) **Articles that have already appeared in learned journals.**

17. Babalola, J.F. (1989). A review of the Physical and Physiological Performance Variables of Athletes. Lagos Journal of Physical Health Education and Recreation 2 (1) pp, 16-23.
18. Babalola, J.F. (1989). Effects of Sleep Deprivation on Resting and Recovery Heart Rates of Athletes. College Review 4 (1) pp, 71-78.
19. Babalola, J.F. (1990). Exercise and Diet for Weight Control. Ondo State Journal of Physical, Health Education and Recreation. 1 (1) pp, 110-123.

20. **Babalola, J.F.** and Musa O.M (1993). Hooliganism in Youth Sports. Journal of Nigeria Association of Sports Science and Medicine (JONASSM) **III** pp, 86-90.
  
21. Babalola, J.F. (1994): 10-Week Morning and Evening Exercise Training Programme and Improved Capacities for Physical Performance. Journal of Nigeria Association of Sports Science and Medicine Vol. 4. 37 – 43.  
(Nigeria)
  
22. Agbonjinmi, A.P., Hassan-Biu, M.O. and **Babalola, J.F.** (1994). Hematological Variables and Smoke Induced Cardiovascular Responses I: Relationships Amongst PCV, Hb and RBC Count and Tachycardia Induced by Cigarette Smoke. Journal of Nigeria Association of Sports Science and Medicine Vol. 6. 122 – 129.  
(Nigeria)  
(Contribution: 71.%).
  
23. Agbonjinmi, A.P., Hassan-Biu, M.O. and **Babalola, J.F.** (1995). Hematological Variables and Smoke Induced Cardiovascular Responses II: Correlation Amongst PCV, Hb and RBC Count and Cigarette Smoke-Induced Blood Pressure Responses. Journal of Nigeria Association of Sports Science and Medicine Vol. 7. 8 – 16.  
(Nigeria)  
(Contribution: 71.%).
  
24. Babalola, J.F. (1998): Physical and Physiological Comparison of Male and Female in Speed and Agility Events. Journal of Special Education Vol. 8. No. 1, 99 – 105.  
(Nigeria)
  
25. Babalola, J.F. (1998). Physical Exercise for Health and Fitness. Journal of the Nigeria Association for Physical, Health Education, Recreation, Sports and Dance, **1** (2) pp, 77-83.
  
26. Babalola, J.F. (1998). Physical and Physiological Comparison of Male and Female in Speed and Agility Events. Journal of Special Education. **8** (1) pp, 76-84.
  
27. Agbonjinmi, A.P., Cole, O.A and **Babalola, J.F.** (1999) Iron and Protein Energy Nutritional Status in Nulliparous University Female Students. Journal of Health Education and Welfare of Special People Vol. 3. No. 1, 35 – 40.  
(Nigeria)  
(Contribution: 71 %).
  
28. Babalola, J.F. (1999): Effect of Cigarette Smoking on the Cardiorespiratory Endurance and Max. VO<sub>2</sub> of Collegiate Athlete Smokers. Journal of Educational Theory and Practice Vol. 5. Nos. 1 & 2,

97 – 104.

**(Nigeria)**

29. Babalola, J. F. (1999): Effects of Sleep Deprivation on Resting and Recovery Systolic and Diastolic Blood Pressures of University Freshmen. Journal of Health Education and Welfare of Special People Vol. 4. No. 1, 63 – 73.  
**(Nigeria)**
30. Babalola, J.F. (1999): Negligence: A Potential Source of Liability to the Practical Physical Education. Nigeria Educational Law Journal Vol. 2. No. 1, 76 – 84.  
**(Nigeria)**
31. Babalola, J.F. and Abass, O.A. (1999). Scientific Training Principles for Optimum Performance. Journal of the Nigeria Association for Physical, Health Education, Recreation, Sports and Dance. 2 (1) pp, 126-133.
32. Agbonjinmi, A.P., Babalola, J.F. and Oranugo, J.B.C. (2000). Estimation of Skeletal and Heart Weights in University Soccer Players. SPED. Journal of Science in Education. 2. (1) pp, 116-120.
33. Babalola, J.F. (2000). Cigarette Smoking a Threat to Health and Safety in Sport. Journal of Functional Education. 2 (1) pp, 50-57.
34. Ogidi, M.M. and Babalola, J.F. (2000). Physical Education, Practical Courses and Individual Safety. Journal of the Nigeria Association for Physical, Health Education, Recreation, Sports and Dance. 2. (2) pp, 105-111.
35. Babalola, J.F. (2000): Cardiorespiratory Capacity as a Component of Physical Fitness. African Journal of Cross-Cultural Psychology and Sports Facilitation Vol. 1. No. 1, 25 – 28.  
**(Nigeria)**
36. Babalola, J. F. (2001): Application of Physical Exercises in the Management of Mechanical Low Back Pain. Journal of Advance Studies in Educational Management Vol. 1. No. 1, 173 – 178.  
**(Nigeria)**
37. **Babalola, J. F.** and Fadoju, A. O. (2002): Level of Awareness of Graduating Degree and Diploma Students' on Acquired Immune deficiency syndrome (AIDS). Nigerian Journal of Emotional Psychology and Sports Ethics Vol. 4. 119 – 123.  
**(Nigeria).**  
**(Contribution: 50%).**
38. **Babalola, J.F.** and Oyeniya, P.O. (2003): Curbing Sport Hooliganism

- During Collegiate Sports in Nigeria. West African Journal of Physical and Health Education Vol. 7. 58 – 63.  
(Nigeria).  
(Contribution: 80%).
39. Babalola, J. F. (2005): Physical Exercise and Dieting for Weight Control. International Journal of African and African American Studies Vol. 4. No. 2, 27 – 32.  
(USA).
40. **Babalola, J.F.** and Oyeniyi, P.O. (2005): The Use of Exercise in the Management of Coronary Heart Diseases. West African Journal of Physical and Health Education Vol. 9. No. 1, 1 – 9.  
(Nigeria).  
(Contribution: 80%).
41. **Babalola, J.F.** and Aniodo, D.A. (2006): Comparative effects of two modes of aerobic training on the pulmonary indices of police trainees. Journal of Human Kinetics and Environmental Education (2006 Special Edition) 55 – 68.  
(Nigeria).  
(Contribution: 80%).
42. **Babalola, J.F.** and Oyeniyi, P.O. (2006): Physical Education and Sports as Antidote to Sedentary Living by Persons with disabilities. Journal of International Council for Health, Physical Education, Recreation, Sports and Dance. Africa Region Vol. 1. No. 2, 106 – 108. (Nigeria).  
(Contribution: 80%).
43. **Babalola, J.F.** and Ayenigbara, G.O. (2006): Problems and Prospect of HIV/AIDS Management: A Focus on Antiretroviral (AVR) therapy. Educational Thought Vol. 5. No. 1, 83 – 89. (Nigeria).  
(Contribution: 80%).
44. Babalola, J. F. (2007): Effects of Hip Angles of 100<sup>0</sup> and Above on Quadriceps Strength During Isometric Contractions in the Male and Female Athletes. International Journal of Applied Psychology and Human Performance Vol. 2. 351 – 356.  
(Ghana).
45. Akinwande, O. A., **Babalola, J. F.** and Mbada, C. E. (2008): Influence of Age on Cardiovascular Response of Normotensive Subjects to Upper Extremities Isometric Exercises. Journal of Physical Education and Research. Vol. XIII No 1. 1897 – 1904.  
(Nigeria).  
(Contribution: 60%).

46. **Babalola, J. F.;** Awolola, O. E. and Hamzat, T.K. (2008): Reliability of Kraus-Weber Exercise Test as an Evaluation Tool in Low Back Pain Susceptibility Among Apparently Healthy University Students. African Journal for Physical, Health Education, Recreation & Dance Vol. 14. No. 2, 188 – 198.  
**(South Africa).**  
**(Contribution: 72%).**
47. Babalola, J.F. (2009): Etiological Factors and Management of Obesity. Journal of Educational Foundations and Management. Vol. 7. No. 1, 1-14  
**(Nigeria).**
48. Babalola, J.F. (2009): Evaluation of Cardiorespiratory Fitness of Elite Soccer Players Using Heart Rate and Blood Pressure Measurements. International Journal of Applied Psychology and Human Performance Vol. 5. 849-858  
**(Ghana).**
49. Babalola, J.F. (2009): Physical Exercises and Functional Capacity for the Aging. Journal of Nigeria Association of Sports Science and Medicine. Vol. 11. No. 1, 23 - 28  
**(Nigeria).**
50. Babalola, J.F. (2010): Relationship Between Body Composition and Functional Capacity of Patients Living with Osteoarthritis of the Knee. European Journal of Scientific Research Vol. 44. No.1, 6-12  
**(Holland)**
51. Babalola, J.F. (2010): Relationship Between Body Composition and Blood Pressure of University Students. Ghana Journal of Health, Physical Education, Recreation, Sports and Dance. Vol. 3, 13-22.  
**(Ghana).**
52. **Babalola, J.F.** and Ademuyiwa, G.M. (2011): Physical and Socio-Cultural Factors as Causes of Maternal Mortality in South-West Nigeria. African Journal of Educational Management. Vol. 14, No. 1, 123-132.  
**(Nigeria).**  
**(Contribution: 80%).**
53. Babalola, J.F. (2011): Health Consequences of Obesity and Overweight. Pakistan Journal of Social Sciences Vol. 8 No. 3 118 - 124  
**(Pakistan)**

54. Babalola, J.F. (2011): Effect of Eight Weeks Aerobic Exercise Programme on Body Weight and Percent Body Fat of Female Obese-Osteoarthritic Patients. European Journal of Scientific Research. Vol. 51. No. 4, 484-489. **(Holland)**
  55. Babalola, J.F. and Taiwo, O.O. (2011): Effects of an Endurance Walking Training Programme on Functional Ambulation Recovery of Stroke Survivors. Research Journal of International Studies Issue 19. **(Holland)**
  56. Babalola, J.F. (2011): Effects of 8-weeks Circuit Training Programme on Physiological and Performance Characteristics of University Racket Game Players. Journal of Asian Scientific Research. Vol. 10, 1-8 **(Pakistan)**
  57. Awotidebe, T.O., **Babalola, J.F.**, Oladipo, I.O., Abass, A.O., Mbada, C.E. and Onigbinde, A. T. (2011): Comparative Efficacy of Open Kinetic-chain Exercise and Short-wave Diathermy in the Management of Patients with Knee Osteoarthritis. Medica Sportiva. Vol. VII No 3, 1635 - 1642. **(Romania) Contribution: 30%)**
- ii. **Books, Chapters in Books and Articles already accepted for Publication**
58. Babalola, J.F. and Nabofa, O.E. (2011): Influence of Martial Arts on Selected Performance Variables Research Journal of International Studies Issue 22. **(Holland)**
- iii. **Articles Already Submitted for Publication.**
59. Babalola, J.F. (2011): Effects of 8-weeks Circuit Training Programme on Physiological and Performance Characteristics of University Racket Game Players.
- iii. **Technical Reports and Monographs**
60. Babalola, J. F. (2003): Skills Development and Techniques in Swimming. Distance Learning Center, University of Ibadan. Ibadan. 74 pages. **(Nigeria)**
  61. Babalola, J. F. (2011): Skills Development and Techniques in Badminton. Distance Learning Center, University of Ibadan. Ibadan. 81 pages. **(Nigeria)**
  62. Babalola, J.F. (2011): Curriculum Development in Physical Education. Distance Learning Center, University of Ibadan. Ibadan. 63 pages. **(Nigeria)**

### **Focus of my Research**

My research focuses on **Physiology of Exercise** which is an aspect of Human Kinetics and Health Education.

#### **Use of Exercise to Improve the Physical and Physiological Capacities and Performance Variables of Athletes.**

The central focus has been on the use of exercise to improve the physical and physiological capacities and performance variables of both athletes and the general populace. The research has used exercise adaptations as modalities for the treatment of obesity, weight control and inducing relaxation and sleep. The research gave a reliable and an easy way of identifying, assessing and management of subjects with low back pain plus other orthopedic problems, and used principles of Physiology of Exercise to enhance effective teaching of skills and development of practical physical education courses to prevent sports injuries and create a safe-play environment (see publications 3, 4, 6, 7, 9, 11, 13, 17, 18, 21, 22, 25 and 28).

#### **Effects of Exercise on Improved Capacities for Physical Activities.**

The research under this category showed that participation in regular physical exercises would result into significant improvement in physical performance. The study also provided information on education of trainers, coaches and exercise therapists on the need for adequate sleep and rest to enhance improved health and performance (see publications 2, 16, 24, 26 and 27).

#### **Effects of Exercise and Diet on Health and General Well-being.**

The studies applied the knowledge of Physiology of Exercise to increase the awareness of stakeholders and provide solutions to resultant health problems emanating from drug use, sedentary lifestyles and improper dieting behaviours in order to improve the general health and well-being (see publications 5, 8, 10, 12, 14, 15, 19, 20 and 23).

The essential foundation of Physiology of Exercise is facilitated through a well illustrated, full colour introductory textbook written on Anatomy and Physiology which aids comprehensive understanding of the human body systems structurally and functionally (see publication No. 1).

The studies in my research have implications on the general health of the athletes and will benefit trainers, coaches and exercise therapists in the need to advise athletes and the general populace to abstain from the use of performance enhancing drugs, cigarette smoking and cultivate an active lifestyle for improved cardiorespiratory endurance, enhanced athletic performance, and prevent obesity and other debilitating health problems.

Ten (10) Publications that Best Reflect My Contributions to Scholarship and Research.

- a. Research on Health and Performance Related Physical Fitness Variables.
1. Babalola, J. F. (1994). 10-Week Morning and Evening Exercise Training



The subjects for this study were 30 collegiate athletes randomly selected from 55 volunteers. They were aged 17-25 years. The experiment involves a 10-week morning and evening training periods lasting for one hour, three times per week. The subjects' aerobic capacities were measured using the 12-minute run test as suggested by Cooper 1970. The distance covered on the number of laps covered on the 400 meter track was recorded. The subjects' performance was interpreted into fitness categories using Cooper's Monogram. The data collected was further subjected to statistical analysis using Analysis of Covariance (ANCOVA) to determine the significance or otherwise of the posttest difference in the distances covered during the 12 minute run test. The study reported a comprehensive evaluation of the capacities for performance in collegiate athletes. The study gave the importance of a well structured programme of exercise trainings to the improvement of both the fitness and performance levels of the athletes.

2. Babalola, J.F. (1999). Effects of Sleep Deprivation on Resting and Recovery Systolic and Diastolic Blood Pressures of University Athletes. Journal of Health Education and Welfare of Special People Vol. 4. No. 1, 63 – 73.  
**(No 17 on the C.V.)**

The main purpose of this study was to determine the significance of the effects of sleep deprivation on resting and recovery systolic and diastolic blood pressures using university fresh men of the department of Human Kinetics and Health Education, University of Ibadan. A total of 60 students were randomly divided into three groups. Twenty in each of the two experimental groups and control group respectively. Only the experimental groups were exposed to the treatment which consisted of 24 hours and 48 hours sleep deprivation. Two hypotheses were formulated and tested to determine the significance of the effects of the treatment on the variables tested at 0.05 alpha level. Analysis of Covariance (ANCOVA) was applied on all post test measures using the pretest measures as covariates. The study provided data to show that sleep deprivation adversely affects physiological variables such as resting and recovery systolic and diastolic blood pressures thereby having consequent effects on the health status and performance levels of the athletes. The study also provided information on education of trainers, coaches and exercise therapists on the need for adequate sleep and rest to enhance improved health and performance.

3. Babalola, J.F. (1999). Effect of Cigarette Smoking on the Cardiorespiratory Endurance and Max  $\text{VO}_2$  of Collegiate Athlete Smokers. Journal of Educational Theory and Practice Vol. 5. Nos. 1 & 2, 97 – 104.  
**(No 16 on the C.V.)**

The aim of this study was to determine the significance of the effects of 48 hours intensive cigarette smoking on the cardiorespiratory endurance and Max  $\text{VO}_2$  of athletes who are known cigarette smokers. A total of 12 subjects participated in

the study. They comprised 6 experimental and 6 control subjects. The subjects were volunteers from among the male Physical and Health Education students who were experienced collegiate athletes. Two hypotheses were formulated and tested to determine the significance of the treatment effects, if any, on the variables tested. Analysis of Variance (ANOVA) using repeated measure design was applied on the pretest and posttest scores. Although the previous sports records of the athletes showed that they were good in their various sports, abstinence from smoking habit would have made them to better their records. This conclusion was drawn from the comparison of the pre and post test results which showed that heavy smoking significantly affected the endurance performance of these athletes. The study provided information on the implications of cigarette smoking on the general health of the athletes which will benefit trainers, coaches and exercise therapists on how to advise their athletes against the habit of cigarette smoking.

**b Prediction of Exercise Effects on Muscular Contraction and Athletic Performance Variables.**

4. Babalola, J F. (2007). Effects of Hip Angles of 100<sup>0</sup> and Above on Quadriceps Strength During Isometric Contractions in the Male and Female Athletes. International Journal of Applied Psychology and Human Performance Vol. 2. 351 – 356. (No 26 on the C.V.).

This study investigated the effect of three obtuse angles on the quadriceps strength during isometric quadriceps muscle contraction. The research was designed to discover the hip angle at which the maximal isometric force could be produced in both sexes. Forty female and thirty-five male participants whose ages ranged between 20 and 30 years took part in the study. The subjects selected were those with no history of musculoskeletal disorder of the dominant lower limb, using non-probability technique. The hip angle was set at three different angles at 100<sup>0</sup> and 130<sup>0</sup> using an adjustable back support of a specially designed testing table. The isometric force of the quadriceps strength predicts the ability of the athlete in track athletics, swimming and some other sporting activities. The quadriceps strength was measured using an angle adapted cable tensiometer after the subject had exerted a maximal pull on the tensiometer. It was found that the quadriceps muscle of the male subjects generated a greater isometric force, than the female subjects, at the various hip angles. It was however discovered that the hip angle at which the maximal isometric force was produced in both sexes was 130<sup>0</sup>. This angle was therefore recommended for optimal performance.

**c. Research on Effects of Exercise on Health and General Well Being.**

5. Babalola, J. F. (2001). Application of Physical Exercises in the Management of Mechanical Low Back Pain. Journal of Advance Studies in Educational Management Vol. 1. No. 1, 173 – 178. (No 20 on the C.V.).

The study aimed at applying physical exercises to the management of pain in the lower back region. The subjects consists of 40 male randomly selected from 85 volunteer final year students in the degree and diploma programmes of the department of Human Kinetics and Health Education, University of Ibadan. They were aged 18-30 years. The factors of age, height, total body weight, body mass index, habitual participation in recreational/physical activities and family history of low back pain. The research utilized a pre-test, post-test experimental design. Descriptive statistics of mean range and standard deviation were used to describe the demographic data, while Analysis of Variance (ANOVA) was used to test for significant differences among test scores at 0.05 level of confidence. It was discovered that low back pain resulted from weak abdominal muscles, psoas major and minor and hamstring muscles. The findings of the research showed that adequate physical exercises should be designed to improve muscular endurance and flexibility of the lower back region of the body. It is recommended that people with muscular insufficiency are advised to participate in these types of exercise while the general public should take recreational physical activities as valued habit. The research showed that early detection of susceptibility to low back pain would help to prevent its subsequent development of this ailment.

6. **Babalola, J.F.** and Oyeniyi, P.O. (2005). The Use of Exercise in the Management of Coronary Heart Diseases. West African Journal of Physical and Health Education. Vol. 9. No. 1, 1 – 9.  
(No 24 on the C.V.)

The paper examined exercise as a process through which the body performs a work of a demanding nature in accordance with muscle and joint functions in a clinically-controlled environment and within the constraints of safety. It was discovered that exercise can reduce the risk of coronary heart disease by raising high-density lipoprotein, increase insulin sensitivity and reduce body fat and hypertension. The research shows that exercise can ensure protection on health and possible longevity in life, if maintained. It is recommended that exercise performance under the guidance of qualified personnel should be encouraged. The study revealed that performance in exercise programme will reduce the risk of coronary heart disease, give a sense of well being and improve the general quality of life.

7. **Babalola, J. F.;** Awolola, O. E. and Hamzat, T.K. (2008). Reliability of Kraus-Weber Exercise Test as an Evaluation Tool in Low Back Pain Susceptibility Among Apparently Healthy University Students. African Journal for Physical, Health Education, Recreation & Dance Vol. 14.

No. 2, 188 – 198.  
(No 27 on the C.V.).

The purpose of this study was to determine the reliability of Kraus-Weber exercise test in the evaluation of strength and flexibility of the spinal and hamstrings muscles of university students. The study was an evaluative tool for the diagnosis and management of people suffering from low back pain as well as predicting the possibility that people may develop the condition. Two hundred subjects (100 males and 100 females), ages ranging between 18 and 30 years, with no previous or present complaints of injury to the back and lower limbs were selected for the study using the non-probability sampling technique of sample of convenience. The Kraus-Weber test was carried out on the subjects whose age, gender, height, total body weight and responses to prepared questions had earlier been recorded, on two occasions with a day's interval. Many of the subjects (52%) failed the Kraus-Weber (K-W) test. The result showed that body mass index, weight, height and previous history of low back pain had low and negative correlation with performance in K-W test while recreational/physical exercise had positive but low correlations with the test. Exercises used on K-W test was found to be reliable and easy to administer. The exercises are recommended for individual evaluation. K-W test gave a reliable and an easy way of assessing subjects with low back pain.

8. **Babalola, J.F.** and Aniodo, D.A. (2006). Comparative effects of two modes of aerobic training on the pulmonary indices of police trainees. Journal of Human Kinetics and Environmental Education (2006 Special Edition) 55 – 68.  
(No 25 on the C.V.).

The study compared the effects of two modes of aerobic training on the pulmonary indices of vital capacity and respiratory rate of police trainees. The study adopted the randomized pretest-posttest control group experimental research design. The trainees were 90 recruits who were within the age range of 18-24 years. The participants were randomly assigned to three groups (two experimental groups and one control group). The experiment which comprised of jog-walk and circuit training were performed three times per week for ten weeks. Pre-training and post training measures were taken before and after training respectively. The data collected were subjected to descriptive statistics of range, mean and standard deviation and inferential statistics of Analysis of Covariance (ANCOVA). The study showed that jog-walk and circuit training were effective on the improvement of pulmonary indices of the participants.

- d. **Research on Nutrition, Sports and Weight Control.**
9. Babalola, J. F. (2005). Physical Exercise and Dieting for Weight Control. International Journal of African and African American Studies Vol. 4. No. 2, 27 – 32.  
(No 23 on the C.V.)

The article reviewed relevant research papers to discuss the role of exercise and a prudent diet control in the bid to maintaining a desirable body composition. The results highlighted in the article were significant

for preventive health because increase in lean body mass and reduction of body fat can result from participation in physical exercise depending on the intensity, duration and frequency of the exercise training. The research further showed that avoidance of sedentary lifestyles and improper dieting behaviours could lead to improved general health and well-being. It is therefore recommended that every individual should practice active lifestyle by participation in moderate and controlled physical exercises. It is further recommended that the caloric intake should balance energy expenditure in order to maintain an excellent body weight. The study revealed that active lifestyle in form of participation in physical exercises, and moderate caloric intake will prevent obesity and resultant health problems.

10. Agbonjinmi, A. P., Cole, O. A and **Babalola, J. F.** (1999) Iron and Protein Energy Nutritional Status in Nulliparous University Female Students. Journal of Health Education and Welfare of Special People Vol. 3. No. 1, 35 – 40.  
(No 15 on the C.V.)

The study aimed at developing the anthropometric indices of nutritional status of Nigerian students. Eight Nulliparous University female students were assessed biochemically to identify their iron and protein nutritional status. Packed cell volume (PCV) or haematocrit, haemoglobin and red cell count were chosen as the measures of iron nutritional status while plasma albumin concentration was chosen as an index of protein energy status. Fasting blood levels of these variables were determined using standard procedures. The mean values of PCV, Hb and Albumin are similar to lower values of ranges prescribed as normal for women while the mean values of red blood count is below the minimal of the range prescribed as normal. The result shows low value of the variable under study, which suggests that most of the participants were suffering from anemia and hyperalbuminemia due to inadequate dietary intake of iron and protein. The study gave a pointer to the need for a biomechanical study and nutritional anthropometric survey of Nigerian students.

## **XI Major Conferences Attended with Report/Paper Read (in the last 5 Years)**

1. The 3rd African Regional Conference of International Council for Health, Physical Education, Recreation, Sports and Dance Africa Region. African Scientific Congress, (Held at University of Education, Winneba, Ghana). 7 August - 12 August, 2006.

### **Paper Read**

Willingness of Physical Education Undergraduates to offer

Entrepreneurship Education as Panacea to Graduate Unemployment.

2. The 17<sup>th</sup> National Conference of Nigeria Association of Sports Science and Medicine (Held at University of Ilorin, Department of Physical and Health Education, Main Campus, Ilorin) November 28 - December 1, 2007.

**Paper Read**

Health Consequences of Obesity and Overweight.

3. 2008 4<sup>th</sup> International Council for Health, Physical Education, Recreation, Sport and Dance ICHPER.SD African Regional Congress (Held at the University of Botswana, Gaborone) October 14 – 17, 2008.

**Paper Read**

Estimation of Skeletal and Heart Weights in University Soccer Players.

4. The 52<sup>nd</sup> ICHPER.SD Anniversary World Congress Sponsored by the Qatar Olympic Committee (Held at the Grand Regency Hotel & Convention Center, Doha, Qatar) May 8 – 12, 2010.

**Paper Read**

Relationship between body composition and functional capacity of patients living with osteoarthritis of the knee.

5. 2011 5<sup>th</sup> International Council for Health, Physical Education, Recreation, Sport and Dance ICHPER.SD African Regional Congress (Held at the University of Ibadan Hotel & Conference Centre, Ibadan) February 2 – 5, 2011.

**Paper Read**

Development of Improved Health and Physical Well-being through Exercise Performance.

6. The 19<sup>th</sup> National Conference of Nigeria Association of Sports Science and Medicine (Held at the Sports Centre, Lagos State University, Ojoo, Lagos) July 13 – July 16, 2011.

**Paper Read**

***DR. J.F. BABALOLA***

**Signature and Date.**