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**THE MIND IN THE BODY:  
SPORTS PSYCHOLOGY AS THE  
CORNERSTONE TO SPORTS ACHIEVEMENTS  
AND GREATNESS**

**U. L. ARCHIVE**

BY

**PHILOMENA B. IKULAYO**



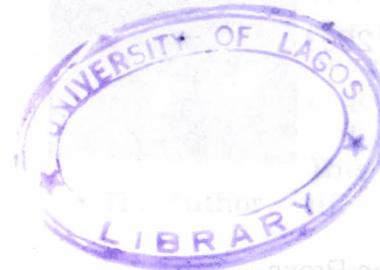
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**THE MIND IN THE BODY:  
SPORTS PSYCHOLOGY AS THE CORNERSTONE  
TO SPORTS ACHIEVEMENTS AND GREATNESS**

**U. L. ARCHIVE**

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By

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**INTRODUCTION**

The attainment of sports excellence has been a matter of world consciousness in recent times because of its international significance. Magnificent sports performance is associated with superiority of the mind and body coupled with good management of human and material resources. These are seen as ways of improving national might, and sometimes used as a demonstration of socio-economic supremacy over others. Most nations all over the world no longer engage in world wars. They engage in sports, except for the recent war in Iraq which was for a purpose. Sports has become the top cynosure of the world. The record number of two hundred (200) nations which participated in the last Olympic Games in Sydney 2000 gave credence to this claim. Thus, the sustenance of a high performance level in all spheres of sports' competitions is of national and international concern. Also, achievements in sports have been linked with world politics and super-powers, because a sustained high national athletic achievement is seen as an indicator to effective and good governance, and, consequently, used as an effective political propaganda for national recognition and identity.

In view of these, many nations of the world have tried various methods of motivating their athletes to perform optimally through personal recognition awards, national honours, monetary rewards and other material gifts. Others have provided sufficient incentives through the provision of standard facilities, equipment and attractive outfit coupled with the employment of top-class coaches and competent administrators, (Ikulayo, 1988; Olympian, 1988; and Vanguard, 1988).

In addition, some nations have employed the services of sports psychologists to take care of the mental, emotional and social welfare of athletes in order to psyche them up to perform their best at all times. Specifically, the National Olympic Committees of U.S.A., U.S.S.R, China, Japan, Australia, Canada, Germany and many others had employed the services of sports psychologists for improved sports performance at major international competitions. At the 1984 Olympic Games in Los Angeles, the United States Olympic Committee employed the services of eleven sports psychologists (Suinn, 1985) who stayed and worked with the athletes throughout the period of the games. At the 1988 Seoul Olympic Games, more sports psychologists were attached to the teams and from different nations of the world (Olympian, 1988). The 2000 Sydney Olympics witnessed the highest number of sports psychologists with nearly all the contingents from all over the world at the Games, having access to the services of sports psychologists. Coming to our domain, the Nigerian government has, also, started to involve sports psychologists in her sports scenes although, it must be noted, it is on an epileptic manner. There was a time that it was a mandatory requirement that a sports psychologist must be part of the technical members of the team, but today such practice has been discarded.

Even though the emergence of sports psychology as both an academic and professional discipline is relatively new when compared with other sports science related disciplines, the impact and the contributions its knowledge has made to performance improvement of sports and personality adjustments of athletes worldwide have become increasingly significant, (Kane, 1972; Singer, 1980; 1986; Nideffer, 1982;

Cratty, 1983; Ravizza 1982; Suinn, 1985; Silva, 1988; Unestahl, 1988). It is generally believed that involvement of sports psychologists has yielded high dividends for Sports Performance advancement worldwide.

Historically, the first romance of psychology with sports was linked with the work done by Triplett (1898) and Griffiths (1932). The area remained dormant until around late 1960s and early 1970s when more psychologists started to conduct laboratory tests, making generalisations which had implications for performance in sports. The interpretations and applications of the generalisations made out of these laboratory researches and findings started to generate reactions. Many of the laboratory results were not strictly applicable to performance on the sports field because of the unstable and unpredictable situational conditions prevalent in competitive sports settings, (Cratty, 1973, Fitts & Posner, 1973; Singer, 1975; and Ikulayo, 1985). Since 1970 the discipline has spread from North America to Europe and, by 1985, it reached the developing African Nations (Singer, 1987). Within this period, professional associations were formed to monitor the professional practice, enhance ethics of the profession and disseminate relevant information through seminars and workshops. Prominent amongst these bodies are the International Society of Sports Psychology (ISSP) which was formed in 1965, the North American Society for the Psychology of Sports and Physical Activity (NASPSPA), the Canadian Society for Psycho-motor Learning and Sport Psychology (CSPLSP), the Association for the Advancement of Applied Sports Psychology (AAASP) and Sports Psychology Association of Nigeria (SPAN) (Straub, 1975; Salmela, 1981; Vealey, 1988 and Adebayo, 1985).

A great deal of researches is now being conducted on competitive sports and they have helped in the growth and development of sports psychology discipline. It has also helped the practitioners to modify interventional approaches with athletes, coaches and administrators.

While the profession has grown more rapidly in the developed countries, the developing world, especially in Africa, the psychological aspect of sports performance has been neglected mainly because few people know about its advantages. Besides, many Africans still believe that they possess natural physiological characteristics which are sufficiently advantageous to excellent sports performance with or without adequate psychological development. Some even believe in the supernatural powers of 'juju'. That is why Africans, even though they are physically endowed and motoric, are yet to rule the world in all sports unlike their Afro-American counterparts.

Figure 1: Three distinct areas of understanding the behaviours of athletes on the field of play



### What is Sports Psychology?

Sports psychology is a branch of sports sciences involving the science of psychology applied to athletes (sportsmen/women) in competitive athletic situations. The discipline is associated with an attempt to scientifically study individuals in sporting situations, analyse and explain or describe behaviour in order to modify, mould, alter or predict subsequent performance outcomes. It is a distinct discipline in which the totality of the athletes, the sports they play, and their competitive environment are of major consideration, figure 1.

Everything the athletes do, feel, think or perceive is important to achievement in sports. Each athlete is unique because of his individual idiosyncrasies and he is treated as such in the field of sports psychology.

Therefore, the process of studying and assessing athletes in sports situation and the reaction, adaptation, tolerance and acclimatisation of the athletes with changes in the sports environment affords the sports psychologist the opportunity to assist sportsmen/women, coaches, administrators, adults, children, and/or any individuals wishing to participate in sports, to attain greatness and benefit maximally in sporting activities. Sport psychologists also identify principles and guidelines that can be effectively used in order to understand the athletes, how they are affected and how best they could be helped to achieve result. In effect, they find solutions to problems emanating from the process of performing and attaining success.

Competitive athletic situation encompasses all the happenings in skills learning, practice and competition processes in relation to performance environment, which is usually unstable especially in team sports.

Sports participation involves the totality of a person and his whole psychological make-up. In an effort to achieve result and perform well in such activity, the knowledge of the psychological profile of the individual is essential to assist behavioural control. The personality data of each athlete will determine his level of attainment in sport, his orientation towards achievement and his motive for taking part.

### **THEORETICAL FRAMEWORK**

In sports, excellence in peak performance is an optimum aim which leads to sports greatness. To achieve this, interplay of knowledge of psychological theories, competitive playing theories and situational theories are combined for effective application in intervention processes. These theories are constructs and rules which should assist greater understanding of the prediction and control of individuals and/or team's behaviour in athletics situations. Their harmonious interactions will aid successful application of psychological principles to sports performance in order to achieve excellence.

#### **A. Psychological Theories**

- Learning Theory
- Performance Theory
- Practice Theory
- Motivational Theory
- Innate Ability Theory
- Arousal Theory
- Personality Theory

#### **B. Competitive Playing Theories**

- Tactical Theory
- Strategy Theory

- Wrong Signal Theory
- Pace Dictating Theory

#### **C. Situational Theories**

- Weather Condition Theory
- Temperature Theory
- Altitude Theory
- Crowd Behaviour Theory
- Tensed Situational Theory

### **A. PSYCHOLOGICAL THEORIES**

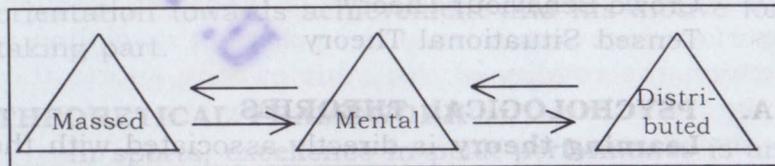
**Learning theory** is directly associated with the functions of the mind in relation to sports competitions. It considers the process of learning by the individuals, stages of learning simple skills, complex skills, fine and gross motor skills; including short term and long term memories, assimilation, retention and the reproduction of learnt skills.

**Performance theory** deals with the level of competence achieved in the skills learnt. Whether an individual has mastered the skill to the extent that his/her performance becomes automatic or is at a level where the slightest distractions within the competitive environment will disrupt the formation, and/or the standard of the skill. This theory focuses attention on the factors which enhance or hinder performances which are internally paced and those which are self paced. It also considers the causes of stability, advancement, fluctuations and deterioration in performance.

**Practice theory** is based on the consequences of traditional practice schedules and how they affect the individuals on simple skills, complex skills, open skills and closed skills; fine motor skills and gross motor skills, discrete skills and continuous skills. This theory affords one the opportunity to know

whether the same practice schedule could be used for the different categories of sports skills and also to be able to predict the relative effectiveness of the schedules. Basically, there are massed, distributed and mental types of practice, figure 2; part, whole-part and whole methods, (Ikulayo, 1982).

Figure 2: Practice schedules model (psm) Types of practice



**Motivational theory** deals with various conditions which could spur a person to wanting to perform well, both intrinsic and extrinsic motivations are discussed. This theory considers the different techniques which could be used in motivating an individual and their predicted consequences. It elaborates on the effects of negative and positive forms of motivation in connection with the individuals taking part in different types of sports. It also explains the reasons why some people prefer to take part in team sports and not individual, dual or combat sports. This is an important theory in sports psychology as it relates to motive for human performance achievements and greatness.

**Innate ability theory** simply explains the in-born abilities, and how it affects sports performance. The naturally endowed individuals may shine irrespective of proper grooming and environmental conditions. These two factors are important because they encourage early discovery of such talents.

**Arousal theory** concerns itself with the level of activation and stimulation conducive to human performance. Too much arousal will cause poor

performance. Also, lack or insufficient activation will also result into poor outcome. Generally speaking, it is the moderate level of arousal that can ensure optimal performance.

**Personality theory** deals with the various personality traits and characteristics common in human beings with the accompanying emotions, body type, intelligence, temperaments and all the other factors which relates to the totality of oneself. It analyses how different traits/characteristics could assist or obstruct sports performance. It also considers the personologism, situationism and interactionism approaches to personality understanding.

## B. COMPETITIVE PLAYING THEORIES

**Tactical theory** directly relates to the competitive playing conditions within the sports settings. They are specifically concerned with the competitive situations that emerge when the game is in progress. For example, tactical theory relates to the varying tactics possible in any given game. The tactics in football may be different from those in hockey and handball, but the fact remains that the same principle of attack and defensive play obtains. The tactical theory explains the diiferent tactics and the possible counter-attacks.

**Strategy theory** deals with the plans of play that could be adopted within any game situation. Various plans and patterns of play could be in operation. In most cases when a well known pattern or strategy of play is adopted by one team, such team is associated with that pattern and it makes that team very vulnerable. Such team is easily 'read' and easily defeated.

**Wrong signal theory** connotes sending wrong information to one's opponents. That is, when a person wants to move to the left he is moving to the right and at the nick of time, he suddenly changes his direction. This wrong signal approach could be used as a form of playing tactics. It is basically to confuse the opponent.

**Pace dictating theory** is related to inconsistent speed and movement during play to one's advantage. That is, changing pace of movement within play as one chooses. This is usually done to have an advantage over the opponent. Once a team chooses to dictate the pace at which a game must be played, the opponent will be at a disadvantage because it will not be able to predict the next move of the opposing team thus it creates a lot of psychological problems for them as they may not be able to settle down to plan a counter-attack. The team which is able to dictate the pace stands a better chance of winning as they will be more emotionally stable, confident and more decisive in the approach to the game.

### C. SITUATIONAL THEORIES

These theories are associated with the varying situational conditions which may be prevalent in any sports competition. Some of these situations are natural and therefore there is nothing that could be done to prevent them, other than to get-used to the situations. For example, the weather or climatic condition, the other situation may be induced by the calibre of opponents being played and/or the type of crowd or spectators watching the performance.

**Weather condition theory** deals with the weather condition prevalent at the time of the competition. It may be raining, snowing, windy or sunny in which case the grass may be wet, slippery

or even too hot. Each of these situations has its effect on performance and efficiency which have psychological consequences.

**Temperature theory** considers the temperature within the competitive arena. A cold weather will definitely make the body and the environment cooler whereas a hot weather condition will increase the temperature in which the athlete will have to compete. There is a limit to the work that could be done at a specific temperature and still be productive and efficient. These could be enervating unless properly managed.

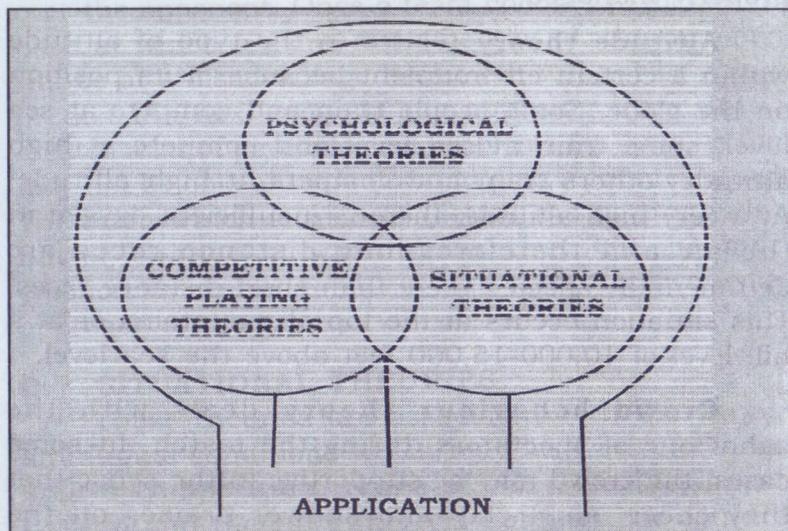
**Altitude theory** relates to the type of altitude within a certain environment because of its position on the globe. Some people train and compete at sea level, some train at sea level and compete at high altitude, others train and compete at high altitude. At a very high altitude, there is insufficient oxygen in the air and therefore, long distance races are detrimentally affected there than short distance races. This situation occurs at the top of mountains or at a hill level of 10,000-15,000 feet above the sea level.

**Crowd behaviour theory** deals with the behaviour of spectators during the match. In some cases, the crowd may be supportive in the sense that they cheer, sing, clap and shower praises on the competitors. At some other time they may be adverse, jeering, booing and intimidating the competitors. In both cases, crowd attitudes could affect the performances of the players.

**Tensed situational theory** relates to a very tensed situation within the playing periods when the athlete is put under intense and stressful situations. This may be caused by the negative attitude of the crowd, by poor officiating, by dangerous play by the

opponent and/or by the low level of performance of the team players. All these conditions have associated psychological problems which could affect performance negatively. When known in advance and a particular attention is paid to them, a great deal could be done to prevent their negative effects and, in fact, they could be used to enhance performance. Figure 3 explains the interplay of the theoretical framework.

Figure 3: An interplay of Theoretical Knowledge and Application in Sports psychology

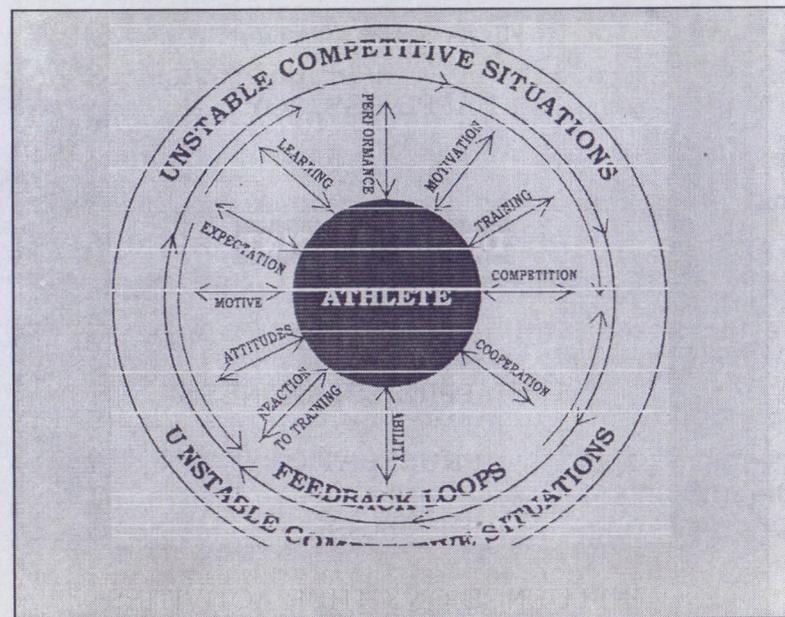


### Psychological analysis of athletes in performance situation

The factors relating to abilities, skills, body dimensions, state of training, emotions, motivation, past experience, incentives, attitudes, adjustment to competition etc. all interact and contribute to observable behaviour of an athlete. The physical skill variables in sports competitions include those

associated with the nature of skills, tactics of the game, category of game (individual, dual or team). The situational factors include type of crowd, - hostile, friendly or neutral; pressure from opponent; performance of team mates and Manager or Coach's expectation and attitudes. Each of these conditions constitutes different psychological problems in the field of play. The interactions and their consequences are ensured by feedback loops as shown in figure 4a.

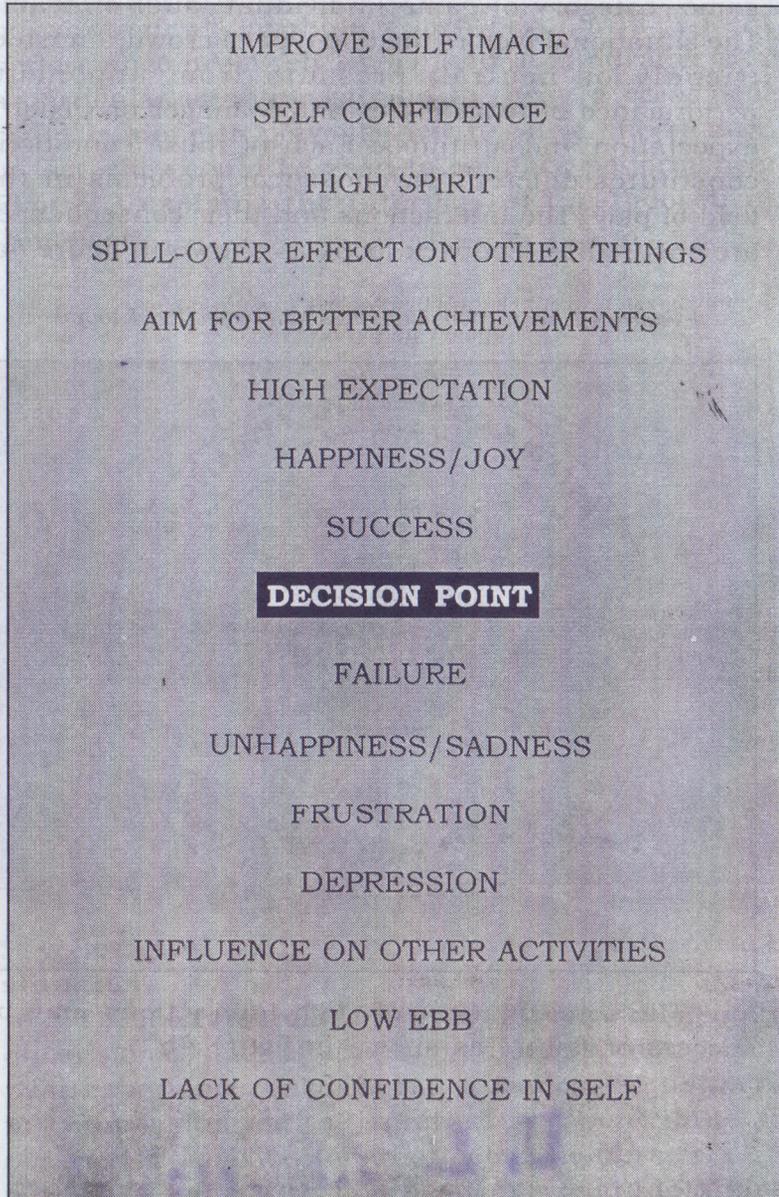
Figure 4a: Interactions brought about by feedback loops



The consequences of such interactions may be success or failure as shown in figure 4b.

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Figure 4b: Success and Failure Consequences



## RELEVANT TOPICS IN SPORTS PSYCHOLOGY

Specific topic areas are essential in sports psychology in which their knowledge will aid better understanding of the concepts in figures 3 and 4 to enhance efficient application of psychological principles to athletes in competitive situations. Undoubtedly, these give the theoretical backbone which guides the practice of sports psychologists worldwide.

Some of these topics are:-

- a. Personality in sports
- b. Stress and performance
- c. Perception and motor performance
- d. Motivation and performance in sports
- e. Motivational approaches and their effectiveness
- f. Feedback, reinforcement and intrinsic motivation
- g. Incentive, reward and awards
- h. Motor learning and skill performance
- i. Practice schedules and performance variables
- j. Coaches attitudes and athletes reactions
- k. Facilitating and enhancing psychological development
- l. Dynamism of competitiveness and achievements; co-operation and competition in sport
- m. Understanding sport environment
- n. Understanding group processes
- o. Leadership, communication, group unity or disunity, group dynamism, productivity, group cohesion and affiliation
- p. Performance enhancement strategies, mental and psychological skills training, performance improvement skills

- q. Psychological pain of sports injuries, enhancing health and welfare
- r. Drug abuse, misuse and performance enhancement
- s. Effect of burnout and over training, success and failure.
- t. Psychometric

A thorough understanding of all of these topics will aid effective application.

Due to time constraint, I will discuss only three topics namely: (1) Personality in Sports, (2) Stress and Performance, and (3) Motivation, as they form the core of the subject-matter and my research activities.

### **PERSONALITY IN SPORTS**

Personality is the totality of self and the reaction to situations at any given time (Ikulayo, 1990). It encompasses all that the individual is capable and incapable of doing. Eysenck *et al* (1963) described personality as the more or less stable and enduring organisation of a person's character, temperament, intellect and physique which determine his unique adjustment, to his environment. While Guilford (1959) described it as being composed of a unique pattern of traits such as attitude, interest, temperament, aptitude, needs, intelligence, in relationship to his mesomorphic and physiological constitution of his body. Therefore, personality denotes the total behavioural patterns of a person which are usually influenced by in-born abilities (traits), acquired or learned skills and the environment. Research evidence has confirmed that if one can identify the existing potential elements in an athlete, experts could use such information to accurately predict his potential behaviour and achievement possibilities in any given sporting environment.

Work by Welford (1968), Eysenck (1953) and Fitts and Posner (1973) have emphasised some essential aspects of personality which are of direct influence on athletes, as those distinguishing between the field-dependent and field-independent, between the extroverts and the introverts, and between stability and emotionality; to determine their appropriate position placement in team sports and to predict their chances of winning or losing in dual, team and individual sports. The research work by Sheldon (1940), as capitalised on physique, is part of personality aspects which plays a prominent role in success or failure of athletes in sports participation. The mesomorphs who are very masculine, energetic and confident usually perform excellently in sprints, while the ectomorphs perform best in high jumps and the endomorphs function best in throwing events. All of these three distinct body types have emotional characteristics associated with each of them which have implication for sports performance, (Ikulayo, 1990).

However, it has been established that the psychological profile identified with superior athletes appears to be similar to those found in high-achieving people.

Kroll (1967) stated that one of the reasons for studying the personality of the athletes could be to understand the athletes' extreme behaviour in some situations and adduce meanings for such behaviour in the hope of assisting in modifying such behaviour.

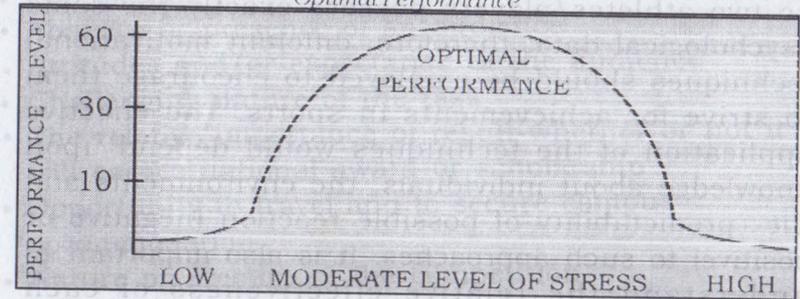
Personality affects mood state and mood change, reactions to failure or success, adaptation to conducive or poor training and competitive environments.

## STRESS AND PERFORMANCE

Stress is said to be present in all human activities and endeavours. The following definitions of stress explain the concept further. Selye (1978) in his book: *"The Stress of Life"* described stress as the rate of wear and tear in human body that accompanies any vital activity. Neeves (1982) viewed stress as the way the human beings respond to conditions that scare, threaten, anger, bewilder or excite them. If such conditions persist, there is a tendency for an occurrence of fatigue, breakdown in the human perceptual mechanisms, or even damage to the system of the body which may result into mental and physical failure. Coleman (1978) in his own contribution to the definition of stress explained that the human beings are constantly under siege and anything deliberately sought or accidentally found, pleasant or unpleasant has a degree of pressure (stress) associated.

In sports psychology, stress is visualised as a form of arousal accompanying all activities which is specifically linked with specification of task demands on the performer (Ikulayo 1990). A low level of stress is characterised with lack of alertness and excitement. The result is always poor performance or substandard production of work as evidence in activities, lacking adequate motivation, stimulation, cheering from the crowd and/or training under disgruntled coaches. On the other hand, an excessive level of stress tends to reduce efficiency, effectiveness and general task productivity. It is only at a moderate level of stress that people can perform their best. This is linked with Yerkes-Dodson theory of Inverted 'U' shape which explains the relationship between moderate stress and optimal performance in all human endeavours as shown in figure 5.

Figure 5: Yerkes - Dodson Inverted 'U' Shape Theory of Optimal Performance



The degree of stress conducive to successful competition is relative to the individual. What is stressful to 'A' may not be stressful to 'B'. Also, some athletes perform excellently under high pressure and rise up triumphantly while others collapse emotionally with accompanying failure.

It is therefore essential to understand the athletes to find out what is stressful to them as individuals, how such could be channeled to getting the best result and how they could be taught to cope with stress and yet be able to perform their best. They must be able to recognise signs of stress and discuss their feelings with sports psychologists who must teach them how to manage stress.

## MOTIVATION AND PERFORMANCE

Motivation is a vital pre-requisite to learning and performance. It plays an important role during the entire process of acquisition of skill. Mastery of physical skills is essential to success in sport. Without motivation, optimum performance can not result; in fact, there might be no interest whatsoever to drive athletes to train effectively during practice sessions, in preparation for competition. (Alderman, 1974; Straub, 1978 and Singer, 1985).

However, motivation varies with individuals. What motivates 'A' may not motivate 'B' or 'C'. Since no two athletes/players possess exactly the same psychological data, therefore, different motivational techniques should be employed to encourage them to strive for achievements in sports. The effective application of the techniques would depend upon knowledge about individuals, the environments and the predictability of possible reaction (negative or positive) to such approaches. It is also important to understand the relative effectiveness of each motivational approach to identify their appropriate usage.

### **Motivational approaches and their effectiveness**

- Rewards - Monetary award, material gifts and presents.
- Incentive - Scholarship, insurance policy, stimulating facilities, availability of competent coaches etc. portraits in sports hall of fame.
- Encouragement - Praise, a pat on the back, presidential handshake.
- Knowledge of results - Acknowledgement of performance out-put. The actual score/merit.
- Praises - Good, excellent performance, well done.
- Feedback - Intrinsic and augmented.
- Punishment - Rebuke, excessive repetition of detested difficult skill.
- Criticisms - Not so good, No, no, poor performance. No use, a disaster.
- Success - Making improvement, achieving goals, winning and scoring high marks.
- Recognition - Awards and Honours
- Needs to achieve

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- Level of aspiration
  - Goal setting
  - Absence or presence of an audience
  - Attitudes and/or expectation of the audience
  - Challenging nature of the task
  - The relative importance of result-whether or not it will earn a national award or scholarship
  - Opportunity to travel and to secure campus accommodation
  - Nature or Prestige of the competition
  - Competitions at various levels
  - Access to the service of Sports Psychologist
  - Good and competent coaches.
  - Task difficulties.
  - Failure - this is negative but it could be motivational

As it can be observed from the list above, different approaches could be used to motivate in sports, but their relative effectiveness depends on how such methods and techniques are utilised. If the best motivational technique is employed wrongly it will not yield the best result.

### **THE ROLES OF THE SPORTS PSYCHOLOGIST**

One of the major roles of a sports psychologist is to ensure high class performance of his athletes under pressure of competition. This could be done by the direct application of various psychological principles before, during and after the competitions.

He must know the athletes and how to motivate the individuals and spur them to high performance from preparation through to the execution stage. He should find out the state of the mind of the athletes by attempting to get "inside" their heads, get to know them and gain greater access to some of their elusive characteristics. This would enable him to predict, interpret and control their behavioural patterns. He

should try to reduce negative thinking and increase the thoughts of high achievements and foster positive thinking. He should design ways and means of enabling athletes to better cope with success, stress of competition, environmental stress, performance stress and fear of failure.

The act of blocking out stress provoking thoughts, discouraging self doubts, avoidance of negative imagery and inhibitory self statement (e.g. "I hope I don't miss this shot") are other ways of managing stress during competitions. Utilisation of Ikulayo Stress Management Approach (ISMA) and other stress management programmes are encouraged.

The introduction of certain controlling relaxation techniques would aid excellent sports performance, for example, cultivating the habit of talking to self. Using cue-relaxation words, i.e. "relax"; "cool it", "calm down now", having a heavy exhalation at intervals most especially when under intense pressure, etc.

Performance of certain design activities would help muscle relaxation. Both mental and physical relaxation is essential to cope with stressful competitive situations. Athletes/players must be well trained in stress coping devices before any major competition. Mental and psychological skills such as determination, will-power and concentration are to be specifically taught and mastered by athletes.

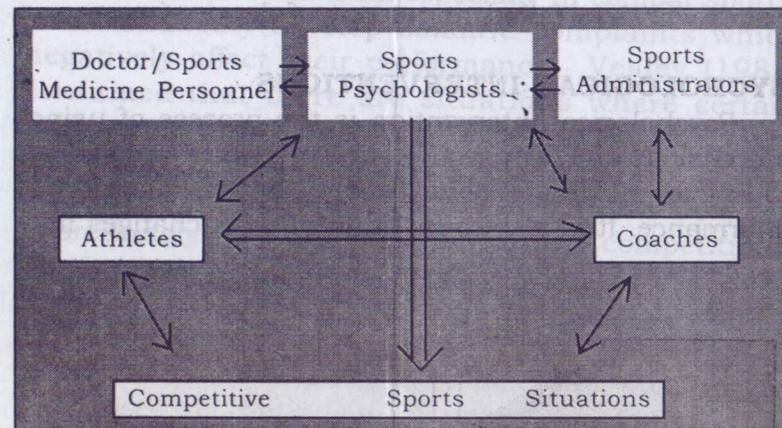
Because the principles and practice of sports psychology revolve round the improvement of performance through the provision of the necessary psychological assistance to enable each athlete attain his optimum performance; all persons concerned with sportsmen should have some knowledge of sports psychology. A single action or an utterance from an organising secretary said at the wrong time may

destabilise the emotions of an athlete going for a competition. Obviously, an athlete who is emotionally disturbed cannot perform his best in that condition.

One of the important roles of the sports psychologists is the establishment of a mutual relationship between the athletes, coaches and other sports personnel. The group should be able to trust one another. The line of linkage between all the sports personnel and the sports psychologists should be dynamic and reciprocal.

A blended line of communication between all personnel is schematically represented in figure 6. Such communication linkages will further enhance performance expectations and achievements.

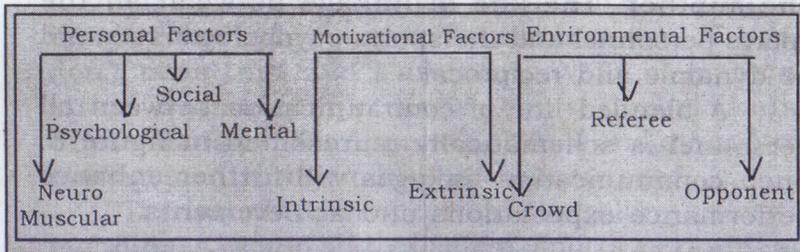
Figure 6: Inter-relationship between the Sports Psychologists and other Sports Personnel



The duties of a sports psychologist do not start and stop on the match of the day. Sports psychologist must be employed full time. He is expected to monitor, counsel, motivate, educate, evaluate and to provide constant guidance to prevent occurrence of serious performance deficiency. He must also have a good grasp of the major determinants of

psychological therapy which revolves around sports performance and include: personal factors, motivational factors and environmental factors and use them effectively for performance enhancement, as indicated in figure 7.

Figure 7: Determinants of psychological therapy

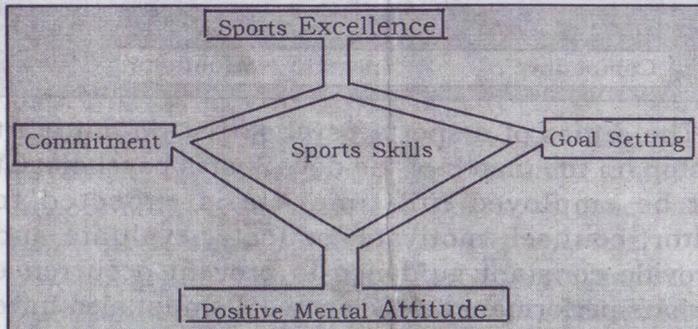


In case of performance failure, he has a bigger role to perform in terms of counseling the team or person who has failed to get out of depression.

**PSYCHOLOGICAL INTERVENTIONS**

Psychological intervention is the process of using mental skills and/or psychological principles to change, modify or influence behaviour in order to improve performance. It is also to institute positive changes in

Figure 8: Attainment of Sport Excellence



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athletes in terms of general mental attitudes towards commitment and achievement in sports (Figure 8). By nature many problems are associated with sport competitions. For example, at different stages, players experience problems ranging from competitive stress, performance stress, and environment stress to achievement stress. Most of these problems may be general in nature but usually they are individualised and that may need specific and specialised psychological interventions (Ikulayo, 1985, 1987 and 2000).

As evident from personal observation and experience, there are certain categories of athletes who performed brilliantly in training but flopped in actual competition. There are those athletes who “sink” immediately they see opponents who had beaten them before. Some even easily concede defeat on the premise that their opponents are physically bigger and more confident than them especially in combat sports. Some suddenly develop somatic complaints which negatively affect their performance. Vealey (1988) confirmed that there are situations where certain athletes perform better than others who were more physically talented and he cited situations where some athletes performed excellently in practice, but depressingly below expectation during competitions. These patterns of behaviour exhibited by these athletes indicate that such athletes have not been able to harmonise their physical ability with their mental and emotional states of affairs in readiness for competition. Thus, they will continue to fail unless something is done about their problems through various psychological interventions, which are better applied by persons who have specialised in sports psychology.

Many of these psychological interventions vary in techniques, approaches and applications. They are primarily used to cope with stress, and to reduce the occurrence of over-arousal, to facilitate attentional

control, to enhance self confidence and to improve performance. The trends worldwide point to the fact that these psychological interventions have yielded positive results and they are becoming increasingly popular because actors in the field of sports are beginning to recognise the importance of mental stability to peak performance as it constitutes the key to attainment of sports excellence.

A thorough understanding of athletes' problems with adequate knowledge of the individuals and their specific sports will help in applying the appropriate psychological principles to enable the athletes cope with the various internal and external problems associated with high level competitive sports performance in order to achieve success. The monitoring of the performances of players and the studying of their reactions to different degrees of stresses occurring from preparatory phase through performance and task competition phases are essential and will throw light on the type of treatment, either therapeutic, corrective or motivational measures to be adopted, (Ikulayo, 1985; Adeyanju, 1987 and Sohi, 1987; Weinberg and Gould 1995).

Specific psychological interventional approaches frequently used have centred round, Progressive Relaxation Techniques, Jacobson (1958); Internal-External Imagery, Epstein (1980); Internal and external mental practice, Ziegler (1962), Corbin (1972) and Suinn (1980); Stress Reduction Techniques and Coping Skills, Smith (1981), Meichenbaum (1977), Ikulayo (1985, 1987) and Ikulayo & Adeyeye (1987). Yoga, Sensory Isolation Tanks and Autogenic Training, Adedoja and Omotayo (1987), Ziegler (1982), Jacobson (1958). Hypnosis, Eskridge (1982) Group and Individual Counseling, Biofeedback, Zaichowsky & Sime (1982),

Relaxation and self-talk; Harris & Harris (1984); Martens (1987). Meditation, Cratty (1983) and Ichimura (1988), Suinn (1985), Nideffer (1982), Syer *et al* (1984), Vealey (1988) and Singer (1986, 1988). Ikulayo (1987, 1989, 1990 and 2000) have researched on psychological interventions such as concentration, goal setting, visualisation and mental practice and utilised verbalisation, individual, group and team counselling with the Flying Eagles, Super Eagles, Julius Berger Football Club, Pepsi Football Academic, and Super Falcons to demonstrate the approaches.

### **APPLICATION WITH FOOTBALLERS**

Different approaches were adopted to introduce psychological services to Nigerian footballers. Some of the interventions used effectively with the footballers, included verbalisation, individual and group counselling. Team psyching and psychological skills training were sometimes introduced to them. Usually these are done before and after practice sessions, or during a break from training; so that the skills taught could be related to the tasks at hand. Peptalks were encouraged, while talk-back was also allowed to clarify procedures.

With the female footballers more of individualized counselling sessions were done and psyching processes were more consolidated for the Sydney 2000 Olympic Games and the 2<sup>nd</sup> edition of the Africa Women Football Championship which they won, as demonstrated in figure 9.

U. L. ARCHIVE

Figure 9: Psyching Verses for Falcons

A Be eager  
 Be anxious  
 Be willing  
 Be ever ready to always do better

|                 |         |         |
|-----------------|---------|---------|
| We can          | We can  | We can  |
| We will         | We will | We will |
| Success is ours |         |         |

B We will succeed We must win  
 We are together to achieve success  
 We are committed to win the Olympic Football  
 Gold Medal.

|                 |         |         |
|-----------------|---------|---------|
| We can          | We can  | We can  |
| We will         | We will | We will |
| Success is ours |         |         |

C We must co-operate with one another to strive  
 and struggle to win.  
 We will put all our efforts to achieve greatness  
 for our nation for our families and for ourselves.

|                 |         |         |
|-----------------|---------|---------|
| We can          | We can  | We can  |
| We will         | We will | We will |
| Success is ours |         |         |

D We are determined to work harder  
 To put our might in all our endeavours  
 Towards the achievement of Olympic Gold  
 To prove the greatness of our nation

|                 |         |         |
|-----------------|---------|---------|
| We can          | We can  | We can  |
| We will         | We will | We will |
| Success is ours |         |         |

E To affirm the superiority of our Race  
 To demonstrate the toughness of our gender  
 To reinforce the determination and commitment  
 to our Nation's Pride

|                 |         |         |
|-----------------|---------|---------|
| We can          | We can  | We can  |
| We will         | We will | We will |
| Success is ours |         |         |

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In addition and for ease of assimilation and  
 application, psychological skills were taught in groups  
 of 4s e.g.

|                       |            |            |
|-----------------------|------------|------------|
| 4As                   | 4Bs        | 4Cs        |
| Alertness             | Boldness   | Control    |
| Attention             | Bravery    | Courage    |
| Anticipation          | Brilliancy | Commitment |
| Aggression (positive) | Brightness | Confidence |

|               |            |              |
|---------------|------------|--------------|
| 4Ds           | 4Es        | Avoidance    |
| Desire        | Eagerness  | Aggression   |
| Determination | Enduring   | Apprehension |
| Dedication    | Ever-ready | Anxiety      |
| Discipline    | Enthusiasm | Anger        |

**Psyching cues**      **Desire to win**

- |                       |   |
|-----------------------|---|
| - Be determined       | Desire to do well                         |
| - Be focused          | Desire to improve                         |
| - Be ever-ready       | Desire to put more effort                 |
| - Be at alert         | Desire to be the best                     |
| - Be bold             | Desire to do better each time             |
| - Be confident        | Desire to be at the top                   |
| - Be willing to score | Desire to excel                           |
| - Be cooperative      | Desire to conquer the world               |
| - Be competitive      | Desire to prove oneself                   |
| - Be happy            | Desire to be a superstar                  |
| - Be friendly         | Desire to attract international attention |

- Be nice
  - Be positively oriented
- Desire to attain fame

### **The don'ts**

- Don't get angry with yourself
- Don't get angry with your team mates
- Don't argue with the referees/officials
- Don't get ruffled with officials hostility
- Don't allow anything to upset you.

### **ATTAINMENT OF SPORTS GREATNESS**

Sports greatness is synonymous with excellent performance, superlative performance, peak performance, optimum performance, successful performance, great achievement, championship performance, outstanding performance. Such performances are associated with victors, superstars, champions, great achievers, go-getters and pace-setters. They are often known as the first, the best, the topmost, the superstar, champions. They are world-widely acknowledged as being superiors to all others because of certain characteristics they possess which make them consistently, persistently and continuously excel in their sports. Such individuals are known as the "inner athletes" (Ziegler, 1982), who has been mentally, physically and psychologically groomed to perform their best under pressure.

The knowledge of psychology must be used to nurture and condition them in order to improve their sports performance. The state of mind is very crucial to attainment of success in sports and, of course, in any human endeavour. Once the mind is properly and positively oriented, a great deal could be achieved.

Since sports psychology deals extensively with the mental, emotional and psychological state of the athletes, it constitutes the most important factors in the achievement, attainment and maintenance of

peak performance in sports. A poorly psyched or emotionally disturbed athlete cannot perform his best in a competition. This explains the distinction in performance between those players that are both physical and psychological well prepared for a contest and those that are merely physically prepared. "When the going gets tough the tough gets going". Those with the appropriate tough mindedness and will-power always carry the day.

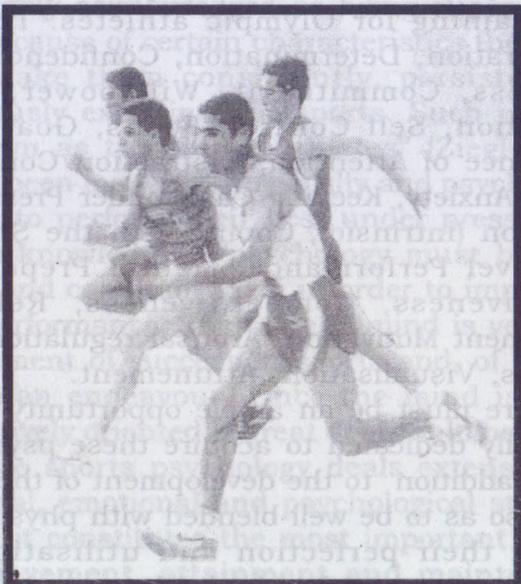
In some situations you find certain individuals who quit the scene or attempt to give up because of the hardship, physical demands, and psychological problems. The team that carries the day is that which has the psychological well withal. Without the proper knowledge and adequate application of sports psychology, the maximum performance cannot be obtained, hence, the title of this inaugural lecture, "The Mind in the Body: Sports Psychology as the Cornerstone to Sports Achievements and Greatness".

Ikulayo (2001) identified 25 specific psychological skills training for Olympic athletes. These are: Concentration, Determination, Confidence, Mental toughness, Commitment, Will power, Positive Orientation, Self Control, Focus, Goal Setting, Sustenance of Attention, Distraction Control, Low Level of Anxiety, Keeping Calm under Pressure, Self Motivation (intrinsic), Coping with the Stresses of High Level Performance, Mental Preparedness, Aggressiveness, Competitiveness, Relaxation, Achievement Motivation, Arousal regulation, Mental Alertness, Visualisation, Attunement.

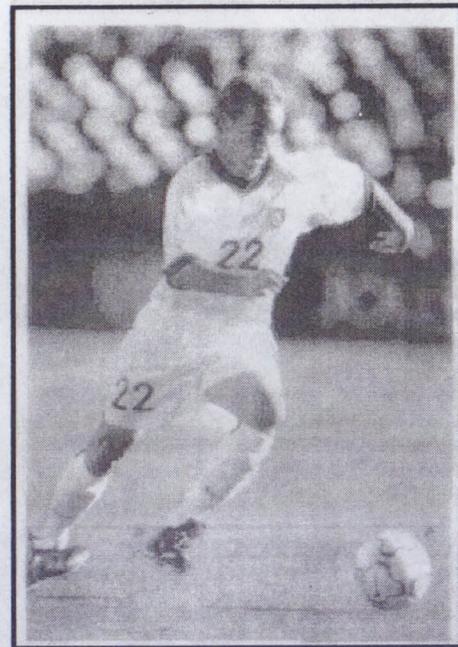
There must be an ample opportunity and time specifically dedicated to acquire these psychological skills in addition to the development of the personal factors, so as to be well blended with physical skills. Without their perfection and utilisation, great achievement cannot be obtained.



*The Pressure of Competition*



*Striving for Success: WILL-POWER*



*Striving for Great Achievement:  
CONCENTRATION AND MENTAL TOUGHNESS*



*Striving for Great Achievement:  
CONFIDENCE*



*Team Unity: The Falcons with the Team Sports Psychologist*

*University of Utah The Falcons on Happy Mood*



*Winning Joy of*

U. L. ARCHIVE



ISSP Management Council Members at Mexico Sports Psychology Conference



The Joy of Winning

U. L. ARCHIVE

## RESEARCH ACTIVITIES

In pursuance of greatness in Nigerian sports through psychological intervention, many researches have been conducted and which have spot-lighted the importance of sports psychology to achievement in sports. A few of such researches are here revisited.

My first research contact with the Nigeria athletes was in 1984 when there was a marked deterioration and persistent fluctuations in the performances of senior national athletes. It was discovered that they had no idea about sports psychology and they had problems performing their best under stress.

Stress as an arousal is a major consideration in the field of sports psychology. It could make or mar performance in competitive sports. So, it requires total attention.

### (1) Types of Stress

Ikulayo (1985) discovered and identified four types of stresses namely competitive stress, performance stress, environmental stress and achievement stress. Each of them was found to place different demands on the performers who also react differently depending on the individual's coping tonic and capability. Neeves (1982) had earlier described four components of stress namely eustress, hypostress, distress and hyperstress.

The combination of work on stress by Ikulayo (1985) and Neeves (1982) led to a "continuum of stress" viewed from positive and negative extremes, (see figure 10).

Figure 10: Continuum of stress based on Ikulayo & Neeves combination

|                                  |        |                  |
|----------------------------------|--------|------------------|
| Eustress<br>+ve                  | Stress | Distress<br>-ve  |
| Euphoria                         |        | Hypostress       |
| Elation                          |        | Hyperstress      |
| Success                          |        | Failure          |
| Win                              |        | Lose             |
| Competitive                      |        |                  |
| Optimal performance              |        | Poor performance |
| Challenging                      |        | Dull, uneventful |
| Performance                      |        |                  |
| Excellent,<br>Peak & Qualitative |        | Poor performance |
| Environment                      |        |                  |
| Conducive                        |        | Unfavourable     |
| Achievement                      |        |                  |
| Success                          |        | Failure          |

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The expanded work brought about the identification of *concepts of stress in Nigeria context* and various ways of managing and coping with them. Examples of such are: executive stress; academic stress; societal stress; labour stress/unrest; female stress; industrial stress; traffic stress; domestic stress and family stress/distress, robbery stress, political stress, security stress. Since these discoveries, experts in different fields have organised seminars, symposia and workshops to address the problems related to each and several of the typified stresses, Ejiogu (1989), Ikulayo (1985, 1987 & 1991), Adeniji (1982), Adeyeye (2002). Coping strategies were found to include laughing, singing, dancing, whistling, rhythmic movement of the body, breathing exercises, change of activity, attempting any form of exercise, clapping, shadow boxing, listening to music, social sports among others.

(2) **Psychological Assessment of Nigeria Athletes in Preparation for the 13<sup>th</sup> Commonwealth Games**

The work on stress management was extended to the athletes in Lagos camp for the 13<sup>th</sup> Commonwealth Games. The groups included the badminton players, the wrestlers and the track and field athletes. The research instrument was a psychological evaluation test based on the assessment of: emotional control; determination; drive; mental toughness; and self confident on fifty (50) athletes from various sports. The findings revealed that 60 percent of the samples were moderately psychologically attuned and 40 percent were psychologically attuned (see figure 11).

Figure 11: Psychological evaluation test on athletes

| Ratings                            |        | Expected category of athletes |   |
|------------------------------------|--------|-------------------------------|---|
| Highly Psychological Attuned       | 86-100 |                               | Top athletes with world class record.   |
| Moderately Psychologically Attuned | 66-85  | 30                            | National athlete with limited exposure. |
| Fairly Psychologically Attuned     | 46-65  | 20                            | State athlete                           |
| Poorly Psychologically Attuned     | 0-45   |                               | Club level athlete lacks exposure       |

No subject out of the sample was categorised under the highly psychologically attuned, which was the psychological status expected of world class athletes with the evaluation score of between 85 and 100. None of the subjects also fell under the poorly

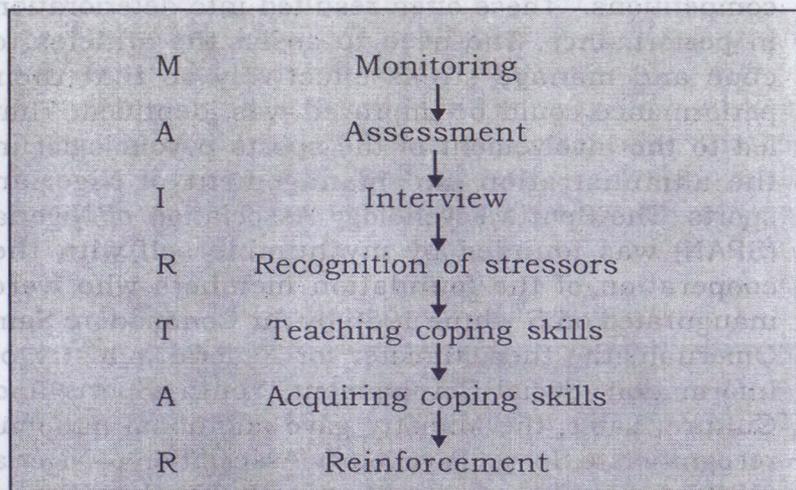
psychologically attuned athletes. Many of the samples were emotionally stable which indicated that with counseling and proper introduction of psychological skills, they would develop positive mental attitude for achievement in world class competitions.

Other findings revealed that the athletes were easily distracted. Many were unable to cope with different types of stresses prevalent during competitions. These often resulted into deterioration in performance. The need to assist the athletes to cope and manage stress effectively so that their performance could be improved was identified. That led to the involvement of the sports psychologist in the administration and management of Nigerian sports. The Sports Psychology Association of Nigeria (SPAN) was founded by my humble self with the cooperation of the foundation members who were inaugurated on 5<sup>th</sup> June 1985 by Air Commodore Sam Omeruah, the then Minister for Federal Ministry of Information, Social Development, Youth, Sports and Culture. Later, the Ministry gave additional national recognition to Sports Psychology Association of Nigeria (SPAN) by inaugurating it along with 22 other Nigeria Sports Associations and made me the first woman to be appointed as a Chairman of a National Sports Association in Nigeria, in July 1987 by Air Vice-Marshal Bayo Lawal.

The research work with Nigerian national athletes was intensified. In the process, the Ikulayo Stress Management Approach (ISMA) in sports competition was propounded, experimented and utilised with athletes in camp. It contained seven procedural stages based on interaction between the sports psychologist and the athletes. They are: monitoring, assessment, interview and discussion, recognition, teaching, acquiring coping skills and

reinforcement of successful coping efforts. The seven steps technique was simply summarised as 'MAIRTAR' (as in figure 12 below). *The stress management technique eventually became a functional coping instrument for all sports psychologists in Nigeria for assisting athletes to reach their maximum potentials in sports.* It was also used in Brazil by Dr. Becker Jr.

Figure 12: Seven steps/ Stages to Stress Management in Sports



Ensuring peak performance using Ikulayo Stress Management Approach (ISMA)

**(3) Application of ISMA as psychological interventions for achievement in sports**

ISMA was applied to a group of fifty (50) Nigerian athletes pursuing physical education major at the University of Lagos. They were males, grouped into five and participated in a research which utilised mental practice, concentration, goal setting, physical practice and a control group. Jump shot in handball was used as the experimental sport skills with the same keeper for the five groups in order to standardise the scoring chances for each person and group.

Researcher went through treatments based on ISMA - MAIRTAR and in relationship with the specific groupings.

All the groups were pre-tested on physical skills and a general psychological evaluation test was administered on them. The first three groups were given treatment for ten consecutive periods and then practiced, the fourth group continued with their practice during the treatment periods while the control group participated in the pre-test and post-test.

The result of the analysis of variance on the post-test scores revealed a significant difference between the five groups with the mental practice group having a substantial improvement in performance than the other groups while the control group had the least score, as shown in figure 13.

The superior scores between the mental practice group and the physical practice group gave credence to the thesis that dependence on physical ability alone without the blending of the mind and body would yield inadequate result.

It is note-worthy to acknowledge the performance improvement recorded for the groups on concentration and goal setting. It nearly doubled the attainment of those on physical practice and control groups.

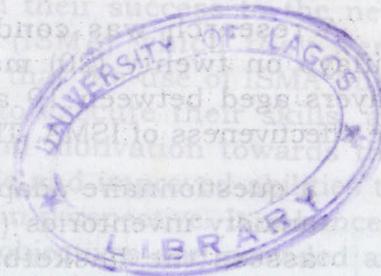
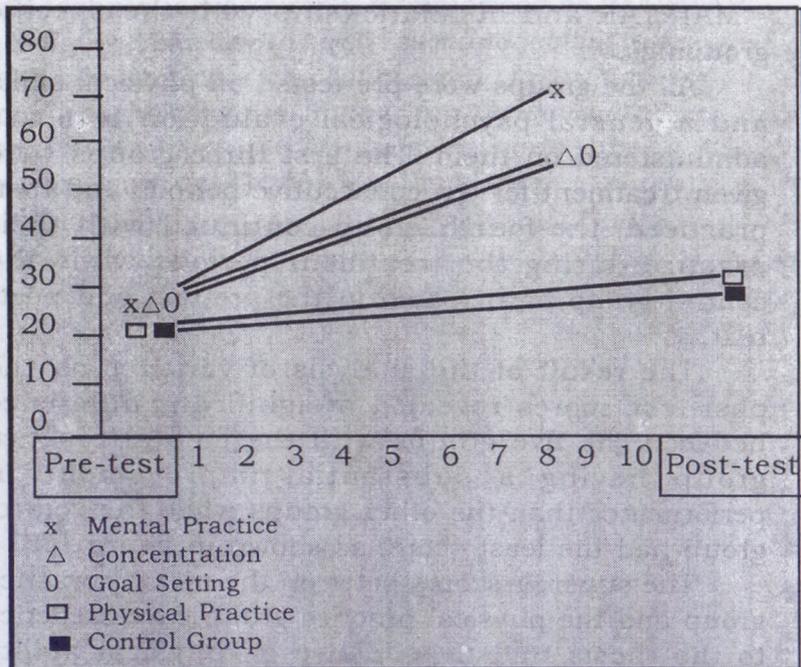


Figure 13: Result of experimental groups



The result was also statistically significant at 5 per cent level using Turkey method of comparing pairs.

(4) **A validation of the effectiveness of Ikulayo Stress Management Approach (ISMA) in competitive sports.**

A research was conducted by Adeyeye and Ikulayo on twenty (20) male National Basketball Players aged between 19 and 33 years to validate the effectiveness of ISMA. The instrument contained:

- (i) a questionnaire adapted from Kroll (1982) an anxiety inventories (psychological scaling) to assess the basketballer stress level. They contained:
  - a. Somatic complaints
  - b. Fear of failure
  - c. Feeling of inadequacy
  - d. Loss of control
  - e. Guilt

- (ii) Application of ISMA-MAIRTAR as treatment for the experimental group (figure 14) and
- (iii) a standardised twenty items inventory questionnaire to validate findings of the research, (figure 15).

The result of the t-test calculation between the pre-test and post-test scores showed a significant stress reduction in four out of the five categories of stress causative factors with the use of ISMA.

It was revealed that the treatment of ISMA assisted the basketballers in coping and managing their stress level during the competition. The result obtained for the 20 items inventory questionnaire revealed that ISMA was very effective in the management of stress in the game.

The study confirmed the effectiveness of ISMA and further validated the claim that its application had worked successfully with Nigeria athletes. The use of ISMA principles and procedures assisted the experimental group to excel and they performed increasingly better in all the three national competitions they played after the treatment. The coach also agreed that the players performances were impressive and attributed their success to the new psychological approach (ISMA) which they were exposed to; as it revealed that the use of ISMA built the required confidence to execute their skills, an increased commitment and motivation towards the group goal, increased poise and improved abilities to adapt, cope and set goals in perspective. It enhanced concentration on specific objectives and provided an insight into typical psychological problems confronting both coaches and athletes, and also helped to solve them.

Figure 14: Application of Isma-Mairtar

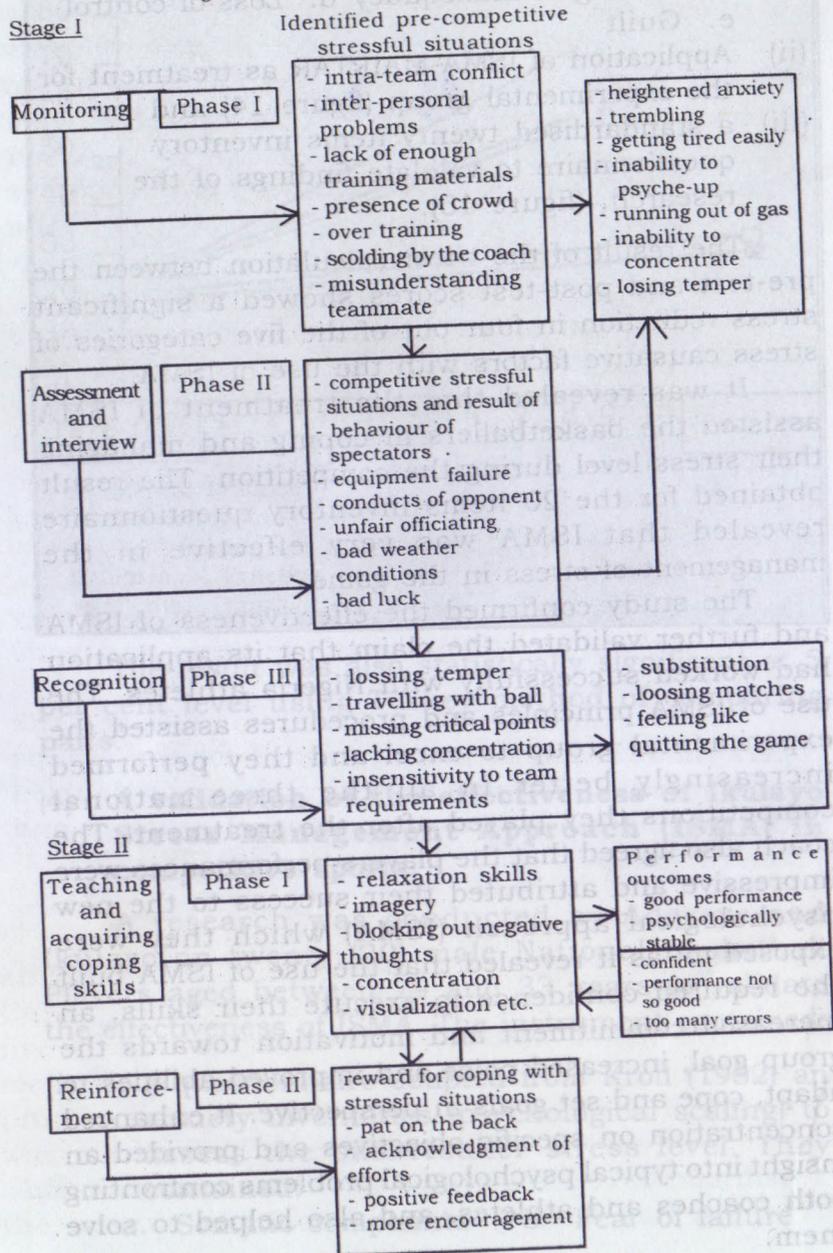


Figure 15: 20 Inventory Questionnaire to Validate the Effectiveness of ISMA

Name: ..... **U. L. ARCHIVE**  
 Number of matches played: .....

Instruction: Check Yes or No in the space provided

| Questions  | Yes | No |
|--|-----|----|
| 1. Do you find most of the techniques in ISMA useful?  |     |    |
| 2. Is there any significant change in your pattern or play in terms of confidence?           |     |    |
| 3. Nervousness   |     |    |
| 4. Awareness of fast/irregular heartbeats  |     |    |
| 5. Urge to urinate   |     |    |
| 6. Ringing in the ears   |     |    |
| 7. Yawning too much  |     |    |
| 8. Being afraid before competition   |     |    |
| 9. Getting unnecessarily tired ISMA has helped me to overcome loss of control caused by      |     |    |
| 10. Behaviour of spectators  |     |    |
| 11. Conduct of opponents   |     |    |
| 12. Unfair decision of officials   |     |    |
| 13. Bad luck   |     |    |
| 14. It has helped my mind from going blank in the game                                       |     |    |
| 15. There is little criticism from the coach because of fewer critical mistakes              |     |    |
| 16. I am now more able to psyche-up myself   |     |    |
| 17. I now believe that I have built-in self confidence that I believe I can beat my opponent |     |    |
| 18. I am now able to cope with unexpected situations on the playing field                    |     |    |
| 19. Mentally, I am now very tough  |     |    |
| 20. I now play better in tougher competitions than the easier ones.                          |     |    |

## 5. Psychological effect of 'juju' on achievement in sports

This research was conducted to ascertain the athletes' believe in the efficacy of 'juju' and three hypotheses were postulated to investigate whether 'juju' was used to:

- (i) Enhance performance
- (ii) Detrimentially affect the performance of the opponent
- (iii) Find out if the suspicion about its usage creates psychological problems for athletes.

This was done by use of 24-item questionnaire.

The data was analysed using Chi-square and descriptive statistics. The results revealed that 90% of the athletes believe in the supernatural powers of 'juju' in Nigeria sports, thus it constitutes a psychological problem to sports performance.

- (a) Athletes responded affirmatively that 'juju' was used to aid performance, boost users ego on the field of play and made them feel very confident. This was significant at 5 percent level with the  $X^2$  value of 29.32 at 49 degrees of freedom.
- (b) It was also confirmed that 'juju' users indulged in the act to create fear in the minds of the opponents knowing that this would mar opponent's performance and even cause them bad luck.
- (c) It was also revealed that a mere mention of 'juju' created fear in the minds of the athletes.

Fear is a psychological problem which could be detrimental to performance, therefore it was recommended that more researches be done in this area and to embark on a mass educational and enlightenment programme on the belief and its effect on performance in order to prepare the minds of the athletes to cope with the frightening and negative thoughts of 'juju' in sports.

## Contribution of Sports Psychology Association of Nigeria (SPAN) to National Sports Development

Under my leadership in 13 years, the Sports Psychology Association of Nigeria (SPAN) organised twelve National/Conferences in different parts of the country, i.e Lagos, Kaduna, Port-Harcourt, Maiduguri, Minna and published the proceedings of the conferences. The last is being put together as a *Book of Readings in Sports Psychology*, edited by Ikulayo and Ilogu.

It provided psychological services to sportsmen/women in camps for the 4<sup>th</sup> All African Games and Seoul Olympic Games preparation in Lagos, Ilorin, Benin, Port-Harcourt and Bauchi camps; CAF and FIFA organised competitions such that were held in Liberia, Ethiopia, Chile, Saudi Arabia and Lusaka where players were studied, monitored and counselled. In some areas, psychological tips were given to athletes, coaches and other officials. In cases where SPAN could not send representative to competitions, the President usually sent goodwill messages to the sports contingents and these were usually read to the athletes. Over these periods, there was a steady improvement in performance of the athletes and marked emotional stability and trust trends permeated between athletes, coaches and officials. This was sustained until the Atlanta Olympic Games, where Nigeria picked up her first gold medals in athletics and football in the history of the games.

Sports Psychology Association of Nigeria (SPAN) established a standing committee on incentives which was to consider critically the pros and cons of the various incentives being used in Nigeria, analyse the psychological effects and provide the government with the blueprint on effective rewards and award systems that will be most appropriate in motivating athletes and capable of sustaining the standards of sports in the country.

It organised two sports psychology courses for Nigerian coaches to expose them to knowledge and techniques in sports psychology.

Collaborative research studies in sports psychology with the athletes included all the identified areas. Examples of such researches are:

- Sources and perceived effects of stress on the performance of Nigerian elite footballers.
- The effect of goal setting on performance in selected sports skills amongst Nigerian adolescent.
- Effects of selected motivational strategies on performance.
- Social facilitation as an ergogenic aid in performances.
- Dominant personality characteristics of Nigerian athletes in selected sports.
- Psychological factors contributory to and of hindrance to high class performance in sports.
- Psychological adjustment of Nigerian athletes in preparing for the 13<sup>th</sup> Commonwealth Games.
- Psychological assessment of Nigerian Olympic athletes.
- Factors that cause aggressive behaviour in soccer.
- Job insecurity as a source of stress for soccer coaches.
- Perceived psychological effect of Nigeria's withdrawal from South Africa '96 (Nations Cup) on the professional footballers.
- Extrinsic motivational strategies on the achievement of professional football players.
- Influence of motivational variable on female participation on fitness club.

- Psychological issues in female participation in sports.
- Perceived effects of injuries on performance on hockey players in Nigeria.
- Perceived effects of violent crowd behaviour on performance of Nigeria athletes.
- Psycho-sociological implication of cheating in higher institutional sports competitions.

Within three years of its existence, SPAN invited the World President of the International Society of Sport Psychology (ISSP) to Nigeria. He met with the Vice Chancellor of the University of Lagos, the President, Nigeria Olympic Committee, Chairmen of Nigeria Sports Associations and interacted with Nigerian athletes in camp for the Commonwealth Games. He also attended the 7<sup>th</sup> SPAN National Conference held in Maiduguri. He adjudged SPAN as the leader in Africa in the field of sports psychology (Singer 1987).

Newsletters were published to enlighten members of the current practice, and the public on the importance of sports psychology to sports performance. All of these activities have contributed to the understanding of the field of sports psychology and its importance to top level sports achievement in Nigeria.

### **Coping with Press and Media Negative Reporting**

A discussion with some athletes revealed that the press had the habit of dampening their morale by some of the negative and biased reporting. According to them, some newspaper headlines enhanced the foreign based competitors and tended to discourage the homebased athletes. Oloriegbe (1995) reported that it was often found that the Nigeria newspapers advertised players, make

unrealistic predictions and exaggerated claims when describing sports events. Abiola (1981) also noted that many of the conflicts in sports have been caused by some sports writers who are out to sensationalise their opinions. General opinion within the sports circle confirmed the anxiety caused by negative media reporting.

In view of these, I organised three interactional fora with the Sports Writers' Association of Nigeria (SWAN) to examine the joint roles of SPAN and SWAN towards sports development in Nigeria as well as to find solution to negative sports news reporting, as such generated a lot of psychological problems for those being attacked. The fora between SPAN and SWAN deliberated on how best to utilise their activities to encourage the athletes to sustain their efforts in attaining peak performance, and what must be avoided. We agreed that the state of minds of individuals have a great deal of influence on their total achievement. SWAN therefore agreed to modify their style of reporting to avoid causing emotional problems for the athletes. This has been sustained over the years.

### **Lack of knowledge of Sports Psychology**

The effect of lack of knowledge of sports psychology is a general attitude of indifference which is characterised by a low expectation, negative thinking, poor adaptation, lack of focus and eventual poor performance and failure. We have earlier seen the consequences of success and failure in any human activity in figure 4b.

The recent drop in the sports status of Nigeria in world ratings (football, tennis and other sports) is not unconnected with the non-involvement of professionally trained sports psychologists and the inability of the sports administrators to acquire

knowledge of sports psychology and use it appropriately for the betterment of sports development. Today, Nigeria sports administrators are still clamouring for the employment of foreign coaches. The reason is that we do not believe in one another. That tends to translate to the self fulfilling prophecies. Colonial mentality, lack of confidence in oneself, poor assessment and low desire to be the best will lead to nothing but failure. With the knowledge of sports psychology you will strive to be the best in whatever activity you are pursuing and once your mind is set on it, it could be achieved.

The recent preparation for the 8<sup>th</sup> All Africa Games is also of interest. Camping and training ought to have commenced more than two years ago. By May this year, many sports are yet to start serious training while other nations such as South Africa, Morocco and Egypt are getting close to 'peaking' in performance. You can only achieve greatness with proper grooming of the mind and body through practice, skills perfection and exposure. However, Nigerians are used to crash programmes, spontaneous actions without proper planning. This attitude must change because it creates a lot of tension and psychological problems for the athletes.

### **CONCLUSION AND RECOMMENDATIONS**

Mr. Vice Chancellor Sir, my submission in this inaugural lecture is that the mind and the body must blend harmoniously together to achieve success in sports and this can be brought about by the understanding and application of sports psychology principles to athletes in competitive sporting situations.

I have established through my research findings and personal involvement with athletes the strong belief that the field of sports psychology is a

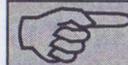
cornerstone to achievements and greatness in sports. Without adequate utilisation of its principles sports greatness cannot be achieved by a disturbed mind. An emotionally stable and sound mind controls the body.

I strongly recommend that:

- (a) More sports psychologists must be professionally trained all over the country through University education;
- (b) Sports psychologists be employed in all Sports Establishments, Sports Clubs and Sports Institutes for this is a *sine qua non*;
- (c) All athletes must be exposed to the services of sports psychologist early in their competitive age so as to develop the psychological, mental and physical skills, in order to mature psychologically along with advancements in sports playing abilities;
- (d) Every person who has anything to do with sports and athletes must have a basic knowledge of sports psychology, one of the reasons why this course is taught to all masters students at the Department of Physical and Health Education, University of Lagos;
- (e) There must be a system of monitoring the competencies of the sports psychologists for professional adherence to ethics; and
- (f) Utilisation of research findings would assist modification and adjustment in sports policies, adoption and implementation.

It is anticipated that once our teams and athletes have reached the stage of performing consistently to world expectation, coupled with the disappearance of existing fluctuations in performances through the harmonious blending of the mind and body, thereby effecting perfection, we can comfortably project to the future and be certain that this nation will soon be

dominating the world of sports. Our youths should be exposed to the services of sports psychologists soonest, right from the elementary school level to help them develop the most required mental skills such as discipline dedication, concentration, attention, anticipation, high expectation, self confidence, positive attitude, intrinsic motivation, commitment and more; for these are essentials for advancement in international sports scenes and life in general. "Strive for perfection"!



**You too can attain greatness (in anything you pursue) if your mind is there.**

#### **BIO-DATA AND NATIONAL SPORTS INVOLVEMENTS**

Professor Philomena Bolaji Ikulayo (Mrs) was born fifty-five years ago at Ikoro-Ekiti to Pa Simeon Olanipekun Falade and Madam Rejinah Dada Falade (nee Babatunde).

I attended St. Columbas Catholic School from 1953 to 1960 with the best result in Arithmetic out of all the four schools at Ikoro-Ekiti. I proceeded to St. Williams, Ijero-Ekiti and later to St. John's Modern School, Ushi-Ekiti.

I attended Mary Immaculate College, Ado-Ekiti where I was trained as a Grade II Teacher from January 1964 to December 1966 and taught at Igede Primary School, Igede-Ekiti for six months and travelled to London on 1<sup>st</sup> July 1967 and just managed to escape the Nigeria Civil War.

I trained at Chelsea College of Physical Education, as a Physical Education specialist, with practical experience in virtually all sports including Lacrosse, Cricket, Baseball, Softball, Hockey, Football, Netball, Stoolball, Swimming and Athletics (track and field). I obtained teaching/coaching certificates in Swimming, Table tennis, Lawn tennis, Badminton, Trampoline and Athletics in the 1st three years which

led to a British Certificate in Education. I spent one year in the area of psycho-social aspects of Physical Education and Sports for my Bachelor of Education degree with Inner London Education Authority Scholarship. I was the only overseas student in my set.



*Chelsea College of Physical Education, Eastbourne, Sussex  
1971 to 74 Set*

As soon as I finished my B.Ed. I taught at Dick Sheppard Comprehensive School London, from 1975 to 1977 and then went to Manchester University where I studied Sport Psychology, Sociology, Language, Comparative Studies in Physical Education and Curriculum Design and Development with the University of Ife postgraduate scholarship in 1977-1978. I was employed as second in charge of the Department of Physical Education at Dunraven College, Streatham, London where I taught for 4 months. I came back to Nigeria and picked up an appointment as an Assistant Lecturer at the University of Ile-Ife in 1978. In the 1979-80 academic session I moved to the University of Lagos as Lecturer II. I was appointed as a professor in 1998, having spent close to 13 years as a Senior Lecturer.

In 1984, I was the only woman member of a 15-man Caretaker Committee of the National Sports Commission (NSC). The Committee was charged with the responsibility of resuscitating sports, because of its depressing state in Nigeria. We visited China and Hong Kong to under study the sports programmes and observed the sports schools there. I later served on the Board for two terms and participated in the organisation of two National Sports Festivals, 4<sup>th</sup> All Africa Games and two Olympic Games, from 1985 to 1989. I also served on the Board of the Nigeria Olympic Committee to prepare its Constitution in 1988.

One of the outcomes of the assignment was the founding of Sports Psychology Association of Nigeria (SPAN) with the aim of eliminating the persistent fluctuations in performance of the sportsmen/women. I became the Foundation President and got involved with athletes in designated sports camps. Zones were created and sport psychologists were attached to them.

I served on the Board of Nigeria Football Association (NFA) Committee on Youth and Women for many years. Nigeria Table Tennis Association, 2000 to date, Lagos State Football Association for 8years, Lagos State Gymnastic Association for 8years, and Nigerian Olympic Medical Committee. I attended the 4<sup>th</sup> All Africa Games in Kenya, Olympic Preliminaries in Chile and Seoul Olympic Games as contingent psychologist. I served as team psychologist to the female football team at the Sydney Olympic Games and African Women Football Championship in South Africa in 2000. In April 1998, I founded the Nigeria Women Sports International (NWSI) of which I still serve as the President.

### **CONTRIBUTIONS TO UNIVERSITY ACTIVITIES**

I was the first female academic staff to serve as chaperon to the University of Lagos contingent to the Nigeria University Games Association (NUGA) in Benin in 1980 It earned me a commendation from Prof. Akin Adesola, the Vice Chancellor at that time, for the service. A research on Sports injuries at the NUGA games was conducted as follow-up to the games.

I served on the University of Lagos Swimming Pool Management Committee and trained the Life Guards. I also, participated in organising the first Omele Ariya day Camp as Swimming Co-ordinator. Between 1982 and 1985 I was made the Hall Warden for Moremi Hall and the Hall Mistress of Amina Hall from 1997 to 1999. In addition, I served as the Acting Head of Department of the Physical and Health Education, from 1992 to 1995 and as Acting Chairman of the University of Lagos Sports Council 1995 when we vied and canvassed the idea of the University of Lagos hosting the 1998 Nigeria University Games (NUGA). I led the Unilag contingent to win the West

Africa University Games (WAUG) for the first time in the history of the games at the University of Benin, Benin City, Nigeria. It was a feat and that fetched me the nickname "Golden Lady". A research on the psychological effect of female participation in sports was conducted thereafter. I participated in three (3) committees of the 1998 NUGA games held at the University of Lagos. Sports psychology services were provided to athletes for both WAUG and NUGA Games.

I established the Sports Psychology Resource Centre at University of Lagos in 1998. The centre is open to staff and students of the Departments of Physical and Health Education in the country for research activities. Human Kinetics Publishers, and Colleagues from England and USA have donated books for the expansion of the Centre.

I expanded the Sports Psychology course from only undergraduate level to Ph.D level in this University and our success story has been emulated by other Nigerian Universities who also run degree programmes in Sports Psychology.

### **INTERNATIONAL ACTIVITIES**

In 1989, I attended the 7<sup>th</sup> World Congress of Sports Psychology as one of the keynote speakers and was elected as one of the members of the managing council of the World Body. I am one of the longest serving members on the board of the International Body and the first African to serve for that length of time.

At the 10<sup>th</sup> World Congress in Skiathos Island Greece, I was elected the Vice President for the second time to serve from 2001 – 2005.

In 1993, I was awarded the Fellow of the Physical Education Association of Great Britain and Northern Ireland in Leeds, England. I received the Distinguished Scholar Award in Physical Education

from the International Council for Health, Physical Education Recreation Sport and Dance (ICHPER-SD) in Florida 1995. I served as the Secretary General Africa Zone from 1991 to 1999 and an Africa representative on the Board of International Association of Physical Education and Sports for Girls and Women for many years from 1985 - 2001.

Academic activities have taken me to various cities of the world, where I have presented research findings and academic write-ups. Amongst them are:

- 28th ICHPER World Congress Warwick University, England 1985
- IAPESGW World Congress West London College, England 1985
- 7th World Congress of Sports Psychology, Singapore 1989
- Brazilian Society of Sports Psychology Conference, Belo Horizonte, Brazil 1990
- South America Sports Science and P.E. Conference, Buenos Aires, Argentina 1990
- FEPSAC European Congress on Sports Psychology, Germany 1991
- International Congress of Ontopsychology, Rome 1991
- 34th ICHPER World Congress, Limerick Ireland 1991
- ISSP Management Council Meeting/Conference, Canada 1992
- 36th ICHPER - SD Congress, Japan 1993
- 8th World Congress of Sports Psychology, Portugal 1993
- 1st International Congress on Women and Sports, Brighton 1993
- International Society of Comparative Physical Education and Sports (ISCPES) World Congress Prague, Czech Republic 1994
- Mexican Society of Sports Psychology National Conference, Mexico 1994
- ISSP Management Council Meeting/Conference, Holland 1995
- 38th ICHPER - SD World Congress, Florida 1995
- International Conference on Women and Sports, Egypt 1995
- 1st ICHPER - SD Asia Congress on Women and Sports, Philippines 1996
- ISSP Management Council Meeting/Conference, Palma deMallorca, Spain 1996
- 9th World Congress of Sports Psychology, Israel 1997
- 2nd World Congress on Women and Sport, Namibia 1998
- ISSP Management Council Meeting/Conference,

- Prague, Czech Republic 1999
- ISSP Management Council Meeting in Canberra, Australia 2000
- 10th World Congress of Sports Psychology, Skiathos Island Greece 2001
- IOC World Congress on Sport Science, Annual Meeting of the American College of Sports Medicine, St. Louis, Missouri U.S.A. 2002
- 1st Workshop on Women Sports International (WSI), St. Louis, Missouri, U.S.A. 2002
- America Voluntary Visitors Program to U.S.A. touring Atlanta, Washington D.C. and New York. 2002

I received the 1996 Women of the Year Award by American Bibliographical Institute (ABI), U.S.A and was listed as one of 2001 Who's Who in the World by Marquis American Publication, 18<sup>th</sup> Edition.

### Service to Professional National Association

I have served my professional parent body, Nigeria Association of Physical, Health Education, Recreation, Sport and Dance (NAPER-SD) at various levels. I was a former Treasurer and presently the 2<sup>nd</sup> Vice President and a member of the "Think Tank" committee of the Association. Also, I am a foundation member of the National Association of Professional Educators (NAPE) since 1989 and a member of Nigeria Association of Women in Sports.

I was the first female recipient of the Award of Excellence presented by National Association of Physical, Health Education, Recreation, Sport and Dance (NAPER-SD) at National Institute for Sports (NIS) in April 1998, and the first recipient of the Fellow of Sports Psychology Association of Nigeria in Minna 1997.

I have written four books and have presented over 70 academic and policy papers at both National and International Conferences/Seminars. Recently, I was called to Bar as Solicitor and Advocate of the Supreme Court of Nigeria.

## ACKNOWLEDGEMENTS

I want to give glory, praise and adoration to the Almighty God who created me and endowed me with the energy, intelligence and will-power to achieve what He has destined me to be.

Honour and gratitude are to my parents, Pa Simeon Olanipekun Falade (at 94 years still climbing the staircase to his bedroom) and my mother, Late Madam Reginah Dada Falade. She toiled through illness and yet provided all my needs for a sound education from Primary School to Grade II Teachers' College. She was an industrious woman. This gathering will do me a great honour by observing a one minute silence in her golden and evergreen memory. I have to place my elder sister, Dr. Yemisi Falade-Saleem (USA) in the category of my parent. She sponsored most of my attendances at International Conferences. I am grateful.

I remember vividly the positive role played by my Head of school, Miss Andrey Bambra, and her other staff: Miss Barford, Miss Elizabeth Cooper, Dr. Joy Standeven, Mr Trevor Wood and many of my lecturers at the Chelsea College of Physical Education, Eastbourne, and their counterparts at the Manchester University England, Prof. MacNair, Mr Steel, and Dr. Macdonald. They all gave me an unbeatable educational standard which has helped me till today.

I acknowledge Prof. J. Ade Oyewusi, my first Head of Department at the University of Ife (now Obafemi Awolowo University), who secured a scholarship for me without knowing me from Adam; Prof. J. C. Omoruan who actually encouraged me to come to the University of Lagos, when he was the Head of the Department. He served as my second supervisor for my Ph.D. work. He also linked me with Prof. Zaichowsky of the Boston University, USA, whom

I also wish to acknowledge for giving me a top class exposure to researches in the field of Sports Psychology. I want to thank, most sincerely, Prof. R. N. Singer (USA), for introducing me to International Sports Psychology Administration, Dr. B. A. Babalola, my main supervisor for the Ph.D degree and Prof. M. S. Olayinka the then Head of Department of Educational Foundations and former Dean of Education.

Mention must be made of Prof. John Adedeji whose reply to my application to University of Ibadan as a lecturer convinced my husband for the need for me to obtain a postgraduate degree before returning to Nigeria.

I acknowledge the contributions made by my colleagues at the Department of Physical and Health Education, the Faculty of Education, my teachers at the Faculty of Law; and the University of Lagos for sponsoring me to three (3) conferences and for granting me a study leave for three (3) months in 1982. For specific mention are: Prof. (Mrs) B. A. Folarin, Professors Frank Okoisor, E. A. Obe, Aloy Ejiogu and Chief Andy Aroloye. Of course, I must acknowledge Prof. Jelili Omotola, the former Vice Chancellor who promoted the first set of three (3) Professors in the history of the Department of Physical and Health Education. I want to thank Mr. Fola Adeola, former Managing Director of Guaranty Trust Bank for part-sponsorship of my attendance at the 38<sup>th</sup> ICHPER Conference in Japan.

My numerous students have been really wonderful and have been sources of inspiration. Amongst them are my five (5) groomed Ph.D holders in the field of Sports Psychology, Drs Mayowa Adeyeye, Joe Vipene, Mohammed S. Mohammed, Oby Okonkwor and Athanasius Amasiatu; four currently

on the programme: Mrs. Moji Adewunmi, Mrs. Victoria Emeribe, Sola Afuye and Johnson Semidara and numerous others who had their Masters degree in Sports Administration, Sociology, and Psychology. I remember many of our former first degree graduates who have attained greatness in their various careers, and the present students. I thank God that they have been part of my joy all along.

I want to show appreciation to the Federal Ministry of Sports and Social Development (through the defunct National Sports Commission) for providing the opportunity for my national and international sports administration and involvement. The members of the Sports Psychology Association of Nigeria (SPAN), deserve a mention and other persons within the sport circle such as Air Vice-Marshal Bayo Lawal, Air Commodore Sam Omeruah, Navy Commodore M.O. Sojinrin, Dr. Samuel Ogbemudia, Chief (Dr.) Shola Rhodes (SAN), Chief Alex Akinyele, Rev. Fr. Slattery, Mrs. Fransisca Emmanuel; Chiefs Fashina Thomas, Fabio Lanipekun, Yinka Craig, Dr. Segun Ogundimu, Dr. Amos Adamu, Dr. Tijani Yusuf; the Late Bridg. Sho-Silva, Air Commodore Tony Ikazoboh, Chief Abraham Ordia, Sir Adetokunbo Ademola and Dr. Simi Johnson to mention a few. These people have influenced my life a great deal. The media especially Nigerian Television Authority (NTA), Africa Independent Television (AIT), Radio, *Punch* and *Sporting Champion* also deserve a mention.

I acknowledge the contributions made by the Babatundes, my younger brothers and sisters (the Falades), the Ikulayos and all other in-laws. I want to thank my secretary, Mrs. Abiola Olanipekun for her competence and Deborah Akingbade for taking care of my family while I was at the Nigeria Law School. Tributes must be paid to all my lecturers at the Nigeria Law School, my colleagues and friends.

My nuclear family has been really great, wonderful and supportive. Without the understanding and the co-operation of my loving husband, Chief Alfred Olaiya Ikulayo (FCA) and children (Ibilola, Omolayo and Ayo Ojejinmi, Kayode (UK), Kolawole and Adegboyega), none of these achievements could have been attained and enjoyed.

Therefore, I thank specially my husband for being who he is and my children for their love, care and financial assistance for my attendance at overseas conferences. Many thanks are extended to Carole Oglesby, President, Women Sports International and the United States Government for sponsoring my trip to the USA in May/June 2002.

I must thank the Vice Chancellor, Prof. Oye Ibidapo-Obe and his crew especially our first woman Registrar, my Dean, Prof. Bade Adegoke, and Dr. (Mrs) Maduekwe for proof reading the final draft of the inaugural lecture, the University of Lagos Press, the Centre for Educational Technology (CET), the Works and Services, the entire University Community and all the distinguished guests present at my inaugural lecture tonight. I pledge to continue to work hard, to maintain the highest standard of academic integrity, honesty and scholarship in this University.

As a visible female role model in my discipline, institution both at national and international levels, I will continue to serve with all my might.

Distinguished guests, gentlemen of the press, ladies and gentlemen, I thank you for your attention and God bless.

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## REFERENCES

Abiola, M. K. O. (1981), "Abiola's Charge to Sport Writers", *Sunday Times*, June 21.

Adebayo, A. A. (1985), *Proceedings of the Official Inauguration of Members of the Sports Psychology Association of Nigeria*, Lagos: SPAN Publication.

Adedaja, T. A. and Omotayo O. O. (1987), A joint lecture at the First Sports Psychology Course for Nigerian coaches by SPAN held at the National Institute for Sports (NIS) Lagos, Nigeria.

Adedaja, T. A. (1987), "Attribution Theory in the Supernatural and use of "juju" as a 5th Attribute in Sports. In: *Social Psychology: Analysis and Implication for participation in Youth Sports*, SPAN Publications 3, 2, 42-50.

Adeniji, O. A. (1982), "Hypertension in Nigeria" Executives ASCON, Topo-Badagry.

Adeyanju, F. B. (1987), "Tips on coping with Stress of Competition" A paper read at SPAN National Seminar NIS Lagos.

Adeyeye, F. M. and Ikulayo, P. B. (1991), "A validation of the Effectiveness of Ikulayo Stress Management Approach (ISMA) in Competitive Sports". In: *Proceedings of the VIII European Congress of Sports Psychology, Koln: Academia Verlag Sankt Augustin*.

Adeyeye, F. M. (2002), "Coping with Stress of Life" unpublished paper presented at a workshop organised by Nigeria Institute of Chartered Educators, Lagos.

Alderman, R. B. (1974), *Psychological Behaviour in Sports*. Philadelphia: W. B. Sanders & Co.

Coleman, V. (1980). *Stress Control*. London Pan Books Ltd.

Corbin, C. B. (1972), *Mental Practice in Ergogenic Aids and Muscular Performance* (ed.) Morgan, W.P. New York: Academic Press.

Cratty, B. J. (1973), *Teaching Motor Skills*, Englewood Cliffs. New Jersey: Prentice Hall, Inc.

Cratty, B. J. (1983), *Psychology in Contemporary Sport, Guidelines for Coaches and Athletes*. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Ejiogu, A. and Aderounmu, O. (1991), *The Management of Executive Stress*: Lagos Al-Marks & Sons Consultants.

Epstein, M. L. (1980), "The Relationship of Mental Imagery and Mental Rehearsal to Performance". *Journal of Sport Psychology*, 2, 211-220.

Eskridge, V. L. (1982), "The Role of Hynosis in Competitive Stress Management". In: L. D. Zaichkowsky and W. E. Sime (eds) *Stress Management for Sports*. Virginia: AAAPERD Publication.

Eysenck, H. J. (1953), *The Structure of Human Personality*, USA: Methuen Wiley.

Eysenck, H. J. and Eysenck, S. B. G. (1963), *Personality Structure and Measurement*. London: RKP.

Fitts, P. M. and Posner, M. I. (1973), *Human Performance* London: Prentice Hall Int., Inc.

Griffiths, C. R. (1932), *Psychology of Coaching*. New York; Charles Scribners & Sons.

Guildford, I. (1959). "Characteristics of Champion Athletes. *Athletic Journal*, Vol. 1.

Ichimura, S. (1988), "Meditation of Esoteric Buddhism for Athletes", Unpublished. A paper read at Seoul Olympic Scientific Conference, Korea Seoul.

Ikulayo, P. B. (1985), "A Keynote Address" at the Inaugural Ceremony of Members of Sports Psychology Association of Nigeria at NIS, Lagos.

Ikulayo, P. B. (1987), "Coping with Stress of Competition". In: *Psychological Preparation for International Engagement*. SPAN Publication, 3, 131-51.

Ikulayo, P. B. (1987), "Psychological Adjustment of Nigeria National Athletes". A paper read at the 5<sup>th</sup> National Conference of SPAN. University of Maiduguri.

Ikulayo, P. B. (1987), "Stress Reduction

Techniques". In: *Stress Management in Competitive Sports* SPAN Publications, 3, 3, 63-74.

Ikulayo, P. B. (1987), "Psychological factors in pursuance of Sports Excellence". *Lagos State College of Education Journal* Vol. 2.

Ikulayo, P. B. (1988), "Incentives in Competitive Sports in Nigeria and their Consequences". A paper read at the 6<sup>th</sup> National Conference of SPAN, NIS Lagos.

Ikulayo, P. B. (1988), "Psychology of Competition" *UNILAPEHER*, Vol. 1 p8 108-120.

Ikulayo, P. B. (1989), "Psycho-Sociological Implication of Cheating in Higher Institution Sports Competitions in Nigeria", *Lagos Education Review*, Vol. 5, No. 1.

Ikulayo, P. B. (1989), "Psychological Intervention for Achievement in Sports". A Keynote Lecture at the 7<sup>th</sup> World Congress in Sport Psychology: Singapore.

Ikulayo, P. B. (1990), *Understanding Sports Psychology*. Lagos. EA/TCN Press.

Ikulayo, P. B. (1991), *Sports Psychology Digest* Lagos: University of Lagos Press.

Ikulayo, P. B. (1992), "Regular Vacation and Recreation as Effective Strategies for coping with Stress". A paper read on 'How to cope with Executive Stress', 26<sup>th</sup> - 27<sup>th</sup> November, Lagos.

Ikulayo, P. B. (1992), "Psychological Make-Up of a Champion Athlete". In: Emiola, L. Lafinhan, K. and Obayemi, W. (eds) *The Champion Athlete*. Ilorin: NUGA Publication.

Ikulayo, P. B. (1993), "The Functional Roles of Sports Psychologists in Attaining Sustained Youth Sports Excellence". *JOSPAN*, 1, 1, 12-18.

Ikulayo, P. B. (2000), "Psyching Verses for Falcons" (A practical approach to psyching sessions).

Ikulayo, P. B. (2001), "Psychological Skills Training": A paper presented at the 10<sup>th</sup> World

Congress of Sport Psychology held at Skiathos Island, Greece.

Ikulayo, P. B. (2003), "Psychology of Handling Star Athletes". A paper presented at a Seminar/Workshop for Coaches in preparation for the 8th All Africa Game, Abuja Nigeria.

Jacobson, E. (1958), *Progressive Relaxation* Chicago: University of Chicago Press.

Kane, J. E. (1975), *Psychological aspects of Physical Education and Sports*. London RKP.

Kroll, W. (1967), "16PF Profiles of Collegiate Wrestler". *Research Quarterly*, 38, 47-57.

Kroll, W. (1982), "Competitive Athletics Stress and Coaches". In: L. D. Zaichowsky and W. E. Sime (eds), *Stress Management for Sports*. Virginia: AAHPERD Publications.

Martens, R. (1987), *Coaches guide to Sports Psychology*. Champaign, IL: Human Kinetics.

Neeves, R. E. (1982), "Coaches' reaction to M. D. Margolies "Stress Management for Professional and World-Class Competition". In: L. D. Zaichowsky and W. E. Sime (eds) *op cit*.

Nidefer, R. M. (1982), *The Ethics and Practice of Applied Sports Psychology*. New York: Movement Pub., Inc.

Oloriegbe, R. O. (1995). "The use of Ikulayo Stress Management Approach on five athletes" M.Ed. Coursework on Stress Management in Competitive Sports.

Olympian (1988), The Seoul Olympian News and Records the Official Daily Records of the Games of the XXIV<sup>th</sup> Olympiad. *Korea Times*: SLOO Pub.

Revizza, K. and Rotella, R. (1982), "Cognitive Somatic behavioural Interventions in Gymnastics". In: L. D. Zaickowsky and W. E. Sime (eds) *op cit*.

Salmela, J. (1981). *The World Sports Psychology Source Book*. Ithaca, New York: Movement Pub.

Selye, H. (1978), "The Stress of Life". USA: Paper back edition.

Sheldon, (1940), *The Varieties of Human Physique* New York: Harper and Row.

Silva, J. (1988), "Applied Sports Psychology present Status and Future Prospects". A paper read in Seoul Scientific Congress. Korea: Seoul.

Singer, R. N. (1980), *Motor Learning and Human Performance*. New York: Macmillan Publishing Co.

Singer, R. N. (1986), *Peak Performance and More* Ithaca, New York: Movement Publications, Inc.

Singer, R. N. (1987), A Keynote address delivered at the Opening Ceremony of the 5<sup>th</sup> Conference of SPAND. University of Maiduguri.

Sohi, A. S. (1987), "Mental Training for Enhancing Performance in Sports". In: *Psychological Preparation for International Sports Engagements* - SPAN Publications, 3, 1, 153-168.

Straub, W. F. (1978), *Sports Psychology: An analysis of Athletes Behaviours*. Ithaca, New York: Movement Publications.

Suinn, R. N. (1976), "Body Thinking. Psychology for Olympic Champs". *Psychology Tokyo* 10, 2, 38-42.

Suinn, R. N. (1980), *Psychology in Sports, Methods and Application*. Minneapolis, Minnesota: Burgess Publishing Co.

Suinn, R. N. (1985), "The 1984 Olympic and Sports Psychology", *JSP*, 7, 4, 321-329.

Syer, J. and Connolly, C. (1984), *Sports Body and Sporting Mind, An Athletes' Guide to Mental Training*. United Kingdom: Cambridge University Press.

Triplett, N. (1898), "History of Sport and Exercise Psychology". In: R. S. Weinberg and Gould D. (1995) *Foundations of Sports and Exercise Psychology*. USA: Human Kinetics.

Unestahl, L. E. (1988), "Systematic Training and Mental Skills in Sport and Life". A paper read at 1988 Seoul Olympic Scientific Congress: Seoul, Korea.

Vealey, R. S. (1988), "Future directions in Psychological Skills Training". *The Sports Psychologist*, 1, 2, 318-336.

Weinberg, R. S. and Gould, D. (1995), *Foundations of Sports and Exercise Psychology*. USA: Human Kinetics.

Welford, A. T. (1968), *Fundamentals of Skills* London: Methuen and Co. Ltd.

Zaichowsky, L. D. and W. E. Sime (1982), Biofeedback for Self-regulation of Competitive Stress. In: L. D. Zaichowsky and W. E. Sime (eds) *op cit*.

Ziegler, S. C. (1982), "Application of Stress Management in Competitive Runners". In: L. D. Zaichowsky and W. E. Sime (eds) *op cit*.

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