

UNIVERSITY OF LAGOS
THESIS APPROVED
BY SENATE
ON 28th DAY OF Feb. 1990

PRODUCTION COST: QUALITY AND PERFORMANCE OF
SPORTS-COACHES IN LAGOS STATE

By

QUADRI, WAZIRI ADESEGUN (M.Ed. Lagos)

A Thesis Submitted In Partial Fulfilment
For The Award of The Degree of Doctor of Philosophy
In Physical Education (Sports Management)
University of Lagos, Nigeria.

1989

PRODUCTION COST: QUALITY AND PERFORMANCE
OF SPORTS-COACHES IN LAGOS STATE

QUADRI, W. A.

CERTIFICATION

THIS IS TO CERTIFY THAT THE THESIS -

PRODUCTION - COST; QUALITY AND PERFORMANCE OF SPORTS-COACHES IN LAGOS - STATE

SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES

UNIVERSITY OF LAGOS FOR THE AWARD OF THE DEGREE OF

DOCTOR OF PHILOSOPHY OF PHYSICAL EDUCATION (SPORTS-MANAGEMENT)

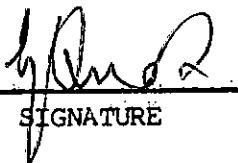
IS A RECORD OF ORIGINAL RESEARCH CARRIED OUT BY

QUADRI WAZIRI ADESEGUN

IN THE DEPARTMENT OF

PHYSICAL AND HEALTH EDUCATIONQUADRI W.A.

AUTHOR'S NAME



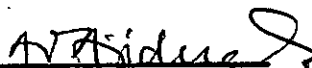
SIGNATURE

20-2-90

DATE

DR. A. O. AJIDUAH


SUPERVISOR'S NAME



SIGNATURE

20-2-90

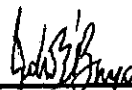
DATE

DR. A. O. AJIDUAHINTERNAL EXAMINER'S
NAME

SIGNATURE

20-2-90

DATE

DR. A. A. ADEBAYOINTERNAL EXAMINER'S
NAME

SIGNATURE

20-02-90

DATE

DR. YOMI AWOSEIKAEXTERNAL EXAMINER'S
NAME

SIGNATURE

20-2-90

DATE

TABLE OF CONTENTS

	<u>Page</u>
Table of Contents	i
List of Tables	iv
Abstract	vii
Acknowledgement	ix
<u>CHAPTER ONE: THE PROBLEM</u>	
Introduction	1
Background to the Problem	4
Definition of Terms	11
Statement of the Problem	13
Purpose of the Study	13
Research Questions	14
Hypotheses	16
Delimitation of the Study	20
Limitation of the Study	21
Significance of the Study	22
<u>CHAPTER TWO: THE REVIEW OF RELATED LITERATURE</u>	
Introduction	27
Curriculum Process	27
Relevance of Objectives to Course Content	28
The Course Content and Occupational Competence	31
The Human Capital Concept and Sport Education	35
The Demand and Supply of Sports-Coaches	41
Cost-Benefit and Sport-Education	51
<u>CHAPTER THREE: METHODOLOGY</u>	
Introduction	58
The Study Instrument	59
Reliability of the Instruments	59
Validity of the Instruments	60
Administration of the Instruments	60
Population	60
Subjects	61
Data Collection	61
Formula for Quality	62
Formula for Performance	63

						<u>Page</u>
Formula for Occupational Competence	..	..				64
Data Analysis	..	..	..	..	..	65
Cost-Benefit Analysis	..	..	..	..	..	67
Measurement of Returns	..	..	..	..	..	71
Cost-Effectiveness Analysis	..	..	..	..	..	72
 <u>CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION</u>						
Introduction	..	..	..	..	..	74
Hypothesis 1	..	..	..	..	..	76
Hypothesis 2	..	..	..	..	..	79
Hypothesis 3	..	..	..	..	..	82
Hypothesis 4	..	..	..	..	..	85
Hypothesis 5	..	..	..	..	..	87
Hypothesis 6	..	..	..	..	..	90
Hypothesis 7	..	..	..	..	..	93
Hypothesis 8	..	..	..	..	..	95
Hypothesis 9	..	..	..	..	..	98
Hypothesis 10	..	..	..	..	..	101
Hypothesis 11	..	..	..	..	..	104
Hypothesis 12	..	..	..	..	..	107
Hypothesis 13	..	..	..	..	..	110
Hypothesis 14	..	..	..	..	..	112
Hypothesis 15	..	..	..	..	..	115
Hypothesis 16	..	..	..	..	..	119
Hypothesis 17	..	..	..	..	..	122
Findings	..	..	..	..	..	146
	
 <u>CHAPTER FIVE: SUMMARY AND CONCLUSION</u>						
Summary	..	..	..	..	..	150
Conclusion	..	..	..	..	..	152
Recommendation	..	..	..	..	..	153
BIBLIOGRAPHY	..	..	..	..	..	161
APPENDICES	..	..	..	..	..	168

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	The Correlation Between the Quality And Productivity of Sports-Coaches Who Hold The West African School Certificate	76
2	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold The NIS Grade III Coaching Certificate Plus The West African School Certificate	79
3	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold The NIS Grade II Coaching Certificate Plus The West African School Certificate	82
4	The Correlation Between The Quality And Productivity of Sports-Coaches The Hold The NIS Grade I Coaching Certificate Plus The West African School Certificate.	85
5	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold The NIS Grade II Coaching Certificate Plus A University Diploma Certificate in Physical Education	87
6	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus a University Diploma Certificate in Physical Education	90
7	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold A Bachelor Degree in Physical Education	93
8	The Correlation Between The Quality And Productivity of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus A Bachelor Degree in Physical Education	95
9	Occupational Competence of Sports-Coaches who Hold The NIS Grade II Coaching Certificate plus A University Diploma Certificate in Physical Education and Sports-Coaches who Hold The NIS Grade II Coaching Certificate Plus The West African School Certificate	98

<u>Table</u>	<u>Page</u>
10 Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus A University Diploma Certificate in Physical Education And Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus The West African School Certificate	101
11 Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus A Bachelor Degree in Physical Education And Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus The West African School Certificate	104
12 Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus A Bachelor Degree in Physical Education And Sports-Coaches Who Hold The NIS Grade-I Coaching Certificate Plus A University Diploma Certificate in Physical Education	107
13 Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus West African School Certificate And Sports-Coaches Who Hold A Bachelor Degree in Physical Education Only	110
14 Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate Plus University Diploma Certificate in Physical Education And Sports-Coaches Who Hold A Bachelor Degree in Physical Education Only	112
15 The Household Production Costs of Grade I Certificate in Sports-Coaching And A University Graduate of Physical Education	115
16 The Relevance of Basic Academic Subjects in Physical Education To Sports-Coach Education Programme And Teacher Education Programme	119
17 The Relevance of Teacher-Education Foundation Subjects to Sports-Coach Education	122
18 Quality and Productivity	125
19 Degree of Occupational Competence	127

<u>Table</u>		<u>Page</u>
20	Relevance of Basic Physical Education Courses to Teacher And Sports-Coach Education	130
21	Relevance of Teacher-Education Foundation Subjects to Sports-Coach Education	132
22	Comparison of Effective Household Production Cost of Sports-Coaches Who Hold The NISG I and B.A./B.Sc. in Physical Education	139
23	Cost-Benefit of 4-year B.Sc. Sports-Coach-Household Production Cost	144

ABSTRACT

The main concern of this study was to confirm if productivity is a function of quality of sports-coaches in Lagos State. Other areas of interest in this study include, the investigation of superiority of qualities of different categories of sports-coaches over one another, the determination of relevance of certain "Foundation Subjects" to training programmes of sports-coaches, the determination of household production-cost of sports-coaches and the projection of cost-benefit and cost-effectiveness of the various training programmes available in Nigeria currently.

The literature review touched on the essence of curriculum development and its application to sport-education, particularly, in the area of relevance of objective to course content, the criteria for selecting course content and the appropriateness of course content to occupational competence. Other areas which were reviewed include, the human capital concept and sport-education, the demand and supply of sports-coaches, the cost-benefit of sport-education and the cost-effectiveness of sport-education as a training programme.

The academic and occupational qualifications were used as criteria for categorising the sports-coaches who served as subjects for this study. Other subjects of the study included, undergraduates of Universities in Lagos State, sports-coach trainees of National Institute for Sports (NIS) sport-managers of private sport-clubs, lecturers of physical education in Universities in Lagos State and sport-administrators in the Lagos State Sports Council (LSSC) and the National Sports Commission (NSC). They were 427 subjects in all.

Four different types of questionnaires were used to collect the data used for this study. They were described as the Performance Rating Questionnaire (PRQ); Production-Cost Questionnaire (PCQ); Quality Probing Questionnaire (QPQ) and the Curriculum Content Questionnaire (CCQ). Some of the copies of questionnaires were subjected to face-validity approach. The reliability of the different types of questionnaires ranged from 0.75 to 0.84.

Three statistical tests were used to test the hypotheses formulated for this study. They included the Pearson Product Moment Correlation (PPMC); the t test, and the Chi-square (χ^2) test.

The result of the investigation revealed that
(i) productivity was a function of quality,

- (ii) sports-coaches who possessed a high basic qualification plus a high or an average occupational qualification were more productive than those sports-coaches who possessed a high occupational qualification plus a low basic qualification;
- (iii) teacher-education "foundation subjects" were not significantly relevant to sports-coach education;
- (iv) household production-cost of sports-coaches who underwent university training programme was more cost-effective than the household production-cost of sports-coaches who passed through the NIS training programme;
- (v) the cost-benefit of University training as a sports-coach was projected as being higher than the cost-benefit that would accrue from the NIS training programme.

On the bases of these findings, it was concluded that the basic qualifications of the sports-coaches was a strong determinant of their respective qualities and consequent degree of productivity. It was therefore, suggested that a University Diploma Certificate in physical education should be the minimum pre-requisite for admission into sport-coach training programme.

ACKNOWLEDGEMENT

The success of this work is credited to everyone whose contribution deserves sincere commendation.

I Thank you all.

CHAPTER ONE

THE PROBLEM

Introduction:

Sports programmes are capital intensive. This is evident from the different areas of sport management such as provision of facilities, supply of equipment, training and maintenance of highly skilled manpower. Other areas of outlay are cost of motivating athletes and high cost of running tournaments and competitions both at national and international levels. Still green in our memories was the cash gift of ₦5,000.00 each to the sixteen-member Golden Eaglet team in 1985 by the Federal Military Government. The second-time incentive galore to about 206 Nigerian athletes to the 4th All African Games held in Kenya in 1987 was another illustration to the claim of capital intensiveness of sport. It is on record that the cash gift ranged from ₦10,000.00 for a gold medal winner to ₦2,000.00 for a looser in the Games.

Similarly, the Super Eagles performance in the 1987 African Cup of Nations soccer competition also attracted a reasonable cash gift of about ₦316,000.00 to both the team officials and the members of the team. The 1989 Kodak-FIFA Junior World Cup Silver Winner Flying Eagles also enjoyed a similar handsome

cash incentive of ₦75,000 each while the officials of the team received a bonus ranging from ₦30,000 to ₦100,000. Many and more examples of such monetary incentives by the Federal Government abound.

Be that as it may, such flamboyant incentive galore to sports men and women is usually carried out in recognition of the dynamic contribution of sports to the economic, political and social development of the nation. The Lagos State Commissioner for Youth, Sports and Social Development recognised these contributions hence he once said, "... sports have become a weapon for diplomacy and international politics" (Otutuloro 1989:2). Although, the returns that accrued from sport in such national development are hardly quantified, it is believed that, if such returns are properly utilized, they can justify the heavy outlay on sports. It must be realized and appreciated though, that no school of thought has come up with any universally accepted formula to quantify the various contributions of sports to the social life of any nation.

Whatever is the position of things, these contributions are obvious phenomena only they have not been subjected to any universally accepted quantification formula as at now. But, talking from the economic point of view, if any venture

requires a quantifiable input, it should have a corresponding quantifiable output. Unfortunately, one of the disturbing problems for sport administrators is how to account for the factor-inputs as against the factor-outputs. In spite of this shortcoming, countries all over the world have always showed interest in sports even when many of such countries are experiencing economic depression.

However, the returns on the huge outlay on sports in Nigeria is to some extent encouraging but not totally impressive, measuring the returns with the results of competitions so far. Some sports lovers have expressed some disappointments about sports development adding that the training of coaches are below standard. One of such sports lovers is Chief M.K.O. Abiola, a one time financier of a leading soccer club in Nigeria. According to him,

The development of sports in Nigeria has been sporadic. It could have been outstanding if development has been fused with modern scientific training and coaching (Abiola 1987:6).

Many other factors have been identified as being accountable for the lapses in the sports development. While many of these factors are material in nature, one major factor is human. Obviously, the human factor takes control of other factors. Precisely, the human factor is the calibre of sports-coach while the other factors include provision of camping

services, welfare of athletes and some others. It goes without saying, therefore, that the availability of sophisticated facilities and equipment at the expense of a highly qualified sports-coach is like building a mansion on a sandy raft. The likely results of such hopeless exercise are collapse and retrogression which is the present state of sports in Nigeria.

If a highly qualified sports-coach is a major answer to the problem of sports-development in Nigeria, for purpose of prudent finance management especially at this austere times, therefore, the production costs of the various categories of sports-coaches in terms of the cost-benefit of sport-coaching as a career to the sports-coach and the cost-effectiveness of the various training programmes to the government are necessary issues for prompt consideration.

Background to the Problem:

Any attempt to emphasise the dynamic roles of sports towards the enhancement of economic and socio-political development of this nation is like stating the "obvious". However, it is improper to deny these roles if not only to confirm the "obvious", identify factors that enhance the roles, identify factors that inhibit the roles and possibly reach

a compromise for the benefit of sports development in Nigeria.

A bold attempt towards the fulfilment of the roles of sports was the establishment of the National Sports Council in 1962. The establishment of the Council was geared towards the easy facilitation or ~~smooth running of sporting programmes~~ and to involve the central government in organised sports. As the awareness of the benefits of sports began to grow from strength to strength, the then Federal Military Government promulgated a decree (Decree 34 of 1971) which gave a formal recognition to the National Sports Council in 1971. The decree rechristened the old National Sports Council of 1971 as National Sports Commission (NSC).

The decree includes amongst other terms of reference for the NSC the following,

To encourage the development and organisation and participation in sports in Nigeria, to coordinate and integrate efforts to raise the standard of performance in sports throughout Nigeria... have the sole right to make... arrangements for technical assistance, recruitment of coaches ... train Nigerians to become sports men and instructors in sports ... provide and maintain sports centres and facilities for the training of Nigerians as instructors in and organisers of sports (NIS 1971:34).

In order to supplement government's effort to develop sports, several attempts were made by physical

education experts, sports lovers and many other sports bodies. Efforts were made to address their minds to the problems of sports development through extensive discourse and discussion in sports seminars, workshops and conferences. For instance, in the National Sports Commission Seminar held in Kaduna, Adedeji (1984) argued that self-reliance and discipline must be the guiding principles of the athletes. Ajiduah (1984) stressed the importance of scientific sports research in the development of sports. Baikie (1984) reminded the conference of the role of higher institution of learning in national sports development. Eben-Spiff (1984) also emphasized the importance of facilities for training and competitions and Onifade (1985) stressed the need for a national sports policy.

Adedeji (1986), Efunkeya (1986), and Ikulayo (1986) expressed in their respective presentations that mental preparedness of athletes, variations in the athlete's aptitude and growth of an "inner athlete" were possible factors which could enhance sports development. In the same trend, Ajiduah (1986) emphasized the role of a qualified sports-coach as an equally important factor that could enhance the growth of sports in Nigeria.

While it is quite reasonable to agree with all the factors identified by various presenters at different seminars, it is no doubt that the sports-coach is a

major and an indispensable factor in the realm of sports-development. Like it has been said that no education of any nation can rise above its teacher (NPE, 1977) so, it can be said that the performance of athletes shall always reflect the qualities of the sports-coaches who handle sportmen and women. It is no exaggeration or distortion of fact therefore, to say that the sports-coach is to sports-development as the teacher is to educational development. As the quality of the teacher can make or mar the educational system, so the quality of the sports-coach can make sports-development static, retrogressive or progressive. Idris (1984) supports the foregoing assertion when he says "The performance of ... athletes is essentially dependent on the quality of training they receive..." (1984:134).

However, the inadequacy of highly qualified sports-coaches with high academic background and the influx of less qualified sports-coaches with low academic background are glaring phenomena in the various sports organisations in Nigeria. No wonder, many private sports-clubs and national associations have occasionally embarked on the recruitment of foreign coaches who it is believed are more qualified than the indigenous sports-coaches.

The common practice to appoint the indigenous sports-coaches to handle both the local and the

foreign based athletes without very serious regards for the quality of the sports-coaches and the consequent poor performance made Ajiduah (1986) to categorise the available indigenous sports-coaches according to their qualities. According to him, the sports-coaches can be classified under two main headings namely, trained and untrained. He explicated,

Thus trained-coaches include physical educationists who also trained as coaches, former top sportmen and women who trained as coaches and are physical educationists, former top sportmen and women who trained as coaches but are not physical educationists and trained sports-coaches who were not top sportmen and women and not physical educationists. The untrained group of sports-coaches include physical education specialists who were not top sportmen and women in their younger days and did not get any formal training as sports-coaches..., gamesmasters and gamesmistresses who did not train formerly as coaches ... and former top sportmen and women who turned to sports coaching at the end of their active sporting career (Ajiduah 1986:72-73).

Alongside the problem of pollution of the sports-coach occupation and consequent incompetences of available indigenous sports-coaches is the incredible attitude of some categories of sports-coaches. Those sports-coaches who read physical education with teacher-education background are particularly likely to belong to this category. This category of sports-coaches are of the opinion that a professional teacher with physical education as his teaching subject is synonymous to a trained sports-coach. They also believe that a trained teacher with physical education bias who is appointed

as a sports-coach does not need to undergo a sports-coach training. They have the notion that they are equally productive if not more productive than the trained sports-coach.

However, in the developed world, it is the practice to appoint a sports-coach who possesses the academic and occupational qualifications of a relatively high level. This suggests that the educational system of the developed world recognises the essence of a highly qualified sports-coach and consequently provides for the training of sports-coaches either in the non-formal curriculum or the formal one. The formal training of sports-coaches was buttressed by Bucher. According to him,

The coach needs a background in physical and biological science education and humanities. Only in this way can he or she best serve youths who are interested in athletics (Bucher 1975:224).

In conclusion Bucher says,

For this reason and others, many persons feel that the coach should be certificated so that his or her course work and training will suit the leadership role entrusted to a coach (Bucher 1975:225).

It was in realization of this imperative need that the National Institute for Sports (NIS) was established in 1974 but formally opened in 1977. In corroboration with the philosophy and practice in the developed world, Bene-Iyinboh (1982) emphasises the purpose of establishing the NIS. He states;

establishment of NIS was dedicated to higher performance in sport and one significant step towards this worthy goal is the training of sports-coaches, administrator ... at various levels and in the different discipline (Iyinboh, 1982:4).

Accordingly, the NIS has the following statutory functions to perform,

The training of the technical manpower, the coaching and management of all sports and games. Research into various factors responsible for high performance sports....
Organisation of refresher courses in sports and games (NIS 1985:2).

It is interesting to state that the NIS has made a considerable contribution to the production of skilled manpower in the area of sports management. It is on record that 1,466 Grade III Coaches, 253 Grade II Coaches and 30 Grade I Coaches were produced between 1976 and 1988 (NSC 1989). That is, a total of 1749 sports-coaches were produced in twelve years. It is also on record that between 1977 and 1988, a total number of 343 candidates passed the Basic Sports Management Examination while only 75 candidates passed the Advanced Sports Management Examination (NSC. 1988).

A closer look at the production capacity of the NIS within a twelve year period shows that the institute has produced a total of 2,167 sports technocrats. That production is undoubtedly encouraging. It will therefore, not be regarded as unwarranted exaggeration to estimate that the NIS

must be producing an average of 180 sports-technocrats annually.

Definition of Terms:

Certain terminologies used in this study which need to be explained include, production cost, quality, performance, cost-benefit and cost-effectiveness.

Production Cost:

In the relevant economics language, Thomas (1971) defines cost as the monetary value associated with the purchase of factor input towards the achievement of a factor output. In the context of this study, production cost means the outlay of education of a sports-coach calculated as a household cost.

Quality:

According to Webster New Dictionary, quality means "the degree of excellence which a thing possesses" (1964:607). In this study therefore, quality means the degree of expertise of a sports-coach. The degree of expertise is the summation of the academic and occupational qualifications.

Performance:

Once again, the Webster New Dictionary defines performance as "functioning, usually with regard to effectiveness" (1964:553). In this study, performance is seen as the measure of productivity of a sports-coach in terms of the number of times a national or

international champion or runners-up was produced within a specific time limit of five years by a sports-coach.

Cost-benefit:

Zymelman (1973:187) defines cost-benefit as a "technique which compares monetary benefit with the cost of carrying out the programme that would have yielded the monetary benefit". It was along the foregoing definition, that cost-benefit was used to estimate the expected monetary benefit to a sports-coach who possessed a University Degree in physical education plus a Higher Coaching Certificate.

Cost-effectiveness:

Coombs and Hallack (1972:255) define cost-effectiveness as the "relationship between the inputs and the corresponding immediate educational output of any educational process". For purpose of this study therefore, cost-effectiveness of sports-education was aimed at finding the relationship between the monetary input of sports-education and the possible output of such sports-education.

Statement of the Problem:

Judging from the performance of Nigerian athletes in international sports competitions and especially those athletes handled by the indigenous sports-coaches so far, it is clear that the results have not been encouraging. Therefore, it is assumed that the quality of the indigenous sports-coaches may or may not be accountable for their productivity. The problem in this respect therefore, is to find out the effect of their qualities on their productivity.

Purpose of the Study:

It is against this background that this study intends to:

- (i) appraise the syllabi of Grade I, II, and III sports-coaching certificates of the NIS.
- (ii) appraise the syllabi of the Nigeria Certificate in Education (NCE) and or Bachelor of Art/Science Degree Certificate (B.A./B.Sc.) in physical education of any Nigeria University.
- (iii) assess the occupational and academic quality of available sports-coaches in the labour market.
- (iv) assess the productivity of the available sports-coaches who are in the services of sports organisations.
- (v) determine the relationship between the academic qualification and productivity of available sports-coaches in the labour market.

- (vi) determine the relationship between the occupational qualification and productivity of available sports-coaches in the labour market.
- (vii) calculate the household production cost of sports-coaches and who are graduates of the NIS.
- (viii) ~~calculate the household production cost of~~ university graduates of physical education who are likely to go into sports-coaching.
- (x) calculate the cost-effectiveness of both the NIS products and the University products.
- (xi) and finally calculate the estimated production cost of the envisaged indigenous high level manpower sports-coach with the concomitant tangible benefit accruing from his education.

Research Questions:

Effort was made to find answers to the following basic questions. The set-out objectives of the various manpower training programmes that were under investigation in this study were used as bases for the questions. It is pertinent to mention the various objectives of the different course programmes.

According to the NIS (1985), the main objective of the NIS is to train the technical manpower required for the coaching and management of all sports. Using the University of Lagos, Faculty of Education as an

example, it is on record that the main objective of the course programmes is to produce a high level trained and qualified classroom teacher. As usual with all other Colleges of Education, the Lagos State College of Education emphasizes the production of middle level trained and qualified classroom teacher.

Using the foregoing statements of objectives as premises for the investigation, the posers were;

- (a) Which of the following training programmes is closely relevant to sports-coaching?
 - (i) the National Institute for Sports training programmes,
 - (ii) the Universities training programmes with physical education bias and or
 - (iii) the Colleges of Education training programmes with physical education bias.
- (b) Which of the various categories of sports-coaches is most productive?
 - (i) a trained sports coach with a university degree in physical education,
 - (ii) a trained sports-coach with a school certificate or below,
 - (iii) an untrained sports-coach with a university degree in physical education.
- (c) Do levels of academic attainment relate significantly to productivity of the sports-coaches?

- (d) Do degrees of occupational qualification relate significantly to productivity of the sports-coaches?
- (e) What is the household production cost of holders of the NIS Grade I, Coaching Certificate?
- (f) What is the household production cost of University Physical Education Graduates and or NCE graduates?
- (g) What is the estimated cost-benefit of the envisaged indigenous high level manpower sports-coach?
- (h) Which of the different sports-coach types has the highest household production cost?
- (i) Will it be profitable for the University Physical Education Graduates to embark on a sports-coach training programme?

Main Hypotheses:

- (i) The performance of indigenous sports-coaches will be found to be related to their levels of academic and occupational qualifications.
- (ii) The effective-production-cost of NIS Grade I Coaching Certificate will be higher than the effective-production-cost of Bachelor Degree in physical education.

Sub-Hypotheses:

- (i) There will be no significant correlation between the quality and productivity of sports-coaches who hold the West African School Certificate only.
- (ii) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade III Coaching Certificate plus the West African School Certificate.
- (iii) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus the West African School Certificate.
- (iv) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus the West African School Certificate.
- (v) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in physical education.
- (vi) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in physical education.

- (vii) There will be no significant correlation between the quality and productivity of sports-coaches who hold the Bachelor Degree in physical education.
- (viii) There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in physical education.
- (ix) The occupational competence of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma in physical education will not be significantly higher than that of the sports-coaches who hold the NIS Grade II Coaching Certificate plus the West African School Certificate.
- (x) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in physical education will not be significantly higher than that of the sports-coaches who hold the NIS Grade I Coaching Certificate plus the West African School Certificate.
- (xi) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in physical education will not be significantly higher than the

sports-coaches who hold the NIS Grade I plus the West African School Certificate.

- (xii) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in physical education will not be significantly higher than the sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma in physical education.
- (xiii) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus the West African School Certificate will not be significantly higher than the sports-coaches who hold the Bachelor Degree in physical education.
- (xvi) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in physical education will not be significantly higher than the sports-coaches who hold the Bachelor Degree in physical education.
- (xv) The household production cost of the NIS Grade I Certificated Sports-coach will not be significantly higher than the household production cost of the University Physical Education Graduate.

- (xvi) The Basic-Academic subjects in physical education will not be significantly relevant to Sports-Coach-Education and Teacher-Education programme.
- (xvii) The Teacher-Education Foundation-Study subjects will not be significantly relevant to Sports-Coach Education.

Delimitation of the Study:

The study area of this investigation is Lagos State. This was so, because sufficient number of subjects needed for the study were readily available. The existence of large number of sports-clubs, institutions of higher learning, sports associations both at the state and national levels is an asset for this study. But more essentially, the only National Institute for Sports in Nigeria where the sports-coaches received their occupational training is situated in the Lagos metropolis. Therefore, the various categories of sports-coaches that are the main concern of this study are abundantly available. They possessed the NIS Grade I, II and III Coaching Certificates plus the West African School Certificate; Diploma Certificate and Bachelor Degree in Physical Education respectively. Other subjects for this study included the Sports Association organising-secretaries, sports officers of private clubs, sports-coach trainees and physical education university undergraduates are readily available in the various establishments already enumerated.

Limitation of the Study:

Several constraints were met during the course of this research investigation. But very prominent one amongst others was the inadequate reference materials. This appeared to be a general constraint for research investigation in Nigeria and particularly in the new field of sports-management as an academic discipline.

Besides, the geographical coverage of this research investigation was delimited to Lagos State. This must have accounted for small numbers of different categories of sports-coaches involved in this study. In addition, the unwillingness of a group of the subjects to fill the questionnaire made one to suspect the genuineness of their responses. Also important to mention, was the air of ego boosting that characterized the rating of sports-coaches by their superordinates. Such attitude gave room for questioning the authenticity of their responses.

Equally important to mention was lack of adequate available data. This has been a bane to major research investigation in Nigeria and particularly in the social sciences hence this research investigation cannot be an exemption.

Furthermore, some variables like ages, sex, type of sports, adequacy of facilities and equipment could

be used as indices for measuring the productivity of sports-coaches. Other variables that could also be used as indices might include types of competition, incentives for athletes, level of commitment of athletes and doping devices by athletes. These variables were not considered in this study because while some of them were not constant and difficult to measure, others were material factors which could easily be controlled by the sports-coach.

Significance of the Study:

It is in the interest of sports development in Nigeria that this study is intended. The fluctuation of performance of Nigerian athletes in international sports competitions in the recent past has been attributed to many factors. However, the problems of poor quality of sports-technocrats particularly in the area of sports-coaching has not been identified and addressed seriously. In this study, this has been identified as an omission of pertinent strategy towards the production of high level manpower sports-coach who is scientifically knowledgeable enough to be able to produce the world class athlete. Therefore, the kind of manpower training programme which may consider seriously the academic and occupational qualities of sports-coaches needed to be determined.

This study is to make the decision and policy makers especially in the realm of sports development address

their minds to the planning of a result oriented manpower training programme that would be capable of producing indigenous high level manpower sports-coach. This study may possibly map out a training programme that will be able to produce the high level manpower sports-coach expected to champion the course of sports training and competition at international levels.

Furthermore, it is evident that Nigeria is currently going through a period of harsh economy which is occasioned by the unprecedented worldwide inflation and the collapse of oil prices and the mismanagement of Nigeria's finances. The situation therefore, demands a careful and prudent management of the available funds for sporting programmes. It is interesting to recall that about ₦7,000,000.00 was spent on Los Angeles 1984 Olympics Games by the Nigerian contingents but "came home with 2 silver ... and bronze while Orok won a gold medal in the Snatch World Championship Competition in Weight lifting" (NIS 1984:67). There is no doubt that the results of the competition does not justify the expenditure of that magnitude. A case of poor management of funds is obvious.

This study intends to offer suggestions that are based on feasible economic-decision-making-techniques. Precisely, this study will determine productive and

less productive. Consequently, the sports authorities would be able to restructure the various levels of manpower training programmes for sports-coaches. For economic reasons as well, this study will determine whether it is a worthy exercise for university physical education graduates to embark on further training as a sports-coach. This study is also interested in relating respective academic and professional qualities to the productivity levels of the sports-coaches. The finding of that investigation will form a reasonable basis for the decision to emphasize academic more or the occupational quality more than the other in the bid to design a manpower training programme for the indigenous high level manpower sports-coaches. This study in that respect therefore, is timely, because it is going to reflect the realities of the economy on sporting activities.

Lack of adequate number of indigenous high level manpower sports-coaches has led to the recruitment of foreign coaches. Hiring of foreign coaches is a drain on the nation's economy and it must stop if sports-administrators want the nation's "self-reliance and economic recovery programmes" to be a success. This is one of many other ways by which sports-administrators can contribute to the realization of the structural adjustment programme objective of the nation. This study will challenge sports administrators to contribute

to the fulfilment of governments' intention and masses aspiration through a well articulated training programme.

Infact, a unique feature of this study is the application of econometrics and barometrics to sports-management. In this regard, this study intends to establish which of the various categories of sports-coaches have the highest production cost as compared to their respective productivity levels.

Yet, this study shall offer the opportunity to estimate the cost-benefit of the high level manpower sports-coach that can compare favourably among the world class sports-coaches.

Similarly, this study will be able to offer suggestions which may facilities a reasonable approach to the designing of course syllabus for a highly qualified coach. In addition, this study will suggest the possible economic returns which may possibly attract a physical education expert of a high qualification to undergo training in sports-coaching. This will mark the beginning of the production of high level manpower sports-coaches that can raise their heads amongst the contemporary world class sports-coaches, who are scientifically knowledgeable, technically skilled, innovative, highly proficient, result oriented and who can produce world class athletes when other material

factors are given equal consideration for sports development.

Finally, to the best knowledge of the researcher, a kind of detailed research work of this magnitude on sports-coaches has probably not been produced in this country. This study therefore, will mark the beginning of attempts to map out a training programme of manpower development in the area of sports or it could serve as an instrument for reemphasising and supporting the proposals that a manpower training programme should be designed for the indigenous high level manpower sports-coaches. Consequent upon this new strategy, the problem of inadequate number of indigenous high level manpower sports-coaches would be reduced if not solved totally. The era of hiring foreign sports-technocrats would give way for the era of hiring indigenous sports-technocrats. Nigeria would then be in position to help other nations through the products of her manpower training programme.

CHAPTER TWO

THE REVIEW OF RELATED LITERATURE

Introduction:

It is important to recall that this study is mainly concerned with the problem of quality, productivity and production cost of indigenous sports coaches in Lagos State. The highlights of discussion therefore, will include the curriculum process, the relevance of objective to course content, the criteria for selecting course content, the course content and occupational competence, the human capital concept and sports education, the demand and supply of sports coaches, the cost: benefit of sports education, and the cost-effectiveness of sports-education.

In an attempt to treat each highlight into details, some relevant concepts especially in curriculum planning and economics were used either to clear certain ambiguities, support certain assertions, correct certain distortions, reject certain generalization, justify certain assumptions, or expatiate on certain theories.

Curriculum Process:

"Excellence in the programme in any social institution reflects quality of programme planning"

(Saylor and Alexander, 1966:3). In other words, the degree of effectiveness of any institutionalized programme is a function of the planning and implementation strategies that were involved in the programme. That is to stress that, both vocational and academic programmes must be treated in line with the understanding of the foregoing assertion if such a programme may fulfill its intentions. It is interesting to note that some scholars in the realm of training programming generally have identified themselves with the area of planning either the formal or the non-formal courses of a training programme. It is this aspect of a training programme they have described as curriculum planning.

Curriculum therefore, is a fundamental need of any educational programme. Many curriculum experts attest to the role a curriculum plays in any educational programme, through reasonable explanations and specific definitions. One of such curriculum scholars is Phenix (1958). According to him:

The curriculum is a schedule proposed instruction embodying the preferred direction of student development... (1958:59).

Relevance of Objectives to Course Content:

Of particular interest to this study is the relevance of objectives of an educational programme to the course content of the programme. At this point,

Tyler (1949) explains succinctly and clearly the relevance of objectives to other components of a curriculum.

Accordingly,

Tyler sees objective as value judgement The view here is that not only is it fruitful to view objectives as value judgements but that the centres for selecting learning activities and criteria for evaluating and also be viewed as expression of values... (Tyler 1949:32).

In the same vein, Odhogbi in (Nduka Okoli, 1983) cites Tyler (1949) as saying:

... in planning a curriculum education objectives should constitute the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests... are prepared (1983:170).

Odhogbi adds that Tyler's conviction on objective curriculum planning shows the determinant function which objectives serve in planning curriculum. It is no gainsaying therefore, that objectives are effective guide for planning learning experiences of students in any training programme. In consonant with this line of thought, one believes that both the National Institute for Sports (NIS) and other universities offering sports education and physical education should plan their respective training programme objectives - and the corresponding training programme contents.

In line with this realization, both the NIS and the Universities state in clear terms the objectives of their respective programmes. It is pertinent to restate that the NIS Brochure states amongst many other objectives. "The training of the Technical manpower required for the coaching and management of all sports and games" (1985:2). In the case of universities and particularly, the Faculty of Education Brochure contains many objectives but of particular concern to this study is to train graduate teachers of all subject areas (1969). This also goes to confirm that the different institutions have a clear view of what end results they expected from their respective training programmes.

However, stating objective of a programme is one important phase which must complement other phases like the course content and the learning experiences if any positive result is expected. In the light of this understanding, some scholars in curriculum planning have come up with different impressions on the complementary role of course content and learning experiences to stated objective of a structured training programme especially in the institute of higher learning. For instance, Dolly states:

Achievement of goals is accomplished by designing experiences that fit or accord with the goals and the effects of experiences can be evaluated with reference to the goals (1970:38).

Dolly goes further to support her view when she states "Learning experiences should be designed to allow practice of behaviour which the objective suggests" (1970:31).

Another renowned curriculum planner - Tyler (1949) contends that certain general principles are applicable to the selection of learning experiences whatever the objectives may be. According to him,

...the first of these principles is that for a given objective to be attained, a student must have experiences that give him an opportunity to practise the kind of behaviour implied by the objective (1949:65).

Furthermore,

Comprehensiveness requires that valid experiences must be provided for a wide range of objectives because objectives without experiences make no contribution to behaviour change (Wheeler 1978:150).

In other words, if one objective is to develop a skill in any form of problem solving, ample opportunity must be given to the student to solve problems so that the objective can be achieved. Similarly, if another objective is to secure interest in mastering a wide of psychomotor skills, this objective can only be achieved if the opportunity to practise those psychomotor skills are available.

The Course Content and Occupational Competence:

In the same vein, one may like to stress that while the objective of teacher education programme should be

provided with relevant learning experiences so also the objective of sports education programmes must be provided with relevant learning experiences in order to achieve the separate desired objectives. However, the fact that both programmes have different clearly stated objectives and with expected outlines of learning experiences and course contents, the products of these programmes are sometimes found not to practice the occupation they are trained for. Mostly concerned are the teacher trainees turned sport-coaches.

The point for concern here, is to re-emphasize that the requirements of occupational competence of a teacher is quite different from the requirements of occupational competence of a sports-coach. Although both occupations may have the same academic spring board, yet the learning experiences in terms of the kind of interships they are exposed to during training makes the difference in the quality and probably in the productivity. This is a fact recognized but not respected by the authorities concerned particularly the body that manages the sports industry in Nigeria.

Contrary to the disregard for occupational competence Wheeler (1978) advances series of arguments to expatiate his stand on the importance of occupational competence. According to him:

It is clear that different types of learning require different types of experiences and the procedure most useful in mastering intellectual skills is not necessarily the best for becoming proficient in psychomotor skills or for changing attitudes. In so far as objectives embrace all these areas so must the corresponding experiences (1978:151).

Yet on the need for relevant occupational competence acquired through exposure to the right internship experience; Wheeler (1978) reemphasizes:

...it may be pointed out that some behaviour can only be learned through experience with a particular kind of matter ... while other behaviour can be learned through experiences with any ... subject. This fact serves to divide the behavioural outcomes to already categorised into two broad classes which are here designated generally determined and specifically determined (1978:184).

In another reaction, he goes further to describe the disregard for requisite occupational competence through exposure to relevant internship as ignorance of the relationship between "process" and "application".

In his own words:

This ignores the part played by process as well as good deal of experimental evidence that mastery of subject matter does not ensure effective application of learnings in relevant situations, that there is considerable difference between "knowing what" and "knowing how"... (1978:130).

A frantic attempt is made by him to substantiate his impression when he reports Crowther as saying:

Before the end of the ...course boys and girls have reached the stage when they desire to see the relevance of what they are doing in school and what they will be doing when they leave school. They are anxious to see a purpose in education and this anxiety seems to us wholly natural (1978:169).

From the foregoing argument, it is clear that for any particular behavioural outcome to materialize, a relevant learning experience must be provided. This impression supports the practice of providing both the sports-coach trainee and the teacher trainee their respective internship opportunities. On the other hand, the practice of appointing a physical education teacher as a sports coach does not conform with the principles of curriculum planning. This is so because each programme syllabus is specific in terms of the need of students, the course content, the learning experiences and the stated objective.

It is pertinent to recall that both the teacher education and the sports education programmes have different objectives to achieve. In order to achieve the different objectives, each programme must adhere strictly to other complementary criteria for the selection of course content with the objectives as focus of attention. In addition, for maximal productivity, learning experience of a teacher trainee should limit him to classroom instructions, except he undergoes additional training as a sports coach trainee while

that of a sports-coach trainee should afford him the opportunity to coach the sport or game of his interest and competence.

Attempt has been made here to justify the appointment of physical education teachers as sports-coaches. The issue has been examined from the point of view of how suitable the occupational training they acquired to the job they perform. Furthermore, the occupational training has been discussed from the view point of theory and practice of curriculum planning. From all indications, teacher education programme satisfies all theories and principles of curriculum planning only and when the trained teacher engages in a classroom instruction and not in sports coaching. It must be mentioned however, that a trained physical education teacher can still decide to undergo a coaching course. Such venture, if attempted perhaps, will make him more versatile and probably more productive as a sports-coach.

The Human Capital Concept and Sport Education:

One area of this study is to find out whether there is a striking correlation between the quality and productivity of the sports-coaches in Lagos State.

A number of investigations have reported a positive correlation between quality and output.

Cohn (1979) states:

Several attempts were made by researchers to measure the effect of quality of a worker on its productivity. The results of such attempts show "a clear and positive relationship between education and productivity (1979:38).

Cohn cites works of Besen (1968), Griliches (1970), Welch (1970), and Wise (1975) as testimonies to support his reports. From the findings of the foregoing mentioned studies, ~~one can confidently infer that the~~ quality of our sports-coaches is a prime factor in determining their productivity. The common experience with Nigerian sports-coaches as of now is not encouraging. If the findings of the aforementioned studies are true of all situations, then it will not be wrong to say that the productivity of Nigerian sports-coaches is a function of their qualities.

In another moment of after thought, Cohn (1979) recalls that a number of scholars have noted a correlation between educational attainment and income. He explains that the scholars do not explain why such relationship exists. He goes on to say:

It is not clear whether higher income permits ... individuals to spend more on education or whether higher investment on education are, in part, a cause of higher income in future years (1979:37).

Considering the complex relationship between education and income, he expresses uncertainty as he finds it difficult to come out with a final conclusion in terms

of which one is dependent on the other. According to him; "it is possible that both are true: higher income permits more education; and more education results, in time, in higher incomes" (1979:37).

It appears he is of the opinion that the quality of the individual is a function of the level and type of educational training he undergoes. He is of the opinion too that the worker does not improve his quality if the income which is likely to accrue from that education is not comparatively higher. The message which he is sending through this discussion is that a high quality worker must enjoy a corresponding high income and vice-versa. It means therefore, that if production of a high quality sports-coach is the immediate need for sports development in Nigeria, the government must also be ready to reward the high quality sports-coaches with corresponding high income.

Let us recall that this study is interested in sports-education from the supply of high level manpower view point. If sports education is going to meet this purpose, it must provide a kind of continuous satisfaction rather than an immediate and terminal satisfaction for the trainee that undergoes it. Such education is also expected to be forward looking with the anticipation that necessary services of high level manpower of sports-coaches should be rendered for

effective and rapid sports development and economic growth in future.

Corroborating this impression, Weisbrod (1962) states:

... economic growth involves not only changes in machinery but also in man, not only expenditure on equipment but also in people. This investment in people makes it possible to take advantage of technical progress as well as to continue that progress (1962:106).

Thus, private or public expenditure on sports-education can be regarded as an investment with the motion that the sports-coach trainees should serve as agent of production by such investment. In effect, such expenditure will yield a continuous return in future to both the sports-coach trainee and the society. Adesina is one of the advocates of this views. Durojaiye in his write-up "Investment in Man" quotes Adesina as saying:

Accelerated economic growth is to a large degree, a function of adequate and commensurate development of human resources..., the expenditure in formal education and in training, ... leads to increased returns both to the individual and to the community (1978:5).

Also, Durojaiye again reports that Balough and Streeter assert:

expenditure on education is a form of investment expenditure, while like all social expenditure can raise output considerably, if properly directed and linked with improved equipment and appropriate institutional reforms (1978:6).

Still related, Durojaiye once again refers to Harbinson saying:

The progress of a nation depends first and foremost on the progress of its people. Unless it develops their spiritual and human potentialities, it cannot develop much else materially, economically.... The basic problems of the under-developed countries is not a poverty of natural resources but the underdevelopment of their human capital. To put it in more human terms, that means improving the education, skills, hopefulness and thus the mental and physical health of their men, women and children (1978:6).

In order not to loose sight of the perspective of this discussion, the researcher wants to restate that he is advancing argument for committing public and private funds to financing sports-education. Hopefully, such education is meant to produce human resource with high skills and knowledge of sports-coaching in order to meet the country's need in the area of sports-development and also enhance the profit motive of the individual. Looking at this argument in the same perspective, Marshall (1979) concludes thus, in his own words:

... expending public and private funds on education... will be profitable as a mere investment.... And the economic value of ... the education... would be well paid for, if it called out one more Newton or Dawin, Shakespeare or Beethroven (cited in Cohn 1979:21).

However, for purpose of a balanced argument one may want to add that the human capital concept advanced here is just one of the benefits of

investment in whatever form of education. Infact, the report of the African Educational leaders assembled in Addis Ababa in 1961 concludes the conference by looking at education benefits from a wider horizon. The leaders expatiate on the benefits of education. According to them:

Education does not have for its primary purpose, a greater production of goods and services. The purpose of education is to broaden understanding so that men may make the fullest use of their innate potential whether spiritual, intellectual or physical. Education would therefore have value even if contributed nothing to economic development... (cited in Durojaiye 1978:9).

One may want to point out that the assertion of African Leaders leaves some loose knots to be tightened. While the assertion is true of general education of some extent, it is not true of specific education like the sports-education that is under review. Apart from all other benefits, the primary goal of sports-education is to produce skilled men for the services they are required for. In this case, the services takes priority over any other benefits in terms of ranking. However, that is not to say that the individual is like a machine which returns benefits to its owner only and nothing to the machine in return.

The Demand and Supply of Sports-Coaches:

It is note worthy to mention that the era of technological advancement and scientific developments which the whole world is experiencing in recent times has not exluded sports industry in any way. So, the awareness of this fact is going to form the basis of discussion in this section. Suffice to say that one is conscious of the poor economic position of the country, as one is also conscious of the crave for technological and scientific advancement. The need to compromise these diverse extremes and to determine the extent to which the compromise has been reached is the concern of this section.

The incident of vacant positions in the private and public offices is a common knowledge. For instance, Ojo (1980) gives a highlight of the gaps in the general manpower supply. He says:

In 1970... between 30 and 40 per cent of persons employed in the country as medical practitioners, architects, teachers were expatriates. A little over 20,000 of them were employed ... as directors, managers and engineers with each group accounting for 25 and 22 per cent respectively... (1980:13-14).

Also, the National Manpower Board (NMB) conducted an investigation in 1977. The investigation reveals that there is high vacancy rates in several manpower categories. The findings of the investigation include:

In number, the vacancy rate was put as 35 per cent for administrative officers, 31 per cent for accountants and auditors, 48 per cent for statisticians ... 45 per cent for librarians..... Also, in the intermediate manpower level, vacancy rates ... ranged from 25 per cent for technical engineers to 58 per cent for metallurgical engineers ... (1977:16).

Yet, in the same trend, Sho-Silva (1984) raised the issue of vacant positions of sports-coaches in a memorandum he presented to the National Sports Commission Caretaker Committee in 1984. In his words:

It is disheartening to note that even in our Olympic-sports, Weightlifting, there is our single indigenous coach; Boxing has an Assistant coach, whereas Basketball, Athletics, Handball and Judo has one or no coach at all. Cycling and Squash can better be described as sheep without shepherd. Therefore, in order to bridge this gap, we have to employ coaches (1984:64).

In support of his claims for vacant positions of sports-coaches, he tenders the following data. The data reveals that in 1984; Athletics was manned by two coaches; Badminton had two coaches; Basketball was manned by two coaches; Cricket has one coach; Judo enjoys the services of one coach; Squash had no coach; Weightlifting had one coach; Cycling had no coach to mention a few. According to his calculation which is based on the manpower need, each sport should be manned by nine coaches under the National Sports Commission employment. His view is clearly stated as:

With six zones we should have six coaches with three at the headquarters making a total of nine coaches per sport at least. Nine coaches per sport, per nineteen sports, make a total of one hundred and seventy-one coaches ... (Sho-Silva 1984:65).

Efunkoya (1984) also presented a memorandum to the National Sports Commission (NSC) Caretaker Committee on the demand and supply of coaches under the covers of NSC only. According to him; Athletics should have the services of seven coaches, instead of three coaches; Basketball should be serviced by six coaches instead of two, Cycling and Chess should have two coaches each in place of none of all; Cricket should be manned by five coaches instead of one and Lawn tennis should be manned by four coaches instead of only one.

It is clear from the foregoing series of experiences recalled by different people and at different intervals of time that the issue of human capital has been a bane to development in all sectors of the nation's socio-economy. The development of human capital is obviously in the downward trend since the last decade. The time lapse between each period of investigation on manpower supply and demand in Nigeria, that is 1970 and 1984 are wide enough to allow for conclusive judgement on human capital development. It may not be totally wrong to conclude therefore, that the disparity between the manpower demand and manpower supply is indicative of

poor awareness of the importance of manpower development in all sectors and particularly in the sports industry.

Quality and Performance of Sports-Coaches:

In addition to the NIS, there are in existence about eight universities and about 30 colleges of education which offer physical education as a discipline. The colleges and the universities have often produced physical education experts who possess the Nigeria Certificate in Education (NCE) the Bachelor of Arts or Bachelor of Science Degrees (B.A./B.Sc.) respectively. A considerable number of holders of these grades of certificates are engaged in the services of sports-councils, national sports associations, privately owned sports clubs, colleges of education, polytechnics and universities as sports coaches and or organising secretaries.

From the foregoing review, it may be correct therefore, to say that the problem of sports technocrat in Nigeria may not be basically a quantitative but a qualitative one.

The researcher feels strongly that the various resource centres for the production of sports technocrats have continued to produce the middle level manpower sports-coaches whereas both the middle level and the high level categories of sports-coaches must be produced so that all levels of manpower needs are adequately provided for with the view of enhancing steady development in sports.

Some sports analysts and lovers have commented and most often decried the quality of sports-coaches in Nigeria. For instance, Emmanuel - a sports-analyst comments:

All these cries for indigenous coaches is a patriotic nonsense. No Nigerian coach can take the Senior Team to the World Cup finals.... We have the footballers, the missing link is a good coach... (1986:7).

In the same vein, Odegbami - a one time international soccer star has this to say:

The team that won the 2nd All African Games in Lagos did so not because of any outstanding coaching techniques but because of the individually gifted players who played under the electrically charged Nigerian total support.... With the Nigerian coaches, the game has wallowed to its greatest low level (1986:14).

In a more frank approach, Adedeji - a sports analyst asserts:

It would be wrong to take the success we achieve at the junior level of soccer as a yardstick for measuring the proficiency of our indigenous coaches at all levels. It must be realised that our home bred coaches are still deficient in technical know-how and good understanding of ... tactics ... (1986:6).

On a more serious note, Abiola, a popular sports club - (the Abiola Babes) financier opines:

In a country where ... sport science is given the least attention and significant economic attention, we will still base our participation on stamina alone without the much needed educational training which makes all the difference between success and failure (1987:15).

The authenticity of the several poor remarks became credible when a governmental parastatal also expressed pessimism about the quality of the indigenous sports coach. A case for reference is the Nigerian Football Association which has made several attempts to employ a foreign coach. In one of such attempts, John reports:

... the search for a foreign coach expected to work with the indigenous one would be intensified in West Germany, France, and Italy... (1986:15).

Looking at the foregoing opinion pools about the indigenous sports-coaches superficially, one is tempted to say that they are scientifically baseless and statistically unfounded. However, the outcome of the 4th All African Games held in Kenya in 1987 justifies the impression of poor quality of the indigenous coach. It was true that Nigeria came second on the medal table with 35 gold medals, 28 silver medals and 36 bronze medals. (NIS 1987). A breakdown of the total number into the various games and sports shows that track and field athletics won 14 gold medals, seven silver medals and six bronze medals. Weightlifting scored eight gold medals, nine silver medals and nine bronze medals. Reports also has it that wrestling, taekwondo and table-tennis won respectively four, three and six gold medals, five, one and three silver medals and one, one and seven bronze medals. While judo and boxing won two and one silver medals respectively, they also won in addition four and six bronze medals. Swimming,

Volley and Hockey won the least laurel of one bronze medal each (NSC 1987).

From the foregoing breakdown track and field (athletics) weightlifting, table-tennis, wrestling and tackwando won a high number of gold medals in that order. Almost all the same games and sports also recorded the highest number of silver and bronze medals except tackwando and boxing which recorded the least number of silver medals and wrestling, tackwando, swimming and hockey that won a bronze medal each. What is latent in this analysis is the contribution of the indigenous sports-coaches to the achievement made so far in the games. Although track and field athletes won the highest number of gold medals, the factor responsible for the bright performance was that the athletes involved were "imported" Nigerian athletes from United States of America (USA). In other words, the bright performance of the USA-based athletes was not the handwork of the indigenous coaches but was as a result of a good and scientific training which the USA-based athletes were exposed to. A similar observation is contained in the Los Angeles 1984 Olympics Games report. The report states:

Track and Field team was made up mainly of Nigerian athletes based in USA who had proved superior to most of their Nigerian based colleagues (1984:61).

It should be noted however, that the track and field team that won a high number of gold medals was made up of almost entirely foreign based athletes and all other sports and games that won a high number of medals

were handled by the foreign coaches.

Another sports enthusiast confirmed the poor performance of indigenous sports coaches, with a subtle word - according to Chinweze:

... it is too early to write off our indigenous coaches ... the fact that our coaches have in recent times led us to defeats in elimination series of the 1986 World Cup, 1986 African Cup of Nations and 1987 All African Games is not enough reason why they should be jettisoned... (1987:15).

Furthermore, the issue of poor quality and corresponding poor performance was even recognised by sports-coaches themselves. The Sports Vanguard (1987) reported that the Nigerian Football Association Coaches Committee analysed the poor performance of the Nigerian team in the "Under-20" World Cup in Chile. The Committee of Coaches resolved that every Nigerian coach would be given a license before he or she should perform as a sports-coach. The reports also included:

The Association will call for the credentials of coaches which will be screened for grading.... Coaches who do not have licenses are to be barred from handling clubs in the country (1987:15).

One might therefore, find it difficult to contest the pessimistic claims of sports analysts and other interested bodies. It is also clear that there exist a wide gap between the set-out objectives of sporting programmes and the implementation strategies in terms of production of highly qualified sport-coaches in Nigeria.

That is why Sho-Silva (1984) suggests that a high calibre sport-coaches who are knowledgeable, experienced and command respect and trust should be employed. However, it is the belief of the researcher that the nation would be best for it, if indigenous sports coaches of a very high calibre are employed. And of course, the high calibre sports-coaches should be produced logically if the Williams Commission (1984) Report would be implemented.

Many moves have been made to check the problem of quality of sports-coaches. For instance, the Williams Commission (1984) recommends that the NIS should be established as an independent educational institute which will be capable of operating jointly with the department of physical education in the universities to produce high calibre teachers ... as well as high calibre coaches... for the nation (1984:43).

Similarly, Okujemi (1986) reporting the International Amateur Athletics Federation (IAAF) assessment of the NIS on its fitness as a staff development centre in Africa says:

...the general facilities at the Institute was inadequate for a centre of the magnitude which the IAAF wanted... although the course curricula at the NIS as well as the calibre of staff was acknowledged (1986:19).

The need to recognize and provide quality education for sports-coaches in some other countries are not a news.

Long before now, Halsey (1965) opines that the whole world is in a period when knowledge is exploding and that more knowledge, new techniques have to be given and new abilities have to be developed in more and more people. He contends "knowledge and techniques are changing the world and education must change with it" (1965:37).

In a similar reaction the Yugoslavs indicate their awareness of knowledge expansion and competition in technological advancement all over the world. Accordingly, their awareness for a more scientific approach to the development of football is expressed as:

But as the style of world football changed, with emphasis on speed, running and non-stop action, the free space for demonstrating technical virtuosity grew smaller. The era of atomic football had begun.... But before long, Yugoslavs... began to think like computers, play faster and more precisely (Vol. 10 No. 80:23).

Still related, Odegbami (1986) also reaffirms the complexities in sports development in recent times and contends that sports-industry is no longer a place for dullards and duncies to dwell. According to him:

...the game at the highest level is one of brains, of unit, ... between the greatest football geniuses in the world. For us therefore to trade successful tackles with the rest of the world, it is necessary that we must have a coach ... who would have the intelligence, the intellectualism, the knowledge ... to face the rest of the world (1986:14).

Yet, another observation was made by Abiola on sports development in Nigeria. He observed that

sports development has been sporadic. But he retorted, "It could have been outstanding if the development has been infused with modern... scientific training and coaching" (1987:15).

It is clear that Halsey's (1965) advice has not been adhered to. However, his advice would be useful if sports education is giving the attention it requires. The provision of sports education would be of vital importance to the fulfilment of the objectives of the national policy on sports and to the enhancement of people's aspiration towards sports participation.

Cost Benefit and Sport Education:

Let us recall that a section of this study focuses on the likely reaction of people towards the idea of attending a further training. Since it is proposed in this study to offer further training opportunities for physical education university graduates in order to raise the human resource level in sports management, the analysis of the cost-benefit of that training programme will go a long way to convince the physical education university graduates of the profit of such training programme in their life time. It is in this regard that similar studies that were conducted to investigate the cost-benefit of different training programmes were reviewed.

In a study of cost-benefit of education in Nigeria conducted by Adesina and Johnson in 1980, they were interested in finding answers to some fundamental questions about the educational system.

The questions include:

What is the rate of flow of increments to the stock of produced means of production (the human capital) at the different levels and how far have the educational plans in post-independence Nigeria reflected this investment decision theory (Adesina and Johnson 1981:4).

They used a population sample of about 869 subjects from three urban areas namely Ago-Talor; Mokola and Ikorodu for the investigation. The findings of the study include:

... the highest rates of return to schooling (private and social) in Nigeria are at the level of intermediate education followed by rates at the university, primary and secondary education levels in that order (Adesina and Johnson 1981:65).

Similarly, Bowals (1967) carried out a study on employees of some private firms in the northern part of Nigeria. The focus of the study was on efficiency of resource allocation to education as an industry. At the end of the investigation, he submitted that:

The claim of the educational sector on economic resources is very strong. In order to obtain an efficient allocation of resources within the sector it is necessary to have a rapid expansion of primary education and a reduction in enrolments technical and secondary schools. Many increases in the efficiency of the system can be obtained by introducing new

educational technologies. At the then level of importation, the productivity of foreigners imported into the system to teach is very high (Bowels 1967:187-188).

Still on Nigeria, another study meant to find out the cost-benefit of Bachelor of Education Degree was conducted by Stephen Akangbou (1981). The data used for the investigation were collected partly from the financial records of the National Universities Commission (NUC) and from about 50 university undergraduates students. His findings are that the B.Ed. degree course is economically profitable to the individual but not to the society and that if B.Ed. degree is perceived as a career, it is very advisable for interested candidates to join the University with a minimum pre-requisite of West African School Certificate (WASC) rather than a maximum pre-requisite of Nigerian Certificate in Education or its equivalent.

A very similar study was also conducted by Enaohwo (1982) on the comparison of private rate of returns to education in Bendel and River States. He cited works of Becker, Schultz, Hansen and Woodhall (1972) as bases for computing private returns to education. Particularly, Woodhall (1972) uses census and empirical data of earnings of American workers with different levels of education. Also, Blaug (1967) estimates the profitability of education to the individual in Britain through a similar procedure. In the case of Enaohwo (1982)

a total of 1,600 respondents were involved in the study from Bendel and River States altogether. The interest of the study was to test the following null hypothesis:

Cost of schooling at the secondary level in Bendel State are not significantly different from those in Rivers State.
Cost of attendance in rural secondary schools are not significantly different from those in urban institutions (Enaohwo 1982:73).

In summary, the first null hypothesis was accepted while the second null hypothesis was rejected. The study found out that the cost of education at the secondary level in Bendel State were not significantly different from those in Rivers State and tests of attendance of rural secondary school were significantly different from those in urban institutions.

Also, relevant to this study is that of Adesina and Johnson (1981) in their work "Cost-benefit Analysis of Education in Nigeria". The references contain a list of studies on developing countries such as Kenya, Mexico Puerto Rico and Singapore. According to Adesina and Johnson, the study on Kenya was carried out by Hans H. Thias and Martin Carnoy (1972). The study was meant to investigate the benefit-cost analysis of the education of Kenya. With a sample of 5,000 employees from three urban areas in Kenya in 1968, they investigated the cost-benefit of the educational system by finding:

rates of return (private and social) to investment in education... and using the projected output of the educational system, estimates of various future alternatives on wages and employment are given, rates of return to increases in different kinds of expenditure per pupil (cited in Adesina and Johnson 1981:37-38).

Also, contained in Adesina and Johnson (1981) study is the report on the study on Puerto-Rice by Martin Carnoy (1982). The study intended to find out how monetary returns to investment in schooling affects the amount of schooling taken by individuals. Like in the other studies, the private rate of return and private present value of additional schooling were used as indices for the estimation in 1959 and then related to the increase in schooling per male worker in the broad occupational categories over twenty years between 1940 and 1960. In conclusion, an estimate of relationship between the return to education and increase in the average schooling in the labour force was found.

In the case of Singapore, the study focused on the returns to schooling and training. Clark D.H. and Pand Eng Fong (1970) (cited in Adesina and Johnson 1981:28) intended to find out the social and private profitability of investment in education in 1960. Through the use of cost-benefit analysis technique the social and private economic cost and returns to schooling and training were compared. The data got from a sample survey of house holds were used to

estimate the net present value and internal rate of return for several levels of education.

And finally on the list is the report of another study on Mexico by Martin Carnoy (1972) (cited in Adesina and Johnson 1981:38). The study employs data specifically collected for the application of cost-benefit analysis technique. The study was meant to provide estimates of direct economic returns to education. Carnoy reports that adjustment for occupation of parents amongst rural males had the effect of increasing estimates of returns to Universities instead of reducing it as one may anticipate.

Besides, a more comprehensive details of works on economics, education and productivity is that of Mark Blaug (1964). The work contains several reports of studies published in the 20th century. A few of the reports focus on topics as finance of education, relationship between education and distribution of income, education and productivity, concepts or measures of human capital, benefit-cost analysis, educational policy and the economics of educational planning. Other studies which are based on the use of some elements of cost-benefit analysis to find out the rate of return to education are being carried out in other developed countries including USA, Canada, England, India, Israel and Japan. Jean Bowman (1966) discusses some of the works that have been done in this area up to 1965.

Similarly, George Psachororoulos (1972) reports the estimates of social and private rates of return to education in many countries throughout the world.

Summary

The highlights of this chapter included areas of curriculum planning and development, in which it was stressed that the effectiveness of any sports-coach training programme must always be a function of appropriate programme planning particularly in the area of clear identification of programme objectives and curriculum content. Also contained in this chapter were reports of several studies on quality and productivity. The consensus of the findings of the studies showed that there was a clear positive relationship between level of education and degree of productivity.

The labour demand and supply of sports-coaches was also discussed in this chapter. The impression of many sports-administrators on demand and supply of highly qualified sports-coaches showed that they were inadequate in number within the labour market and efforts should be geared towards the production of such high level manpower sports-coach through a well planned training programme. In addition, several study reports on cost-benefit and cost-effective of training programmes were discussed. Majority of such study reports concluded that there must be an estimate of positive relationship between the monetary return to education and increase in the average schooling in the labour force before any already existing worker would venture to embark on further training.

CHAPTER THREE

METHODOLOGY

Introduction

The focal point of this study was on the quality of the indigenous sports coaches as against their productivity in Lagos State. In the process of carrying out the investigation, the researcher made effort to appraise the syllabi of various sport-manpower training programmes such as the National Institute for Sports Syllabus on Sport-coaching and the Bachelor Degree Syllabus on Physical education which the various categories of sports-coaches under investigation underwent, assess their respective degrees of productivity as against their qualities, calculate the production cost of the sports-coaches, estimate the immediate monetary returns to the likely indigenous high level manpower sports-coach who is likely to receive his training in Nigeria and calculate the cost-effectiveness of available sports-coach training programmes.

Similarly, the statistical techniques that were used to analyse the data and to test the various null hypotheses of the study needed the clarity that would make the report of the study comprehensive. Hence, this chapter also contains instrument of the study, reliability and validity of the instruments, administration of the instruments, population sample, subjects for the study, data collection, formula for calculating quality, performance and occupational competence of

sports-coaches, data analysis, the cost-benefit analysis technique and the cost-effectiveness analysis technique.

The Study Instrument:

The study instruments were basically four types of questionnaires drawn up by the researcher. One of the questionnaires was referred to as Production Cost Questionnaire (PCQ). Another one was called the Quality Probing Questionnaire (QPQ), while the remaining two types of questionnaires were called the Performance Rating Questionnaire (PRQ) and the Curriculum Assessment Questionnaire (CAQ).

Reliability of the Instruments:

Attempt to ascertain the reliability of the instruments was made by subjecting the QPQ and PRQ to coefficient of stability approach. The QPQ and PRQ were tested and retested amongst the same 20 sports-coaches of Lagos State Sports Council on two different occasions of six months interval. The scores were correlated to obtain a correlation coefficient of 0.75.

In the case of PRQ, the instrument was tested and retested amongst the same 10 organising secretaries on two different occasions of six months interval. The data collected through the two different tests were correlated. A correlation coefficient of 0.84 was obtained.

The PCQ was not subjected to any test of reliability because the items contained in the instrument were basic concepts of ergonometrics which remain unchanged at any given situation.

Validity of the Instruments:

Content validity approach was used to validate the questionnaires. The items in the CAQ were compared with the respective training programmes syllabi of the NIS and the Universities, vis-a-vis the training programmes objectives by physical education lecturers. At the end, a considerable agreement was reached between the lecturers in terms of appropriateness of the content of the instrument.

The PCQ contained the items which were basic components of the factor inputs for costing the training programmes under investigation. The agreement of the items in the questionnaire with the concept of household cost makes the validity of PCQ very strong. While the PRQ owed its validity to Annual Performance Evaluation Report (APER) form, the QPQ owed its validity to the institutionalized certificates awarded in Nigeria.

Administration of the Instruments:

Effort was made to distribute the copies of questionnaires to the different subjects by the researcher personally and collected back after a few days interval. However, out of 600 copies of the different questionnaires distributed only 472 were filled properly and returned.

Population:

This study made use of crops of subjects who function in the realm of sports industry in Lagos State either as a sports-coach, an organising secretary, a sports manager,

or sports officers of private sports clubs, directors of sports, students of the NIS, students of physical education of Universities in Lagos State, lecturers of physical education in the Universities and Colleges of Education in Lagos State and postgraduate students of physical education at the University of Lagos.

Subjects:

The subjects for this study included, 250 sport-coaches, 75 sports officers, 52 students of the NIS, 50 physical education undergraduates, 15 lecturers and 30 postgraduate students of physical education. On the whole a total of 472 subjects were used for this study.

The subjects were randomly selected particularly the student-subjects. Attempt was made to involve all the sports-coaches in both the private and public sectors because of the large number of sports coaches needed for this study. In addition, all available physical education lecturers and postgraduate students were used as subjects.

Data Collection:

The data were collected through the use of the questionnaires drawn up specifically for this study. The four types of questionnaires were administered to the various crops of subjects. The coded responses of the subjects formed the major data for this study. Attempt was also made to collect data for the production cost analysis from available accounting records of the Universities in Lagos State, the National Institute for Sports and the United Bank for Africa all in Lagos.

Quality:

The qualities of sports coaches were calculated according to the academic and occupational qualifications they possessed. The academic qualifications that were considered included the West African School Certificate (WASC), the University Diploma Certificate in Physical Education (DPE), and the Bachelor Degree in Physical Education. On the other hand, the occupational qualifications included the National Institute for Sports Grades I, II and III Coaching Certificates.

For purpose of research convenience, the academic qualifications were rated in order of ascending levels. While the GCE/WASC or Teacher Grade II Certificate was rated 10, the NCE/Diploma Certificate was rated 20, the B.Sc./B.A. was rated 30 and the M.A./M.Sc./M.Ed. or Ph.D was rated 40. By the same rating system, the Grade III Coaching Certificate was rated 10, the Grade II Coaching Certificate was rated 20, the Grade I Coaching Certificate was rated 30 and any other Higher Coaching Certificate was rated 40. On the whole the total value of all academic qualification was 100 while the total value of all occupational qualifications was 100. Both the academic qualification and the occupational qualifications were reported in percentages through the following formula:-

Suppose:

a; b; c; d; represent the respective qualifications. The overall score therefore, was $\frac{abcd}{100}$ for academic qualification. Therefore, the individual academic qualification reported in percentages (K_1) was:

$$\frac{a+b+c+d}{100} \quad \text{or} \quad \frac{\sum abcd}{100} \quad \text{or} \quad K_1$$

In the same manner, the individual occupational qualification reported in percentages (K_2) was

$$\frac{a+b+c+d}{100} \quad \text{or} \quad \frac{\sum abcd}{100} \quad \text{or} \quad K_2$$

The summation of the academic and occupational qualifications resulted to the qualities of the individual sports coaches. Bearing in mind that K_1 and K_2 were calculated in percentages, the Academic Qualification was $\frac{\sum abcd}{100} \times \frac{100}{1}$ or K_1 and Occupational Qualification was $\frac{\sum abcd}{100} \times \frac{100}{1}$ or K_2 . Quality was calculated as $\frac{\sum K_1 K_2}{100} \times \frac{K_1 K_2}{200}$. That meant

$$\text{Quality} = \frac{\text{Academic} + \text{Occupational}}{200} \times \frac{100}{1}$$

Performance:

The performances of the sports-coaches were calculated using the three major criteria which were extracted from the Annual Performance Evaluation Report form (APER). The criteria were remarked as "Outstanding" "Good" and Unsatisfactory, while "Outstanding" was

rated as three (3); the "Good" was rated as two (2) and Unsatisfactory was rated as zero (0).

Maximum performance score obtainable by the individual sports-coach was 21. The summation of performance score obtained by each sports-coach was calculated in percentages. Maximum performance score was denoted as "m" and the summation of performance score of a coach was denoted as "k"; then performance of each sports-coach was represented with the following formula:-

$$\text{Performance} = \frac{K}{m} \times \frac{100}{1} \text{ or}$$

$$\text{Performance} = \frac{\text{Summation of Performance Score Obtained} \times \frac{100}{1}}{\text{Maximum Performance Score Obtainable}}$$

Occupational Competence:

Having calculated the mathematical values for "quality" and "productivity" of sports-coaches, the occupational competence was also calculated by the direct proportion method. According to Durell, "Denominator is the number of parts into which the unit is divided" (1968:34). In the context of this study therefore, "Numerator" is the observed "quality" multiplied by the observed "productivity" whereas the "denominator" is the expected "quality" of the sports-coaches. In mathematical terms, suppose;

- a = observed quality
- b = observed productivity
- c = expected quality

Therefore, in agreement with Durell (1968) formula for direct proportion

$$\text{Occupational Competence} = \frac{a \times b}{c} \quad \text{or}$$

$$\frac{\text{observed quality} \times \text{observed productivity}}{\text{expected quality}}$$

Data Analysis:

Three data analysis techniques and two econometric analysis techniques were used for treating the data of this study. The data collected on the sports coaches in respect of their respective qualities and the corresponding productivity were treated with Pearson Product Moment Correlation (PPMC) statistical technique. PPMC was found suitable for analysing data on the relationship between quality ^{and} productivity of sports-coaches not only because PPMC was capable of treating absolute values of raw scores but particularly because it was possible to adjust it to a special t test for determining whether a sample correlation co-efficient is significantly greater than zero (Glass and Hopkins 1984). Level of significance of 0.05 and two tailed test were used.

Furthermore, the raw scores gathered from the responses of physical education lecturers on the relevance of various course syllabi under investigation were treated with t test statistical technique. The t test was found suitable for analysing the data

because of many reasons. Firstly, the variables were coded on a two point scale. Secondly, it was possible to find the variation of means of the data collected on the variables. Finally, the subjects were from the same population sample and that group samples were small. Level of significance of 0.05 was used. A one tailed test was used. This was because this aspect of the study tried to investigate which one amongst the two training programmes for sports-coaches available in the country is more adequate. Furthermore, this aspect also investigated the superiority of quality of one class of sports-coaches over the other.

Other items in the various questionnaires were also subjected to Chi-Square statistical test. Such questions that were meant to find out respective opinions about the quality of the presently available sport-coach training programme were coded and treated with Chi-Square. This is because Chi-Square (X^2) could be easily used to test a statement of fact based on diversified opinions. Level of significance of 0.05 was used. Level of significance of 0.05 was generally selected for all the statistical test used ^{this} in study. This was because it reduced any form of statistical error to a maximum of 5 chances out of every one hundred chances.

Finally, the production cost and the benefit that accrue from the investment on sports-coach education were calculated with cost-benefit analysis and cost-effectiveness analysis techniques. They were appropriate econometrics used to find out the economic viability of programmes and to enhance choice-making in terms of higher benefits resulting from two or more alternative sources of such benefits.

Cost-Benefit Analysis:

In the attempt to calculate the returns, effort was made to calculate the production cost in terms of the household cost. Furthermore, the expected monetary benefits to the university degree was estimated:

It is also important to mention that the household cost concept was used as basis for calculating the production cost because all Federal Universities in Nigeria offered a free tuition, likewise the National Institute for Sports. However, the university undergraduate students and the sports-coach trainees pay for other services rendered to them by their various institutions. Since this study was interested in the private investment made by the sports-coach trainee on his education, the cost of his education was based on the household cost domain and was eventually used to calculate the costs. Furthermore, the NIS offers courses in sports-coach training programme. The trainees who attend the training programme were mostly self-sponsored

particularly for other services apart from the tuition fee. As a result, the cost of undergoing the training programme was regarded as a household concern.

Meanwhile, the production cost of a university physical education graduate as calculated by household cost techniques is represented mathematically as follows:

$$Pr_g = Hc_u = \sum_{i=1}^{i=k^4} \frac{a_h + b_h + c_h + \dots + n_h}{k_1 + k_2 + k_3 + k_4}$$

Where Pr_g = Production cost of a university physical education graduate.

Hc_u = Household cost of a university physical education graduate.

That is; $Hc_u = a_h + b_h + c_h + \dots + n_h$

whereas;

$a_h, b_h, c_h \dots n_h$ = Cost of various factor inputs being considered under household cost for a university graduate are

a_h = cost of books and stationery

b_h = cost of accommodation

c_h = cost of feeding

d_h = foregone income

k^4 = cost of factor inputs in a four-year degree programme.

As earlier mentioned, the production cost of the NIS (anticipated) diploma certificate graduate was calculated under the household cost domain.

This is represented mathematically as follows:-

$$Pr_d = \sum_{i=1}^{i=n} \frac{a_h b_h c_h \dots n_h}{1}$$

$$\text{that is } Hc_d = a_h + b_h + c_h + \dots n_h$$

Where;

Pr_d = Production ^{cost} of the NIS diploma certificate graduate

$a_h b_h c_h \dots n_h$ = cost of various factor inputs being considered under the household cost domain for the NIS graduate include,

whereas;

a_h = (i) boarding fee,

b_h = (ii) cost of books and stationeries,

c_h = (iii) earnings foregone,

d_h = (iv) other miscellaneous expenses

n = cost of factor inputs in a one-year period.

= In the final analysis, the production cost of the anticipated high level manpower sports-coach was calculated as represented in the following mathematical formula.

$$TPr_c = \sum_{i=1}^{i=n^4} \frac{a_h, b_h, c_h, \dots n_h}{1} + \sum_{i=1}^{i=n} \frac{a_h, b_h, c_h, \dots n_h}{1}$$

Where

TPr_c = Total production cost of the anticipated high level manpower sports-coach.

$a_h, b_h, c_h, \dots, n_h$ = cost of various factor inputs calculated under the household cost domain for the university physical education graduate.

$\frac{a_h b_h c_h \dots n_h}{k^4}$ = cost of various factor inputs calculated under the household cost domain for the NIS graduate.

k^4 = cost of factor inputs for a four-year period (i.e. gestation period for a physical education university graduate).

n = cost of factor inputs for a one year period (i.e. gestation period for the NIS anticipated Diploma Certificate Coach).

Similarly, the following formula was used to calculate the household cost of a three-year sports-coach training programme available for other categories of trainees who possessed certificates below the Bachelors degree as the pre-requisite for admission into the NIS.

$$Pr_d = Hc_d = \sum_{i=1}^{i=2^4} \frac{a_h b_h c_h d_h \dots n_h}{z_1 + z_2 + z_3}$$

Where

- Pr_g = Production cost of NIS graduate
 a_h = cost of books and stationery
 b_h = cost of accommodation
 c_h = cost of feeding
 d_h = cost of foregone income
 Z_3 = cost of factor inputs for a three-year
 (gestation period) NIS programme

It is pertinent to say that emphasis was placed more on the appropriateness of factor inputs that comprised the different cost domains and the consequence production costs. That is to say that although the mathematical formula are very important but beyond that, the different items considered for each domain are much more important for the calculation of the series of production costs.

Measurement of Returns:

The monetary returns to the education of the sports-coach was estimated and finally compared with the cost of his education.

The internal rate of return was used to estimate and compare the cost and benefit of the education of the indigenous high level manpower sports-coach being anticipated.

Mathematically, this was obtained by solving for "r"; or the monetary returns for his education

$$"r" = \sum_{t=1}^{t=n} \frac{C_n(i)(ii)}{(1+r)^n} = \sum_{t=1}^{T=n} \frac{B_n(i)(ii)}{(1+r)^n}$$

Where

- $C_n(i)$ = Present value of cost of education for the B.Sc. Degree for "n" years.
- $C_n(ii)$ = Present value of cost of education for the Diploma Certificate in sports-coaching for "n" years.
- "r" = discount rate on his investment.
- T = is the working life less age at first year of B.Sc. + Diploma Certificate.
- 1 = is the first year of B.Sc. + Diploma Certificate.
- $B_n(i) (ii)$ = Present value for the future benefit of B.Sc. + Diploma Certificate.

With the foregoing calculation, it was possible to find the monetary return to a Bachelor Degree holder and or Bachelor Degree + diploma Certificate holder.

Cost-effectiveness Analysis:

The cost-effectiveness analysis has been used in this study to compare the effective training programmes available now. That is, the University Degree programme in physical education and the NIS Sports-coach training programme. In order to have good basis for comparison, four similar criteria

were used for calculating the cost-effectiveness of the two programmes. The criteria included the mastery of foundation subjects, quality of sports-coaches, correlation "r" of quality and productivity and the household production cost. For purpose of calculation the criteria were represented as follows:-

- a = mastery of foundation subjects
- b = quality of sports-coaches
- c = correlation "r"
- d = household production cost

From the foregoing stated criteria, the cost-effective formula was determined as follows:

According to Zymelman (1973:200) "the final cost of a fully effective graduate in each program can be calculated as follows:-"

$$\begin{aligned} \text{Cost-effectiveness} &= \frac{d}{1} \times \frac{1}{a} \times \frac{1}{b} \times \frac{1}{c} \\ &= \frac{d}{abc} \end{aligned}$$

Having considered not only the production cost of products of the different training programmes but also the quality and productivity, the overall criterion used for choosing a better alternative training programme was the least production cost of a higher quality and effective sports-coach.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

Introduction

The focus of this study was to investigate the outlay of sports-coaches education, the quality and performance of the different categories of sports-coaches and appraise the curriculum content of the training programmes of sports-coaches. In the process of carrying out the investigation, certain relevant research questions were imminent as they served as springboard to the findings of the study. Amongst the provoking questions are summarized below:

- (i) Will there be any significant correlation between the quality and productivity of the respective categories of sports-coaches.
- (ii) Will there be differences between the occupational competences of the various categories of sports-coaches?
- (iii) Will there be any differences between the outlay of various categories of sports-coaches training programmes?
- (iv) Is the Physical Education Teacher Training Programme offered in Nigeria Universities quite relevant to sports-coach Training Programme?

The foregoing questions are pointers to the different parts of this chapter. Each part takes care of specific area of the study with its specific data. The first part of this chapter presents data on the quality and productivity of the various categories of sports-coaches who were subjects of this study. The second part of the same chapter presents data on the occupational competence of the various categories of sports-coaches and the third part present data on the household production cost of the various categories of sports-coaches. The final part of the chapter presents data on the sports-coaches training programmes course syllabus.

As it could be noted, each part of this chapter focuses on a specific variable within the scope of this research work. This suggests that each parts must have taken its bearing from a specific data and different relevant null hypotheses which have served as bases for the statistical analysis and findings of the study. The null hypotheses were already stated in Chapter Three of this research report.

Table 1

The Correlation Between The Quality And Productivity
of Sports-Coaches Who Hold The West African
School Certificate

N	Variables	Means	S.D.	r	t _{calc.} (NS)	t _{0.05}	df.
	Quality (x)	5	0	-	-	-	-
	Productivity (xy)	25.38	16.41	-	-	-	-
	XY	-	0.027	-	-	-	-
16				0.027	0.10	2.145	14

Sources: Coded responses subjected to Pearson.
Product Moment Correlation and t test.

NS = Not Significant.

= 0.05.

Table 1 contains the data on the quality and productivity of that category of untrained sports-coaches who hold only the West African School Certificate.

According to the foregoing data, the mean of their quality was five (5) with a standard deviation of zero (0) whereas the mean of their productivity was as much as twenty-five (25.38) with the standard deviation of about sixteen (16). The wide margin between the variates was probably accountable for the low

correlation (r) of 0.027. Also, the " t calc." recorded 0.10 whereas the " t tabled value" was 2.145 at 0.05 confidence level with a degree of freedom of fourteen (14). A closer look at the table suggested that this category of untrained sports-coaches recorded a considerable level of productivity when in fact their tangible quality was nothing to write home about. This probably accounted for the noticeable margin between their quality and productivity, hence the correlation was very low. However, in view of the fact that this category of untrained sports-coaches has been able to record certain level of productivity suggested that other intangible variables like on the job experience, being a current or old active athlete and still within the productive age range may be reasons that could be advanced for their level of productivity.

The noticeable level of productivity notwithstanding, the correlation was subjected to t test. For purpose of clear direction, the problem of quality and productivity was presented as the hypothesis which states that; There will be no significant correlation between the quality and productivity of sports-coaches who hold the West African School Certificate. In order to test the

hypothesis, the correlation (r) of 0.027 was treated with t statistical test. The result of the statistical test treatment showed that the t calculated was 0.10 whereas the t tabled value was 2.145 at 0.05 significant level with a degree of freedom of fourteen (14). It was clear that t calculated falls within the bracket of the t table value region which indicated that the value of t calculated was not statistically significant (0.10 2.145). In otherwords, the null hypothesis which was stated thus; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the West African School Certificate" was accepted.

Table 2

The Correlation Between The Quality And Productivity
of Sports-Coaches Who Hold The NLS Grade III
Coaching Certificate Plus West African School
Certificate

N	Variables	Means	S.D.	r.	calc. t (NS)	t ^{0.5}	df.
11	Quality (x)	11.3	2.54	-	-	-	-
	Productivity (y)	33.4	25.5	-	-	-	-
	XY	-	13.8	-	-	-	-
				.21	.607	2.262	9

Source: Coded responses subjected to Pearson
Product Moment Correlation and t test.

NS = Not Significant.

= 0.05

The data on Table 2 indicate the quality and productivity value of category of trained sports-coaches who hold the NLS Grade III Coaching Certificate plus the West African School Certificate. The mean value of their quality was 11.3 and the mean value of 33.4 was recorded for their productivity.

While the standard deviation of the quality stood as 2.54 that of the productivity recorded 25.5.

Definitely, the productivity value was comparatively higher than the quality value. Although, the productivity value recorded by this category of sports-coaches was not particularly impressive, what was of interest here was the fact that the tangible quality value was too far below the productivity value. In other words, the tangible quality value did not match the productivity value. Several factors may be identified as the cause. Some of such factors were the type of athlete under the training of such sports-coaches, the level of competition which the sports-coach has prepared his/her athletes and the age of the sports-coach. Others, were available sports facilities and equipment and a host of other incentives. Any of the foregoing intangible factors could be a cause for that comparatively higher productivity value than the tangible quality value. Those intangible factors were not considered in the statistical treatment because they are not constant.

Still on table 2, the correlation (r) of both the quality and productivity amounted to .21. While the t calculated amounted to .607, the t tabled value

recorded a slightly higher value of 2.262 with a degree of freedom of nine (9) and at 0.05 confidence level.

In order to verify the true position of the relationship between the tangible quality value and the productivity value, the relationship was proposed in form of a null-hypothesis which reads thus:

"There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade III Coaching Certificate plus the West African School Certificate. The correlation (r) of .21 was subjected to t statistical test which resulted to a negligible value of .607 as against the t tabled value of 2.662. This showed that t value of the relationship between the tangible quality and productivity of this category of sports-coaches fell within the range of the t tabled value. This automatically meant that the t value of .607 was not statistically significant (.607 < 2.662) hence the null hypothesis which was stated as "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade III Certificate plus the West African School Certificate" was accepted.

Table 3

The Correlation Between The Quality And Productivity
of Sports-Coaches Who Hold The NIS Grade II
Coaching Certificate Plus The West African School
Certificate

N	Variable	Means	S.D.	r.	t calc. (NS)	t _{.05}	df.
	Quality (x)	20	0	-	-	-	-
	Productivity (y)	26.18	6.31	-	-	-	-
	XY	-	0.16	-	-	-	-
16			-	0.16	.605	2.145	14

Source: Coded responses subjected to Pearson
Product Moment Correlation and t test.

NS = Not Significant

= 0.05.

The data on Table 3 indicate the quality value and productivity level of a set of sports-coaches who acquired the NIS Grade II Coaching Certificate plus a West African School Certificate. The data indicate that the average quality value of this category of sports-coaches was twenty (20) while they recorded a slightly higher productivity level of 26.18. Correspondingly, the standard deviation of the quality value was zero (0) while that of

productivity level was 6.31. It was clear from the data contained in Table 3 that a small margin of difference existed between the quality value and the productivity level. Although the quality and productivity values recorded by this category of sports-coaches were nothing to write home about, the data have shown that the group of sports-coaches under discussion has shown evidence of intermediate occupational training. The correlation coefficient (r) of 0.16 also showed very low relationship between quality and productivity of the set of sports-coaches under discussion.

In order not to arrive at a wrong judgement of the relationship between the quality and productivity of this group of sports-coaches a null hypothesis stated that; There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus the West African School Certificate. The null-hypothesis was tested by subjecting the correlation (r) to t statistical test treatment. It could be seen clearly from Table 3 that the result of t test treatment recorded .605 as against the t tabled value of 2.145 at 0.05 significant level with a degree of freedom of 14. From these figures, it is obvious that the t test treatment result of .605 was not statistically significant

hence the hypothesis that; There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Certificate plus the West African School Certificate was accepted.

Table 4

The Correlation Between The Quality And Productivity
of Sports-Coaches Who Hold The NIS Grade I Coaching
Certificate Plus The West African School Certificate

N	Variable	Means	S.D.	r.	t ^{calc.} (NS)	t ^{-0.5}	df.
	Quality (x)	37.66	7.07				
	Productivity (y)	48.93	22.36				
	XY		50.67				
15				0.32	1.216	2.160	13

Source: Coded responses subjected to Pearson
Product Moment Correlation and t test

NS = Not Significant

= 0.05

Table 4 is a lay out of data on the quality value and productivity level of another category of sports-coaches who hold the NIS Grade I Coaching Certificate and possess the West African School Certificate as their maximum basic qualification. The data indicated an average quality value of 37.66 with a corresponding standard deviation of 7.07 while the average productivity level stood at 48.98 with its corresponding standard deviation of 22.36. The figures suggested a close margin between the variables. This was probably responsible for the correlation (r) of 0.32 as could be observed on

Table 4. A correlation (r) of 0.32 also indicated that there was a positive relationship between the quality and productivity of this category of sports-coaches. But, whether the correlation was statistically significant or not remained a poser for statistical interpretation.

The null-hypothesis stated that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a West African School Certificate." The null-hypothesis was tested by treating the correlation (r) of 0.32 with a t statistical test. According to the data on Table 4, the t test calculated or derived from the data was recorded as 1.216 while the t tabled value stood at 2.160 at 0.05 level of significance with a degree of freedom of 13. Definitely, the t test result of 1.216 was not statistically significant. In other words the calculated t test value of 1.216 corroborated the null-hypothesis which asserted that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus the West African School Certificate."

Table 5

The Correlation Between The Quality and Productivity
Of Sports-Coaches Who Hold The NIS Grade II Coaching
Certificate Plus The University Diploma Certificate
in Physical Education

II	Variables	Means	S.D.	r	t _{calc.}	t _{-0.05}	df.
	Quality (x)	32	1.040				
	Productivity (y)	36	9.924				
	XY		6				
13				.58	2.367 *	2.202	11

Source: Coded responses subjected to Pearson
Product Moment Correlation and t test.

* = Statistically significant

= 0.05

Table 5 contains data on the quality and productivity of a set of sports-coaches who hold the NIS Grade II-Coaching Certificate plus a University Diploma Certificate in Physical Education. This set of sports-coaches recorded a quality value of 32 as against a slightly higher productivity level of 36 with a corresponding standard deviation of 1.04 and 9.92 respectively. The correlation (r) that resulted from the computation was .58. This correlation (r) clearly showed a positive relationship between the quality and productivity of

sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education.

Although, the correlation (r) was positive, it was not enough to reach a conclusion that the relationship between the quality and productivity of this set of sports-coaches was not statistically significant. Therefore, a null-hypothesis was tested that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education".

The null-hypothesis was tested by subjecting the correlation (r) of .58 to t statistical test treatment. As could be observed on Table 5, the calculated t test value stood at 2.367 as against the critical t value of 2.201 at 0.05 level of significance with a degree of freedom of 11. From the data under analysis, one could see clearly that the calculated t value of 2.367 maintained its position outside the critical t value region of 2.201 (2.367 > 2.201). This was an obvious position of statistical significance. It has been clearly indicated therefore, that the null-hypothesis which stated that; "There will be no significant correlation

between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education was not corroborated hence the null-hypothesis was rejected.

It was on the basis of the rejection of the formulated null-hypothesis, that the alternative hypothesis which stated that; "There will be significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education" was upheld.

Table 6

The Correlation Between The Quality and Productivity
Of Sports-Coaches Who Hold The NIS Grade I Coaching
Certificate Plus a University Diploma Certificate
In Physical Education

N	Variables	Means	S.D.	r.	t ^{calc.}	t ^{0.05}	df.
	Quality (x)	37.63	2.59				
	Productivity (y)	74.10	12.13				
	XY		17.45				
19				.56	2.750*	2.110	17

Source: Coded responses subjected to Pearson
Product Moment Correlation and t
statistical test.

* = Statistically Significant
= 0.05

Table 6 is the numerical presentation of the
quality value, the productivity level and the relation-
ship between the former and the latter variables of
sports-coaches who hold the NIS Grade I Coaching
Certificate plus The University Diploma Certificate
in Physical Education.

Figures on this table showed that the sports-coaches
in this category had a productivity level of 74.10 to

their credit and an average quality value of 37.63. The corresponding standard deviation of the productivity level was 12.13 while that of quality value was 2.59. These figures amounted to a correlation (r) of .56. The correlation (r) of .56 could be regarded as a promising correlation superficially if that was the limit of the interest of this research work. But far beyond that limit, such statement could be regarded as statistically baseless if that statement was made with a tone of finality that correlation (r) of .56 was significant. Hence, a null-hypothesis was formulated which focused on the relationship between the quality and the productivity of the category of sports-coaches under discussion.

The null-hypothesis states that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education".

The foregoing null-hypothesis was therefore tested by subjecting the correlation (r) of .56 to t statistical test treatment. As a result of the t test treatment, the correlation (r) of .56 gave rise to the calculated t test value of 2.750 contrary

to the tabled t value of 2.110 at 0.05 level of significance and degree of freedom of 17. With a calculated t test value of 2.750, was greater than the t tabled value of 2.110. (2.750 > 2.110). The calculated t test value of 2.750, therefore, was clearly outside the critical region of the t test tabled value of 2.110, hence it was statistically significant. On the basis of this revelation, the null-hypothesis which stated that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus the University Diploma Certificate in Physical Education" was rejected. On the contrary, the alternative hypothesis which stated that; "There will be a significant correlation between the quality and the productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education" was accepted.

Table 7

The Correlation Between The Quality and Productivity
Of Sports-Coaches Who Hold Bachelor Degree in
Physical Education

N	Variables	Means	S.D.	r.	t ^{calc.} NS	-0.05 t	df.
	Quality (x)	55.45	8.61				
	Productivity (y)	37.41	9.53				
	XY		18.26				
22				0.22	1.02	2.086	20

Source: Coded responses subjected to Pearson
Product Moment Correlation and t test.

NS = Not Significant

= 0.05.

Table 7 contains data on the quality value and productivity level of sports-coaches who hold a University Teaching Degree (B.Sc./B.A. Ed.) in Physical Education. The data revealed that this set of sports-coaches recorded an average quality value of 55.45 with a productivity level of 37.41. While the standard deviation of the quality values was 8.61 that of the productivity level was 9.53. The correlation (r) that resulted from the computation of the relationship between

the quality and productivity of this set of untrained university graduate sports-coaches stood at 0.22.

Besides the fact that these data showed that a positive correlation existed between the variables under discussion, the data also showed that it was a low correlation.

Nevertheless, the correlation (r) of 0.22 was treated with t test in order to ascertain the statistical significance. Towards this end, a null-hypothesis was formulated in order to have basis for the treatment. The null-hypothesis was that; There will be no significant correlation between the quality and productivity of sports-coaches who hold the Bachelor Degree in Physical Education. According to Table 7, while the correlation (r) was 0.22 the calculated t test value was 1.02 as against the tabled t test value of 2.086 at 0.05 level of significance and degree of freedom of 20. It was obvious that 1.02 was less than 2.086 (1.02 < 2.086) which signified that the calculated t test value of 1.02 was not statistically significant. It therefore, meant that the null-hypothesis which stated that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the Bachelor Degree in Physical Education" was accepted.

Table 8

The Correlation Between The Quality and Productivity Of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus A Bachelor Degree in Physical Education

N	Variables	Mean	S.D.	r.	t ^{calc.}	t ^{-0.05}	df.
	Quality (x)	62.66	7.78	-	-	-	-
	Productivity (y)	60.33	26.29	-	-	-	-
	XY		136.15	-	-	-	-
15				.67	3.30*	2.16	13

Source: Coded responses subjected to Pearson Product Moment Correlation and t test

* = Statistically Significant
= 0.05

Table 8 indicates the value of quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus a Bachelor Degree in Physical Education.

The data revealed that the sports-coaches in this category recorded an average quality value of 62.66 as against an average close range productivity value of 60.33. The standard deviation of the quality amounted to 7.78 whereas a standard deviation of 26.29 was

recorded for their productivity. The wide and close gaps of differences in the mean and standard deviation notwithstanding, these figures gave rise to a correlation (r) of .67 which could be regarded as a high one.

In order to ascertain whether a high correlation (r) of .67 was statistically significant, a null-hypothesis, was tested. The null-hypothesis states that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus a Bachelor Degree in Physical Education. Accordingly, the null-hypothesis was tested by subjecting the correlation (r) of .67 to t statistical test treatment. The t test treatment resulted to a calculated t test value of 3.30 whereas the t test tabled value was 2.16 at 0.05 level of significance and a degree of freedom of 13. Definitely, the calculated t test value of 3.30 was higher than the t test tabled value of 2.16 ($3.30 > 2.16$) hence the t test value of 3.30 was statistically significant. On the basis of the foregoing statistical difference, the null-hypothesis which stated that; "There will be no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I plus B.A./B.Sc. (Ed.) in Physical Education"

was rejected in favour of the alternative hypothesis which stated that; "There will be a significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I plus B.A./B.Sc. in Physical Education".

Table 9

Occupational Competence of Sports-Coaches Who Hold The NIS Grade II Coaching Certificate (NISG. II) Plus A University Diploma Certificate in Physical Education (DPE) And Sports-Coaches Who Hold The NIS Grade II Coaching Certificate (NISG. II) Plus A West African School Certificate (WASC)

Categories of Sports-Coaches	Means	S.D.	t ^{calc.}	t ^{-.05}	df.	N
NISG. II Plus DPE	5.31	2.53	-	-	-	
NISG. II Plus WASC	3.75	3	-	-	-	
			1.829*	1.697	30	32

Source: Coded responses subjected to t test

* = Statistically Significant (one tailed)

= 0.05

Table 9 contains data on the occupation competence of two categories of sports coaches. They include those sports-coaches who hold the NIS Grade II Coaching Certificate (NISG II) plus a University Diploma Certificate (DPE) in physical education and those who hold the NIS Grade II Coaching Certificate (NISG II) plus the West African School Certificate (WASC).

In order not to loose trend of this report, it is important to reiterate that occupational competence of sports-coaches in the context of this study means

the degree of occupational skill and level of academic knowledge possessed to perform as a sports-coach as rated by their respective bosses. The occupational competence of the individual sports-coaches was derived through the mathematic formula already explained in chapter 3 of the research report.

According to this Table (9), the category of sports-coaches who hold the NISG II plus DPE recorded an occupational competence mean of 5.31 while the other category who hold the NISG II plus WASC recorded an occupational competence mean of 3.75 which is 30 per cent less than the former category. However, both categories recorded a very close standard deviation of 2.53 and 3.00 respectively.

To be able to know whether the close range of occupational competence value recorded by the two categories of sports-coaches were statistically meaningful, a null-hypothesis was formulated. The null-hypothesis stated that: "The occupational competence of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education will not be

significantly higher than those who hold the NIS Grade II Coaching Certificate plus the West African School Certificate." In the process of the investigation the null-hypothesis was tested by treating the data already discussed with a t statistical test. Consequently, the t test treatment resulted to a calculated t test value of 1.829 whereas the t test tabled value was ~~1.697~~ (one tailed) at 0.05 level of confidence and degree of freedom of 30. From the foregoing figures, the calculated t test value of 1.829 was greater than the t test tabled value of 1.697 (1.829 > 1.697) hence the calculated t test value was statistically significant.

Based on this finding, the null-hypothesis which stated that; "The occupational competence of sports-coaches who hold the NISG II plus DPE will not be significantly higher than those who hold the NISG II plus WASC" was absolutely rejected in favour of the alternative hypothesis which stated "The occupational competence of sports-coaches who hold the NISG II plus DPE will be significantly higher than those who hold the NISG II plus WASC".

Table 10

Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus University Diploma Certificate in Physical Education (DPE) And Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus The West African School Certificate (WASC)

Categories of Sports-Coaches	Means	S.D.	calc. t	-0.05 t	df.	N
NIS Grade I Plus DPE	11.89	4.39	-	-	-	1
NIS Grade I Plus WASC	3.89	3.32	-	-	-	1
			4.210	1.690	36	38

Source: Coded responses subjected to t test.

* = Statistically Significant (one tailed).
= 0.05.

Table 10 contains data on the occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus University Diploma Certificate in Physical Education (DPE) and sports-coaches who hold the NIS Grade I (NISG I) plus the West African School Certificate (WASC).

The foregoing Table 10, showed that the two categories of sports-coaches have a considerably wide range of occupational competence. For instance, while

those sports-coaches who hold the NIS Grade I Coaching Certificate plus West African School Certificate recorded a 3.89 mean of occupational competence, the other category of sports-coaches who hold the NIS Grade I plus the University Diploma Certificate in Physical Education recorded a 11.89 mean of occupational competence. Similarly, while the former set of sports-coaches recorded a 4.39 standard deviation the latter category of sports-coaches recorded a standard deviation of 3.32.

Accordingly, the aforementioned data were used to test the following null-hypothesis; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG. I) plus the University Diploma Certificate in Physical Education (DPE) will not be significantly higher than the sports-coaches who hold the NIS Grade I Coaching Certificate (NISG. I) plus the West African School Certificate (WASC)". In the attempt to test the null-hypothesis, the relevant data were treated with t statistical test. The data showed that the calculated t test was 4.210 as against the tables t test value of 1.690 at a level of significance of 0.05 and degree of freedom of 35.

It was clear from these figures that the calculated t test value of 4.210 was higher than the t test value of 1.690 (4.210 > 1.690). This showed a clear degree of statistical significance. On the basis of these figures, the null-hypothesis which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus University Diploma Certificate in Physical Education (DPE) will not be significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus West African School Certificate (WASC)" was rejected in favour of the alternative hypothesis which stated that: "The occupational competence of sports-coaches who hold the NISG I plus DPE will be significantly higher than those sports-coaches who hold the NISG I plus WASC".

Table 11

Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus a Bachelor Degree in Physical Education and Sports-Coaches Who Hold the NIS Grade I Coaching Certificate (NISG I) Plus the West African School Certificate (WASC)

Categories of Sports-Coaches	Means	S.D.	$t_{calc.}$	$t_{.05}$	df.	N
NISG I Plus B.So.	21.7	6.3	-	-	-	
NISG I Plus WASC	9.5	5.2	-	-	-	
			3.935*	1.701	28	30

Source: Coded responses subjected to t test

* = Statistically Significant (one tailed)

= 0.05.

Table 11 indicates data on the occupational competence of two categories of sports-coaches.

They include those sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus a Bachelor Degree in Physical Education and those who hold the NIS Grade I Coaching Certificate (NISG I) plus the West African School Certificate (WASC).

According to the foregoing table, the category of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree recorded an average occupational competence value of 21.7 while the other category who hold the NIS Grade I Coaching Certificate plus the West African School Certificate had on record an average occupational competence value of 9.5. Similarly, the corresponding standard deviation representing their occupational competence stood at 6.3 and 5.2. respectively.

Nevertheless, the investigation went beyond this level to establish a premise for a meaningful statistics between the variables. To this end, a null-hypothesis was formulated which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education will not be significantly higher than those who hold the NIS Grade I Coaching Certificate plus the West African School Certificate".

In the same trend, the null-hypothesis was

tested with t statistical test. In other words the data under discussion were treated with t test. The treatment after all resulted to a calculated t test value of 3.935 contrary to a tabled t test value of 1.701 (one tailed) at 0.05 level of significance and a degree of freedom of 28. These figures indicated that the calculated t test value of 3.935 was greater than the tabled t test value of 1.701 (3.935 > 1.701). This was a clear indication of a statistical significance of the calculated t test value of 3.935.

The degree of the foregoing statistical significance formed the premise for rejecting the null-hypothesis which stated that: "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education will not be significantly higher than those who hold the NIS Grade I Coaching Certificate plus the West African School Certificate". Therefore, the alternative hypothesis which stated that: "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education will be significantly higher than those who hold the NIS Grade I Coaching Certificate plus the West African School Certificate" was accepted.

Table 12

Occupational Competence of Sports-Coaches Who Hold The NIS Grade I (NISG I) Coaching Certificate Plus Bachelor Degree in Physical Education and Sports-Coaches Who Hold The NIS Grade I (NISG I) Coaching Certificate Plus a University Diploma Certificate in Physical Education (DPE)

Categories of Sports-Coaches	Means	S.D.	t calc.	t-0.05	df.	N
NIS Grade I Plus B.Sc. Ed.	20.43	5.78	-	-	-	-
NIS Grade I Plus DPE	11	5.48	-	-	-	-
			3.35*	1.697	30	32

Source: Coded responses subjected to t test treatment.

* = Statistically Significant (one tailed)
= 0.05.

The data on Table 12, are quantitative values of the occupational competence of sports-coaches who hold the NIS Grade I (NISG I) Coaching Certificate plus a Bachelor Degree in Physical Education and another set of sports-coaches who hold the NIS Grade I (NISG I) Coaching Certificate plus a University Diploma Certificate in Physical Education (DPE).

According to Table 12, those sports-coaches who were in the bracket of NIS Grade I Coaching Certificate plus Bachelor Degree in Physical Education had on record a mean of 20.43 with its corresponding standard deviation of 5.78 whereas the category of sports-coaches who hold the NIS Grade I Coaching Certificate plus University Diploma Certificate in Physical Education recorded a mean of 11 with its corresponding standard deviation of 5.45. These figures showed a narrow margin of occupational competence between the two categories of sports-coaches under review, and a standard deviation difference of about 3. Nevertheless, a null-hypothesis was tested in order to have basis for a clearer conclusion. The null-hypothesis stated that: "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education will not be significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education".

Attempt was made to test the foregoing null-hypothesis with t statistical test. In this event, the foregoing data were subjected to t test treatment. The details of the treatment of the data on Table 12

showed a calculated t test value of 3.350 as against a t test tabled value of 1.697 at 0.05 level of significance with a degree of freedom of 30. The calculated t test value of 3.350 was greater than the t test tabled value of 1.697 (3.350 > 1.697). It was obvious therefore, that the calculated t test value of 3.350 was statistically significant, hence one was comfortable to reject the null-hypothesis which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus Bachelor Degree in Physical Education will not be significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus Diploma in Physical Education (DPE)" in favour of the alternative hypothesis which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus a Bachelor Degree in Physical Education will be significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus Diploma in Physical Education (DPE)".

Table 13

Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus West African School Certificate (WASC) and Sports-Coaches Who Hold A Bachelor Degree in Physical Education Only

Categories of Sports-Coaches	Means	S.D.	t _{calc.} (NS)	t _{-0.05}	df.	N
NIS Grade I Plus WASC	9.29	3.67	-	-	-	
B.Sc. Ed.	7.47	2.70	-	-	-	
			1.250	1.690	32	34

Source: Coded responses subjected to t test treatment.

NS = Not significant (one tailed).

= 0.05.

Table 13 indicates in figures the occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus the West African School Certificate (WASC) and those sports-coaches who hold the Bachelor Degree in Physical Education (B.Sc. Ed.).

As indicated on the table, those sports-coaches who were in the category of NISG I plus WASC recorded a level of occupational competence of 9.29 whereas those sports-coaches who were in the category of Bachelor Degree recorded a slightly low level occupational competence of 7.47 which was less than 20 per cent occupational

competence of the former. In the same vein, the corresponding standard deviation recorded by those two sets of sports-coaches were 3.67 and 2.70 respectively. Obviously, these figures showed a narrow margin of level of occupational competence between these sets of sports-coaches under discussion. The marginal difference notwithstanding, a null-hypothesis was tested to substantiate the positions of occupational competences of the two sets of sports-coaches. The null-hypothesis stated that; "The occupational competence of sports-coaches NIS Grade I Coaching Certificate (NISG I) plus West African School Certificate (WASC) will not be significantly higher than those sports-coaches who hold the Bachelor Degree in Physical Education".

In the usual manner, the null-hypothesis was tested with t statistical test. Having subjected the means of 9.29 and 7.47 with standard deviation of 3.67 and 2.70 to t statistical test treatment, the result showed that the calculated t test was 1.250 (one tailed) as against the t test tabled value of 1.690 at a level of significance of 0.05 with a degree of freedom of 32. The t statistical test result showed that, the calculated t test figure of

1.250 was comfortably contained within the critical region of the t test table value of 1.609. It was clear therefore that the t test table value of 1.609 was higher than 1.250 (1.250 1.609) hence the calculated t test value was not significant. The statistical figures under discussion therefore, corroborated the null-hypothesis that; "The occupational competence of sports-coaches who hold the NISG I plus WASC will not be significantly higher than those sports-coaches who hold a Bachelor Degree in Physical Education".

Table 14

Occupational Competence of Sports-Coaches Who Hold The NIS Grade I Coaching Certificate (NISG I) Plus A University Diploma Certificate in Physical Education (DPE) And Sports-Coaches Who Hold The Bachelor Degree In Physical Education Only

Categories of Sports-Coaches	Means	S.D.	$t_{calc.}$	$t_{-.05}$	df.	N.
NISG I Plus DPE	16.3	8.2	-	-	-	
B.Sc.	10.9	3.1	-	-	-	
			2.00*	1.681	36	38

Source: Coded responses subjected to t test treatment

* = Statistically Significant (one tailed)
= 0.05

Table 14 contains data on the occupational competence of a group of sports-coaches who possess the NIS Grade I Coaching Certificate (NISG I) plus a University Diploma Certificate (DPE) in Physical Education and another group of sports-coaches who possess the Bachelor Degree in Physical Education.

According to the foregoing table, the category of sports-coaches who possessed the NIS Grade I Coaching Certificate (NISG I) plus a University Diploma Certificate in Physical Education (DPE) recorded an occupational competence mean of 16.3 with its corresponding very high standard deviation of 8.2. On the contrary, the other category of sports-coaches who hold the Bachelor Degree in Physical Education had on record a low mean of 10.9 occupational competence and similarly low standard deviation of 3.1.

However, in order to have a reliable grounds for ascertaining the statistical relationship between the figures under discussion, the figures were subjected to statistical test treatment. In the process, a null-hypothesis was tested which stated; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education will not be significantly higher than those who

possess the Bachelor Degree in Physical Education". Using the null-hypothesis as basis for the statistical analysis of the variate, the result of the t statistical test treatment amounted to 2.00 as against the t test tabled value of 1.684 at 0.05 level of significance with a degree of freedom of 36.

From all indication, a calculated t test value of 2.00 was higher than the t test tabled value of 1.684 (2.00 > 1.684). This was a good indication of a statistical significance between the variates. In other words, the alternative hypothesis which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus Diploma Certificate in Physical Education (DPE) will be significantly higher than those who hold a Bachelor Degree in Physical Education stood the chance of being accepted at the expense of the null-hypothesis which stated that; "The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate (NISG I) plus University Diploma in Physical Education (DPE) will not be significantly higher than those who hold the Bachelor Degree in Physical Education".

Table 15

The Household Production Costs of A Grade I Certificate In Sports Coaching and a Bachelor Degree Graduate of Physical Education

Subjects	N	Gestation Period	Mean (H)	S.D. (H)	t _{calc.}	t _{-0.05}	df.	N
NIS Grade I Certificate	3	3(session)	7164	132	-	-	-	
University P.E. Graduate	3	Y 3 (sessions)	6846	230	(NS) .878	2.132	4	6
	4	Y 4 (sessions)	6139	253	* 2.68	2.015	5	7

Source: Actual Private Production Cost treated with t statistical test.

* = Statistically Significant (one tailed)

NS = Not Significant (one tailed)

= 0.05

In Table 15 are contained data on household production cost (HPC) of the NIS Grade I Certificate Sports-Coach and a University Physical Education Graduate.

A close look at the table showed that the mean household production cost (HPC) of the NIS Grade I Certificate sports-coach recorded a mean of ₦7,164.00 per year per student as compared with the University Physical Education graduate mean HPC of ₦6,846.00 and ₦6,139.00 per year per student for three and four-year programmes respectively. While the Four-year University programmes recorded the least mean HPC of ₦6139.00 the NIS Three-Year programme recorded the highest mean HPC of ₦7164.00 and sandwiched on the cost continuum was the mean HPC of ₦6846.00 for the Three-Year University programme. The standard deviation of the NIS Grade I Certificate sports-coach was ₦132.00 while the University Physical Education graduate for three and four-year programmes recorded a standard deviation of ₦230.00 and ₦253.00 respectively.

In order to treat the data with the t statistical test a null-hypothesis was formulated. The null-hypothesis states; "The household production cost of the NIS Grade I Certificate Sports-Coach will not be significantly higher than the household production cost of the University Physical Education Graduate".

Having subjected the data on household production cost for the various trainees under discussion to t test, the result showed that the Three-Year University Physical Education graduate and Four-Year University Physical Education Graduate recorded a t calculated value of 0.878 and 2.68 respectively as against the t test tabled value of 2.132 at 0.05 level of significance for the Three-Year University Physical Education graduate with a degree of freedom of 4 and t tabled value of 2.015 at 0.05 level of significance with a degree of freedom of 5 for the Four-Year University Physical Education graduates. It meant that, there was no statistical significance between the HPC of the NIS Grade I Certificate Sports-Coach and the HPC of a Three-Year University Physical Education graduate but statistical significance existed between the NIS graduate and the Four-Year University Physical Education graduate. The HPC of the NIS Grade I Certificated Sports-Coach therefore, was not significantly higher than the HPC of a Three-Year University Physical Education graduate whereas it was significantly higher than the Four-Year University Physical Education graduate.

Based on the findings, the null-hypothesis which stated that: "The household production cost of the NIS Grade I Certificated Sports-Coach will

not be significantly higher than that of the University Physical Education" was accepted for the Three-Year University Physical Education graduate and rejected for the Four-Year University Physical Education graduate.

Table 16

The Relevance of Basic Academic Subjects in Physical Education
To Sports-Coach-Education-Programme and Teacher-Education-Programmes

Types	Very Relevant		Relevant		Not Relevant		$\frac{(O-E)^2}{E}$	$\chi^2-0.05$	df.
	$\frac{(O-E)^2}{E}$	%	$\frac{(O-E)^2}{E}$	%	$\frac{(O-E)^2}{E}$	%			
Sports-Coaches Training Programme	2.67	35.13	4.86	63.94	0.07	0.93	7.60		
Teacher Training Programme	2.57	35.30	4.64	63.73	0.07	0.97	7.28		
$\frac{(O-E)^2}{E}$	5.24		9.5		0.14		14.88*	6.991	2

Source: Response of Physical Education Experts coded and treated with χ^2 statistical test.

* = Statistically significant.

= 0.05.

In Table 16 are contained data on the relevance of basic academic subjects in physical education to Sports-Coach-Education-programme and Teacher-Education programme.

Surprisingly, both training programmes were rated almost equally. According to table 16, while the Sports-Coach-Education programme recorded a 2.67 very relevant subjects the Teacher-Education programme recorded a 2.57 very relevant subjects. They both recorded about 35 per cent of very relevant subjects. In the same token, they both recorded a 4.86 and 4.64 relevant subjects, respectively which also amounted to about 64 per cent respectively. Further to that, the Sports-Coach-Education and the Teacher Education recorded a very low mark of 0.07 in the non-relevant column amounting to 0.93 per cent respectively.

In order to find a conclusive analysis, the data were subjected to Chi-square statistical test. The basis of the treatment was that a null hypothesis was stated as thus: "The basic academic subjects in Physical Education will not be significantly relevant to Sports-Coach-Education and Teacher-Education Programmes". The results of the treatment showed that the Sports-Coach-Education recorded a calculated χ^2 of 7.60 whereas the Teacher-Education recorded a calculated χ^2 of 7.28 as against the χ^2 tabled value of 6.991 at 0.05 level of significance with a degree of freedom of 2.

Obviously, the χ^2 values of 7.60 and 7.28 were higher than the tabled χ^2 value of 6.991 (7.60 6.991) and (7.28 6.991). The results revealed that the calculated χ^2 of 7.60 and 7.28 were significant. In other words, the basis of the statistical analysis, that was "The basic academic subjects in physical education will not be significantly relevant to Sports-Coach Education and Teacher-Education" was proved wrong in favour of the alternative hypothesis which stated that: "The basic academic subjects in physical education will be significantly relevant to Sports-Coach-Education and Teacher-Education Training Programmes."

Table 12

The Relevance of Teacher-Education Foundation-Subjects
To Sport-Coach Education

Subjects	Very Relevant		Relevant		Not Relevant				
	$\frac{(O-E)^2}{E}$	%	$\frac{(O-E)^2}{E}$	%	$\frac{(O-E)^2}{E}$	%	$\sum \frac{(O-E)^2}{E}$	$\chi^2 - 0.05$	df.
Theory of Teaching	0.07	77.7	0.02	22.2	0.001	0.1	0.091		
Psychology of Teaching	2.70	67.66	1.28	32.09	0.015	.25	3.995		
Methods of Teaching	1.63	56.01	1.28	43.98	0.001	2.01	2.911		
Teaching Practice	0.03	59.00	0.02	39.00	0.001	2.00	0.051		
$\sum \frac{(O-E)^2}{E}$	4.43		2.60		0.018		(NS) 7.048	12.5916	6

Source: Response of Physical Education Experts coded and treated with χ^2 statistical test

NS : Not statistically significant.

α : 0.05

Table 17 contains data on the relevance of Teacher-Education Foundation-Subjects to Sports-Coach Education. According to the table, Psychology of Teaching recorded the highest degree of "very relevant" value of 2.70 whereas Teaching Practice recorded the least degree of 0.03 for "very relevant". Topping the degree of "relevance" were Methods of Teaching and Psychology of Teaching with 1.28 respectively. Down the line were Theory of Teaching and Teaching Practice having on record 0.02 respectively. On the other hand, the Theory of Teaching, Teaching Practice and Methods of Teaching recorded the least value of 0.001 respectively while the Psychology of Teaching recorded a higher value of 0.015 for "not relevant".

However, the foregoing analyses did not reveal any conclusive statistical meaning hence a null-hypothesis was formed to create basis for further clarity. In the process, it was hypothesized that: "The Teacher-Education Foundation-Study subjects will not be significantly relevant to Sports-Coach Education. The result of the data treatment showed a calculated χ^2 value of 7.048 as against the tabled χ^2 value of 12.5916 at 0.05 level of significance with a degree of freedom of 6. From all indications the tabled χ^2 value of 12.5916

was able to accomodate the χ^2 value of 7.048 within its brackets. In other words, 12.5916 was greater than 7.048 (12.5916 7.048) which indicated that the calculated χ^2 value of 7.048 was not statistically significant. (It was therefore, true to assert that; "The Teacher-Education Foundation-Study subjects will not be significantly relevant to Sports-Coach Education".

Discussion:Table 18Quality And Productivity

CATEGORIES		CORRELATION		
Basic Qualification	Occupational Qualification	r.	Results	
WASC	-	0.027	NS	0.05
WASC	NISG III	0.21	NS	0.05
WASC	NISG II	0.16	NS	0.05
WASC	NISG I	0.32	NS	0.05
*DPE	NISG II	0.58	*	0.05
*DPE	NISG I	0.56	*	0.05
*B.Sc./E.A./B.Ed	-	0.22	NS	0.05
*B.Sc./B.A./B.Ed.	NISG I	0.67	*	0.05

Source: Extracts from Tables 1 - 8

WASC = West African School Certificate

DPE = University Diploma Certificate in Physical Education.

B.Sc./B.Ed. = Bachelor Degree in Physical Education.

NISG I, II, III = National Institute for Sports Grades One, Two, and Three Coaching Certificates.

* = Statistically Significant

NS = Not Significant.

Table 18 shows a summary of the findings of the investigation on the correlation of quality and productivity of the sports-coaches. Out of the eight (8) categories involved in the investigation, five (5) of them did not show significant correlation while the remaining three (3) groups have significant correlation between their respective qualities and the corresponding productivity. According to the foregoing table, all categories who hold the WASC as their respective basic qualifications and who hold the NIS Coaching Certificates ranging from Grade III to Grade I have no significant correlation between their respective qualities and their corresponding productivity. From the same table, one could see that all categories of sports-coaches who hold a minimum basic qualification of DPE and a maximum of Bachelor Degree with the occupational qualifications ranging from NIS Grade III to NIS Grade I Coaching Certificate recorded a significant correlation between their respective qualities and their corresponding productivity.

The findings suggest that a basic qualification ranging from the University Diploma Certificate in Physical education to Bachelor Degree is a primary factor for quality consideration for the sports-coaches.

Table 19

Degree Of Occupational Competences

No. of Pair	Categories	Competency	$t_{-0.05}$
1	NISG II PLUS DPE NISG II PLUS WASC	* 1.829	1.697 (one tailed)
2	NISG I PLUS DPE NISG I PLUS WASC	* 4.210	1.690 (one tailed)
3	NISG I PLUS B.Sc/B.Ed. NISG I PLUS WASC	* 3.935	1.701 (one tailed)
4	NISG I PLUS B.Sc/B.Ed. NISG I PLUS DPE	* 3.350	1.697 (one tailed)
5	NISG I PLUS DPE B.Sc./B.Ed.	* 2.00	1.684 (one tailed)
6	NISG I PLUS WASC B.Sc./B.Ed.	* 1.250 (NS)	1.690 (one tailed)

Source: Extracts from Tables 9 - 14

NISG I; II = National Institute for Sports Grades One and Two Coaching Certificate.

WASC = West African School Certificate

DPE = University Diploma Certificate in Physical Education.

B.Sc/B.Ed. = Bachelor of Science Degree in Physical Education.

* = Statistically Significant.

NS = Not Significant.

Table 19 is an outline of the findings of the investigation on the comparison of occupational competence of the different categories of the sports-coached. According to the foregoing table of findings, six (6) pairs were involved in the comparison of occupation competence.

It is pertinent to recall that the basic finding of this portion of this study revealed that one category out of each pair recorded a highly significant occupational competence over the other member of that pair. For instance, in pair one (1) the NISG II plus DPE recorded a significantly higher occupational competence over the NISG II plus WASC. Similarly, the NISG I plus DPE had a significantly higher occupational competence over the NISG I plus WASC, the NISG I plus a Bachelor Degree recorded a better occupational competence over the NISG I plus WASC and NISG I plus DPE had on record that the NISG I plus a Bachelor Degree was more occupationally competent. In the case of pair five (5) the NISG I plus DPE recorded a significantly higher occupational competence over the category while in pair six (6) the NISG I plus WASC did not record a high occupational competence over the Bachelor Degree category.

A point of interest in these findings was that the higher the basic qualification of one category of sports-coaches over the other, the more superior the occupational competence of that category over the other while the categories that were paired had equal occupational qualification. What this meant was that for any level of sports-coach training programme to fulfill the purpose for its needs, it must consider the appropriate pre-requisite qualification as a primary factor towards its effectiveness. But, beyond this fact, the basic qualification must be considered along with the relevant subjects within the brackets of physical education discipline. As it was evident on Table 19, the sports-coaches who were in the category of NISG I plus a Bachelor Degree topped the list in respect of occupational competences.

The evidence therefore, clearly suggested that the Bachelor degree in physical education could be the appropriate basic qualification for the indigenous high-level man-power sports-coach who might consequently lead the Nigerian athletes to victory in international sports-competitions.

Table 20Relevance of Basic Physical Education
Courses to Teacher and Sports-Coach Education

Training Programmes	χ^2	$\chi^2_{0.05}$
Sports-Coach-Education	*9.60	5.991
Teacher-Education	*7.28	

Source: Extracts from Table 16

* = Statistically significant

= 0.05.

Table 20 contains a summary of findings on the relevance of basic physical education courses to both the Sports-Coach Education and Teacher Education.

According to the foregoing table, both training programmes recorded a significant relevance to basic physical education courses using the different objectives of the training programmes as the predictor of the degree of relevance. This finding therefore explained why physical education should be seen as a springboard from which other occupations like physical education teacher,

sports-coach, stadium management, sports-administration, purchasing and supply, store-keeping, sports-physiologist, sports-psychologist, sports-biomechanics and a host of other allied occupations should establish their bases. This is probably a major reason for making physical education a West African School Certificate Examination subject at the secondary school level.

Table 21

Relevance of Teacher-Education Foundation-Subjects
To Sports-Coach-Education

Training Programme(s)	χ^2	χ^2 0.05
Sports-Coach Education Programme	(NS) 7.048	12.5916

Source: Extracts for Table 17

NS = Not Significance

= 0.05

The finding of this study concerning the relevance of Teacher-Education Foundation subjects to Sports-Coach Education is contained in Table 21.

It was evident that the Teacher-Education Foundation subjects were not significantly relevant to Sports-Coach Training Programme. This did not come as a surprise because the objective of Teacher-Education Programme is not similar to the objective of Sports-Coach Training Programme hence the differences in the foundation-subjects. The findings in Table 22 therefore, confirmed the fact that teaching as an occupation was not a good substitute for sports-coaching as an occupation.

It was concluded from the finding that those trained

teachers who took up sports-coaching were not trained sports-coaches, notwithstanding their university education advantage. The graduate physical education teachers still require the exposure to specific sports-coach training programme in order to be a highly sound sports-coach and not a highly sound teacher.

Having discussed the summary of the findings of this research work, it was considered necessary to discuss the implication of the findings to practice. Based on the findings of this study, one could state that productivity is a function of quality. In other words this study revealed that the better the quality of sports-coaches the better the performances of sports-coaches. A rundown over the sets of subjects particularly with regards to sports-coaches include the following.

WASC plus NISG III

WASC plus NISG II

WASC plus NISG I

DPE plus NISG II

DPE plus NISG I

B.Sc./B.Ed. -

B.Sc./B.Ed. plus NISG I.

From all indications, all the categories of sports-coaches received occupational training except the B.Sc. (Ed.) category. Those categories of sports-coaches who possessed the West African School Certificate as their basic qualifications recorded a low positive correlation. On the other hand, the sets of sports-coaches who possessed the University Diploma Certificate in physical education recorded a fairly good positive correlation. It is also important to mention that the basic qualification was not the only determinant of their qualities but also the occupational qualification. Hence, the sets of sports-coaches who possessed the West African School Certificate; University Diploma in physical education and Bachelor Degree in physical education possessed severally the NISG, I; II; & III Coaching Certificates.

A point for concern is that the higher the basic qualification the higher the correlation and the lower the basic qualification regardless of the level of occupational qualification (either low or high) the lower the correlation. It therefore, suggests that the basic qualification is a stronger determining factor of the quality of sports-coaches even when sports-coaches training programme of different levels are available for

the production of such skilled manpower. This finding tends to support Buchers assertion about the sports-coach education. According to him; "the coach needs a background in physical education and science education. Only in this way can he best serve youths who are interested in athletics" (Bucher 1975:224). No wonder the sports-coaches who possessed the University Diploma Certificate and Bachelor Degree Certificate in physical education respectively recorded a comparatively high correlation.

Similarly, the findings also revealed that, the higher the academic qualification of one set of sports-coaches, the more superior the occupational competence over the other category in a pair. This also confirmed that any level of sports-coach training programmes must consider the appropriate subject discipline as a primary factor towards the fulfillment of its goals. This finding also supports the idea that either the University Diploma Certificate or the Bachelor Degree in physical Education should be the minimum academic qualification for the available manpower training and development programmes for sports-coaches if it should be able to produce the high level skilled manpower.

Furthermore, the different sets of the sports-coaches have attended the Teacher Education and the Sports-Coach Education training programmes separately.

This suggests that each training programme centred on a specific Foundation subjects. It is important to recall that the findings of this study revealed that the Foundation subjects for Teacher-Education were not relevant to Sports-Coach Education. It must also be mentioned that the findings also revealed that the basic courses in physical education were relevant to both the Teacher-Education training programme and the Sports-Coach Education when infact the objectives of the two programmes were not the same. One could infer therefore, that the influence of the basic subjects on the training programmes was very high. That meant that both the sports-coach and the teacher picked their foundations from the same source. What makes the difference was perhaps how and where each skilled manpower used the fundamental knowledge. However, this seemed contrary to the principles of programme curriculum planning based on the objective. Like Odhogi cited Tyler as saying that objectives should form the basis for selecting the materials, outlining contents and developing the instructional procedures in a bid to plan a curriculum (Odhogi 1983). What is being revealed is that the holder of Bachelor Degree in physical education with teacher education background need a minimum training programme in order to be able to

perform well on the sports-coaches field. This finding therefore, tends to support the admission policy of the National Institute for Sports which allows holders of Bachelor Degree in physical education with teacher-education background to undergo a Nine-month coaching programme for the award of a Grade I Coaching Certificate.

Another finding of this study was that the household production cost of graduates of the National Institute for Sports was not significantly higher than that of the physical education graduates of the University, whereas the National Institute for Sports graduates with very low academic qualification recorded a comparatively low correlation between their quality and productivity. Viewing this finding from the economic point of view and particularly from the private and public benefits, it could be said that it was not a profitable venture to produce that calibre of sports-coaches whose output did not justify the input involved in the training programme. Besides, it would not be highly cost-effective for the sports-coach trainee and the government to embark on such training programme. On the other hand, the household production cost of the physical education graduate of the University was comparatively low with its corresponding low correlation. In this case, it

seems it would be highly cost-effective for the government and any sports-coach trainee who holds either the University Diploma Certificate or the Bachelor Degree in physical education to embark on such training programme. The cost-effectiveness of the cadres of sports-coaches as worked below testifies to the findings.

The National Institute for sports graduates recorded the following criteria for calculating the cost-effectiveness.

- (i) Graduate Household Unit Cost = N21,493.00
- (ii) Correlation (r) = .3
- (iii) Quality Sports-coaches = 7
- (iv) Foundation Subjects Mastery = .3

In the case of the University graduates of physical education the;

- (i) Graduate Household Unit Cost = BSc₃ = N20539.00
= BSc₄ = N24555.00
- (ii) Correlation (r) = .2
- (iii) Quality of Sports-coaches = .7
- (iv) Foundation Subject Master = .7

Thus, the household production cost of the effective graduate of each training programme was calculated as follows

Table 22

Comparison of Effective Household Production Cost
Of Sports-Coaches Who Hold The NISG I And B.Sc.
In Physical Education

Types of Training Programmes	Foundation Subjects Mastery	Quality	Correlation "r"	Household Production Cost (₹)	Effective Production Cost (₹)
N.I.S.	.3	.7	.3	21,493.00	341,159.00
B.Sc. ₃	.7	.7	.2	20,539.00	209,581.00
B.Sc. ₄	.7	.7	.2	24,555.00	250,561.00

Source: Table 4; 7; 13 & 15.

According to Table 22, the criterion for the choice between the two existing training programmes for a sports-coach trainee is best made using the household production cost of the graduate of highest quality. It is clear from the figures contained in Table 22 that the effective production cost of a sports-coach who underwent the Three-Year B.Sc. Physical Education programme was ₹209,582.00 as against the Four-Year B.Sc. Physical Education programme which was ₹250,561.00. The effective production cost of the NIS Grade I Coaching Certificate was ₹341,159.00. A closer look at these figures showed that the NIS Grade I Coaching Certificate recorded .3 for "Mastery of Foundation Subjects" .3 for "Correlation between Quality and Productivity" and .7 for "Quality". In the same vein, the B.Sc. Three-Year programme recorded

.2 for "Correlation between Quality and Productivity", .7 for "Mastery of Foundation Subject" and .7 for "Quality". The B.Sc. Four-Year recorded equal values of the criteria mentioned with the B.Sc. Three-Year programme.

The interpretation of these figures was that the unit production cost of a holder of NIS Grade I Coaching Certificate who has passed through the Institution for Grades III and II Coaching Certificates amounted to ₦21,493.00; But, if after the completion of his training and became a Grade I Certificated Sports-coach, he was able to have .3 value of "Mastery of Education Subjects"; .3 value of "Correlation between Quality and Productivity" and .7 value of occupational quality, it has cost him ₦341,159.00 to have that level of mastery and occupational quality.

The B.Sc. Degree; Three and Four-Year programmes products have equally recorded .7 value for "Mastery of Foundation Subject"; .7 for "academic quality"; .2 for "Correlation between Quality and Productivity" and a unit production cost of ₦20,539.00 and ₦24,555.00 respectively. These figures indicated that a holder of Bachelor's Degree in physical education for both Three-Year and Four-Year programmes who was a sports-coach had spent ₦209,582.00 and ₦250,561 respectively.

In other words, the NIS Grade I Coaching programme product recorded the highest effective-production-cost

of ₹341,159.00 while the B.Sc. Physical Education Three-Year programme recorded the lowest effective-production-cost of ₹209,582.00 and B.Sc. Physical Education Four-Year programme had on record as much as ₹250,561.00 as its effective-production-cost. Looking at the figures, it could be seen that the two sets of programmes were deficient of one thing or the other. But, it appeared the NIS programme recorded a poorer values than the B.Sc. programmes. In view of this revelation and consequent highest effective-production-cost, it would be economically ideal to develop a sports-coach training programme curriculum for university undergraduates in the universities or university graduates of physical education in the NIS.

The final analysis was that it would be more cost-effective to run sports-coaching courses for university undergraduates or university graduates of physical education. It would be profitable for the sports-coach trainee who will eventually come out with a higher quality value and consequent higher degree of productivity. It would be equally advantageous to the sports-authority who might then be in position to have highly qualified sports-coaches for the development of sports in the country.

Equally important to mention is that government should provide more incentives that would attract the appropriate sports-coach trainee. Already a free tuition is a paramount incentive. Equally paramount to worker's job satisfaction are the normothetic and idiographic considerations provided by organisations (Getzel et al 1968). However, the idiographic consideration will be discussed here.

Besides the fact that the real wages are generally lower than the market wages for both the private and public worker in Nigeria today, it is also known that the wages attached to a particular job is a determinant of its popularity. This reason probably explains why it was suggested by the NSC Care-Taker Committee that the high level skilled manpower sports-coach should earn Salary Grade Level 10 amounting to a gross pay of ₦6596.00 as the salary entry point. This suggestion must have been probably made with the understanding that the future demand for a high level skilled manpower in sports-coaching must yield a worthwhile benefit to the sports-coach trainee. However, whether this inference is true or not is yet to be cleared. It was against this background that the cost-benefit analysis of the suggested sports-coach training programme was calculated in order to justify the argument.

The cost-benefit analysis made use of the following criteria;

Types of Investments = (i) 4-Year Bachelor Degree
in Physical Education
Programme plus NIS Grade I
Coaching Programme.

(ii) Bank Savings.

Capital for (i) ₦31,558.00

(ii) ₦24,555.00

Interest Rate for (ii) .18

Monetary Returns for (i) ₦6,596.00

(ii) ₦4,420.00.

Table 23

Cost-Benefit of 4-Year Bachelor Degree Programme
Plus 1-Year NIS Grade I Coaching Programme and
Bank Savings Investment

Type Of Investment	Capital ₹	Interest Rate	Periods (Years).	Monetary Return (₹)	%	Remarks
4 Yr Bachelor Degree Plus NIS Grade I Coaching Programme (A)	31,558.00	-	1	6596.00	21	(A) High
Bank Saving. (B)	24,555.00	.18	1	4420.00	19	(B) Low

Source: Extracts from Table 15.

According to the foregoing table, the comparison between Alternative "A" and "B" showed that the benefit that would accrue for taking to sports-coaching as a career by the University physical education graduates would amount to a gross annual pay of N6,596.00 if the suggestion of the NSC Care-Taker Committee of 1984 on salary wages was upheld. The alternative was that a University physical education graduate who saved a sum of N24,555.00 in the bank for a 1-year period instead of expending the same amount on his university education would have been paid a consolidated interest of N4,420.00. The choice between the alternative benefits therefore, if based on the amount of money realised over the capital would favour definitely the sports-coaching as a career. It is therefore, the contention of this report that every realistic and appropriate incentive should be considered along with the introduction of the suggested sports-coach education so that the appropriate candidates for the training programme could be motivated-towards sports-coaching.

Findings:

The findings resulting from this research include the followings.

- (i) There was no significant correlation between the quality and productivity of sports-coaches who hold the West African School Certificate.
- (ii) There was no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade III Coaching plus the West African School Certificate.
- (iii) There was no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Certificate plus the West African School Certificate.
- (iv) There was no significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus the West African School Certificate.
- (v) There was a significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education.

- (vi) There was a significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education.
- (vii) There was no significant correlation between the quality and productivity of sports-coaches who hold the Bachelor Degree in Physical Education.
- (viii) There was a significant correlation between the quality and productivity of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education.
- (ix) The occupational competence of sports-coaches who hold the NIS Grade II Coaching Certificate plus a University Diploma Certificate in Physical Education was significantly higher than those sports-coaches who hold the NIS Grade II Coaching Certificate plus a West African School Certificate.
- (x) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma in Physical Education was significantly higher than those sports-coaches who hold NIS

Grade I Coaching Certificate plus a West African School Certificate.

- (xi) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education was significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate plus a West African School Certificate.
- (xii) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a Bachelor Degree in Physical Education was significantly higher than those sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma in Physical Education.
- (xiii) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a West African School Certificate was not significantly higher than those sports-coaches who hold the Bachelor Degree in Physical Education.
- (xiv) The occupational competence of sports-coaches who hold the NIS Grade I Coaching Certificate plus a University Diploma Certificate in Physical Education was significantly higher than those who hold the Bachelor Degree in Physical Education.

- (xv) The household-production-cost of the NIS Grade I Certificated sports-coach was not significantly higher than the University Physical Education Graduate for the 3-Year Degree Programme but significantly higher for the 4-Year Degree Programme.
- (xvi) The basic academic subjects in physical education were significantly relevant to Sports-Coach-Education and Teaching-Education.
- (xvii) The Teacher-Education Foundation-Subjects were not significantly relevant to Sports-Coach-Education.

CHAPTER FIVESUMMARY, CONCLUSION AND RECOMMENDATIONSSummary:

The compass-bearing of this research work focused on the problem of quality as against the productivity of sports-coaches in Lagos State. Other interests of this research were the appraisal of the course syllabi of the currently available training programmes of sports-coaches. In the process of the investigation, four (4) different sets of research subjects were involved; namely the practising sports-coaches; the immediate supervising officers of the practising sports-coaches, the physical education lecturers, the physical education students and sports-coach trainees. They were 427 in number. Furthermore, four (4) different types of questionnaires were drawn namely the Production Cost Questionnaire (PCQ); the Performance Rating Questionnaire (PRQ); the Quality Probing Questionnaire (QPQ) and the Curriculum Appraisal Questionnaire (CAQ).

In the process of the investigation, items contained in the questionnaire were coded accordingly. The variates eventually formed the data used for this study. As each type of questionnaire was specifically meant for a particular study variable like the productivity, quality and cost, the data collected for each study

variable were treated with appropriate statistical test. For instance, while the relationship between quality and productivity was treated with Pearson Product Moment Correlation in conjunction with t test, the course content syllabi of the training programmes were subjected to Chi-square (χ^2) statistical test. The production cost was analysed through the use of t test, cost-effectiveness and cost-benefit analysis techniques.

The results of the analyses showed that the productivity of the various categories of sports-coaches under investigation were influenced by their respective qualities. It is pertinent to recall at this juncture that the qualities of sports-coaches in the context of this study were determined by their respective academic qualifications and occupational qualifications. For purpose of clarity all the practising sports-coaches were described in this study according to their respective qualities. Using the quality as a criterion for the categorization, the sports-coaches were categorised into eight (8) groups, namely, the WASC; WASC plus NISG. III; WASC plus NISG. II; WASC plus NISG. I; DPE plus NISG. II; DPE plus NISG. I; B.Sc./B.A./B.Ed; and B.Sc./B.A./B.Ed. plus NISG. I.

The result of the investigation also showed that the sports-coaches who possessed a higher academic qualification recorded a higher degree of occupational competence. In addition, it was revealed that the basic physical

education courses were equally relevant to Teacher and Sports-coach Education. However, this study rejected the notion that Teacher-Education Foundation subjects were in anyway relevant to Sports-coach Education.

Furthermore, this study also revealed that although the production cost of NISG. I Coaching Certificate holders was higher than the production cost of University Degree holders. However, it was not statistically significant for the 3-Year Degree programme but statistically significant for the 4-Year Degree programme.

Conclusion:

Based on the foregoing findings of this study, it was concluded that the degree of productivity was a function of quality of sports-coaches in Lagos State. It was also concluded that the qualities of the respective sports-coaches were determined more by their academic qualifications than their occupational qualifications. In addition, it was concluded that the household production cost of the NIS Grade I Certificate graduate was more than the household production cost of a University Bachelor Degree graduate of physical education. Finally, it was concluded that a Bachelor Degree in sports-coaching will be more cost-effective than a NIS Grade I Certificate in sports-coaching.

Recommendations:

Considering the research findings and the implications of the findings to sports-development one would like to make the following suggestions.

It has been established that basic courses in physical education as an academic discipline are quite relevant to sports-coach-education and teacher-education respectively. It has also been established that the Bachelors Degree in physical education and or the University Diploma Certificate in physical education are promising pre-requisites for the training of high level skilled manpower sports-coach. In addition, the findings also revealed that the household production cost of a University physical education graduate is less when compared with that of the National Institute for Sports.

In consonance with these findings, it is therefore suggested that the University education system should give the production of middle and high level manpower in sports-coaching equal attention as it has always given to all other areas of manpower needs of our economy. To this end, the physical education syllabus in the various universities should be reappraised to accomodate the training of sports-coaches. In other words time and events have overtaken the obsolete idea of treating physical education as a teacher-education discipline only. It is high time the products of

physical education were diversified. The establishment of National Institute for Sports stands a better position as a clearing house. Like the Law School stands for lawyer-trainees so should the National Institute for Sports stands for sports-coach trainee. It is then, we can be proud of intellectual sports-coaches who can withstand the test of international challenges and who are possibly able to produce world beaters.

The National Sports Policy which was unduely orchestrated sometimes ago stressed mass participation and catch them young as major plans and programmes for sports development in Nigeria. In the same vein, the Commissioner for Youth, Sports, and Social Development alerted members of the Press in one of the sports press briefings in 1989, the intention of the Lagos State Government to launch the State Sports Policy which intends to focus on the attraction of private participation in the development and promotion of sports in the state (Otutuloro 1989). Similarly the Federal Government launched a Sports-Endowment Fund in 1988 "to generate additional funds which will complement the development efforts of the State Government in the provision of sports-facilities" (Otutuloro 1989:2). Several other attempts were made by private companys and industries to improve the standard of sports in Nigeria. For instance, the 7Up Bottling Company Limited sponsored

the Ramblers Basketball Open Classics and the Lagos State Senior Men's Wrestling Open Championship in February and April 1989 respectively. The need for these references to government and private efforts towards sports development is to appreciate their concern for sports development and to substantiate their ignorance particularly in the area of manpower training and development in sports-industry. To this end, it is therefore, suggested that the National Sports Policy should be critically reviewed whereby the issue of staff training should be given equal attention in the policy. The standard of sports can only reach its peak if manpower training and development is treated with all serious intentions and equal or more government subventions is earmarked for it like the Federal Government cash gift which is currently in vogue. The National Sports Policy should mandate private companies and industries to earmark a handsome percentage of their annual budget on "Advertisement and Promotions" to sports development and with special interest in manpower training and development. Government policies on other social services like the National Medical Policy, Press Policy, Education Policy to mention a few is known to be the brain child of the experts in the various distinct fields. This is unlike the practice in the sports-industry. It is high time the government recognised sports as an industry characterized by equally needed

skilled manpower like the "medicine" or the "law". The importance of the required skilled manpower can be realised and appreciated when they are given the opportunity to function in their areas of specialization with all free hands and a conducive organisational atmosphere.

It is noteworthy to recall that this research confirmed that the quality of products of Sports-Coach Training programme is a function of both the pre-requisite of the candidates and their exposure to the occupational training programme. It therefore, means that any training programme which allows different categories of certificates as its pre-requisite for admission should reflect the categories of certificates in the course design in terms of the syllabus content and course duration. The Sports-Coach Education should therefore, borrow a leaf from the university admission policy. It is relevant to mention that the university admission policy allows the General Certificate of Education (GCE), the National Certificate of Education (NCE) and the General Certificate Advanced Level (GCE A/L) for admission into degree programmes. It is in recognition of the differences in the categories of such pre-requisites that holders of NCE A/L and GCE or WASC have to undergo a Two, Three and Four year programmes respectively. There is no doubt that the differences in the course durations must have

taken care of the differences in the standard of pre-requisites with special attention to the course content. The point of interest at this juncture is that the NIS admission requirements which respect the occupational qualification at the expense of the basic qualification and the standard of such basic qualification should be discarded off. The course content and the course duration should reflect the category of the basic qualification of the candidate undergoing such a training programme.

Equally important in matters relating to manpower training and development is the quality of the trainers and the relevance of several course contents to such training and development programme. It has been observed that courses offered and examined to obtain the same university degree differ from department to department and from session to session particularly in some departments of physical and health education. It implies that some departments do not have an outline of compulsory courses or that such outline of compulsory courses are not strictly adhered to, thereby resulting to half baked graduates of physical education. It also implies that available numbers and types of lecturers in a particular session determine what courses are available for students to offer whereas the relevant and compulsory courses should determine what specialist lecturers are required ^{and} maintained. A lecturer whose absence does not affect adversely the

training programme or leaves a compulsory gap that must be urgently filled is an indication of dispensability. All those inferences point to lack of equal academic input in some of the department of physical and health education in the universities. Such an absurd practice negates the impression of the 1984 NSC Caretaker Committee on manpower training. For instance, the Committee opines, "The National Sports Development drive can only succeed if good quality and quantity of Sports Teachers, Trainers and Coaches graduate are in sufficient numbers to meet the pressing demands" (1984:22).

Against this realization therefore, it is hereby suggested that an accreditation panel should be set up through the concerted efforts of the Federal Ministry of Youth; Sports and Culture, Federal Ministry of Education and the Nigerian University Commission to look into the appropriateness and depth of courses offered in the departments of physical and health education to products of these departments, assess the available facilities and equipment and probe into the qualities of trainers in the departments with the view of improving the qualitative features of the department through a realistic and drastic recommendation. It is more important however, that the recommendation should be implemented with despatch so that a high quality manpower training in the sports industry can be ensured. There is no doubt that efforts made in this direction is not effort wasted if such effort is made with all commitment and fairness,

a clear sense of direction and sincerity of intention.

To this end, the Federal Government should increase the annual subvention to the universities through the Nigerian University Commission. In addition, the Federal Ministry of Youth; Sports and Culture must earmark and spend a reasonable proportion of its annual budget on manpower training of sports-coaches in the university education system. Furthermore, the accreditation-panel should be empowered to rationalize the establishment of department of physical and health education, provide guidelines for recruitment of trainers, determine compulsory courses to be offered in sports science and mandate department of physical and health education to produce not only teachers of physical education but also sports-coaches, sports-administrators, sports-psychologists, exercise physiologists, biomechanists, recreation officers, stadium managers, sports journalist and a host of other relevant job experts in the sports-industry.

In view of the shortcomings of this study already discussed in Chapter One, it would be meaningful to suggest that research of this nature should extend its geographical coverage to other States of the Federation so that more subjects of different categories would be available for use. In addition, a similar study could be conducted in other States of the Federation which have similar characteristics to Lagos State in

particular. This would allow for comparison of findings and consequently confirms or refutes the findings of this study.

More importantly, efforts should be geared towards developing a weighting devices and formula as measuring indices for the intervening variables such as age, sex, types of sports, adequacy of facilities and equipment and others already mentioned in chapter one.

However, it must be mentioned that these suggestions may run into problem of logistics, problems of resistance to changes by those concerned and problem of intentional fund starving. Be that as it may, the expected result of good manpower training in sports-coaching should be attainable if these problems were envisaged right from the beginning of the planning and necessary steps were taken to arrest such problems.

On the whole, it was evident that the basic qualifications of the sports-coaches was a strong determinant of their respective qualities. It was evident too that the productivity of sports-coaches was a function of their respective qualities.

BIBLIOGRAPHYBooks

- Ackley, G., Macroeconomics Theory and Policy, Macmillan Pub. Co. New York, 1978.
- Akangbou, S.D., The Economics of Educational Planning in Nigeria, Vikas Pub. House Ltd., Nigeria 1981.
- Anderson, C.A., and Bowman M.J., Education and Economic Development, Frank Cass and Co. Ltd., London, 1966.
- Benson, C.E., Perspective on the Economics of Education: Readings in School Finance and Business Management, Houghton Mifflin Co., Boston, 1863.
- Black, J., and Bradley J.F., Essential Mathematics for Economics, John Wiley and Sons, London 1976.
- Bucher, A., Charles., Administration of Health and Physical Education Programmes Including Athletics, V.C. Mosby Company, New York: 1975.
- Clarke, L., Mathematics One: Heineman Educational Books; London 1970.
- Input-Output Analysis in Public Education. Ballinger Publishing Company, New York, 1975.
- Cohn, E., The Economics of Education, Ballinger Pub. Co. Massachusetts, 1979.
- Coombs, P.H., & Hallak, J., Managing Educational Costs: Oxford University Press, London; 1972.
- Crane, P.D., Personnel: The Management of Human Resources: Wadsworth Publishing Company, Inc., California, 1979.
- Dolly, R.C., Curriculum Improvement: Decision Making and Process, Allyn and Bacon Inc. Boston, 1970.
- Dressel, P.L., Handbook of Academic Evaluation, Jossey-Bass Publishers London, 1979.

- Durell, C.V., General Arithmetic For Schools; G. Bell and Sons Ltd., London 1968.
- Getzels, J.W., Lipham, J.M., and Campbell, F.R., Educational Administration As A Social Process: Theory Research, Practice; Harper and Row Pub., New York, 1968.
- Guralnik, D.B., Webster's New World Dictionary; The World Publishing Company, New York, 1964.
- Glass, G.V., and Hopkins, K.D., Statistical Methods in Education and Psychology; Prentice-Hall, Inc., New Jersey, 1954.
- Hallack, J., Educational Costs and Productivity, Unesco Int. Inst. for Educ. Planning Parris, 1967.
- Hansen, W.L., Total and Private Rates of Return to Investment in Schooling. Bowman M.J., et al (ed.) Reading in Economics of Education, Parris, 1971.
- Hoel, P.G., Introduction to Mathematical Statistics; John Wiley & Sons Inc., New York 1971.
- Hogg, R.V., & Craig, A.T., Introduction to Mathematical Statistics; Macmillan Publishing Co., Inc., New York, 1970.
- Jordan, K., and Alexander K., Futures in School Finance: Working Towards A Common Goal, Phi Delta Kappa Indiana, 1974.
- Lauwerys, J.A., Education and the Economy, Evan Brothers Ltd., London, 1969.
- Loveday, R., Statistics A First Course; Cambridge University Press, Cambridge 1970.
- Manelo, A.S., Resource Distribution Inside School Districts, Mass: Books, Lexington, 1971.
- Mood, M.A., Graybill, F.A., & Boes, D.C., Introduction to the Theory of Statistics; McGraw Hill Inc., Tokyo 1963.
- Morris, V., Investment in Higher Education in England and Wales: The Human Capital Approach to Educational Planning. Fowler G. et al. (ed.) Decision Making in British Education; Heineman. 1973.
- Obe, E.O., Educational Testing in West Africa; Premier Press and Publishers, Lagos, 1980.

- Odhogbi, A.L., Objectives and Curriculum Structure in Nigerian Colleges of Education; Nduka Okoh (ed.) Professional Education, Ethiope Pub. Co., Nigeria, 1983.
- Ozigi, A.O., A Handbook on School Administration and Management. Macmillan Education Ltd., London, 1977.
- Phenix, P.H., Curriculum Philosophy of Education, Holt, Rinehart and Winston Inc. London, 1958.
- Sapiro, E., Macro-Economic Analysis, Harcourt Brace Jonanovian Inc., New York 1978.
- Saylor, G.J., and Alexander W.M., Curriculum Planning for Modern Schools. Holt, Rinehart and Winston Inc., London, 1966.
- Selltiz, C., Wrightsman, L.S. & Cook, S.W., Research Methods in Social Relations; Holt, Rinehart and Winston, New York, 1976.
- Siegel, S., Non-Parametric Statistics For The Behavioural Sciences; McGraw Hill Book Company Inc., New York 1956.
- Thomas, J.A., The Productive School: A System Analysis Approach to Educational Administration; John Wiley & Sons Inc., USA, 1971.
- Tyler, R.W., Introduction To Statistics; Macmillan Publishing Co Inc., New York 1974.
- Walpole, R.E., Introduction To Statistics; Macmillan Publishing Co. Inc., New York 1974.
- Wheeler, D.K., Curriculum Process, Hodder and Stoughton, London, 1967.
- Wood, D., and Fildes, R., Forecasting for Business: Methods and Applications, Longman Group Limited, London, 1976.
- Zymelman, M., Financing and Efficiency in Education; The Nimrod Press, Boston, 1973.

Journals, Monographs and Mimeographs

- Abiola, M.K.O., An Address Delivered at a Dinner Organised by J.K. Nigeria Sunday Punch April 26, 1987.

Adedeji, J.A., Mental Preparation for Sports Events/ Competition Psycho-Up Edited Proceedings of the 2nd National Conference of the Sports Psychology Association of Nigeria; Lagos, 1986.

Self-Reliance and Discipline: A System Approach Towards Sports Development in Nigeria, Proceedings of the National Sports Commission Sports Seminar; Kaduna, 1984.

Adesina, S., and Johnson T.L., Cost-Benefit Analysis of Education in Nigeria, Lagos University Press, Nigeria, 1981.

Ajiduah, A.O., Importance of Scientific Sports Research in the Development of Sports in Nigeria, Proceedings of the National Sports Commission Sports Seminar; Kaduna, 1984.

The Importance of Research and Scientific Coaching in Competitive Sports, Edited Proceedings of the 2nd National Conference of the Sports Psychology Association of Nigeria; Lagos, 1986.

Baikie, A., Role of Higher Institutions of Learning in National Sports Development; Proceedings of the National Sports Commission Sports Seminar; Kaduna, 1984.

Blaug, M., The Private and the Social Returns on Investment in Education; Journal of Human Resources - Summer. 1964.

Bowles, S., Economics of Education; 2 quarterly Journal of Economics, May 1967.

Bowman, M.J., The Human Investment Revolution in Economic Thought; Sociology of Education, vol.39, 1966.

Carnoy, M., Rates of Return to Schooling in Latin America; Journal of Human Resources Vol.2 No.2, 1967.

Durojaiye, M.O.A., Investment in Man; Inagural Lecture Series, Lagos University Press, Nigeria, 1978.

Eben-Spiff, R., Facilities and Training and Competition, Proceedings of the National Sports Commission Sports Seminar, Kaduna, 1984.

Efunkoya, A.A., Hints for Coaches and Officials: Psychological and Medical; Edited Proceedings of the 2nd National Conference of the Sports Psychology Association of Nigeria, Lagos, 1986.

— The Existing Position of Coaches/ Facilities Available to National Associations; Memoranda on Sports Development, September, 1984.

Enaohwo, J.O., Cost-Benefit And the Investment Factor in Education: An Empirical Investigation of the Private Rate of Returns to Education; Journal of Education in Developing Areas Vol.1, No.1, 1982.

Federal Ministry of Education: National Policy on Education; Federal Ministry of Information, Nigeria, 1977.

Halsey, D.K., The Decision to Invest in Vocational Education; An Analysis of Costs and Benefits; Journal of Human Resources 3; Washington, 1965.

Idris, U., Re-appraisal of the National Sports Festival From 1973-1981; Proceedings of the National Sports Commission Sports Seminar, Kaduna; 1984.

Ikulayo, P.B., Coping with the Stress of Sports Competition; Edited Proceedings of the 2nd National Conference of the Sports Psychology Association of Nigeria; Lagos, 1986.

National Institute for Sports, Brochure Academic Sessions. 1985/87 Lagos, 1985.

OECD, Education and Development, Parris, 1944.

Ojo, F., Education and Manpower in Nigeria; Research Bulletin No. 80/01 Lagos University Press, Nigeria, 1980.

Onifade, A., Towards A National Policy For Amateur Sports in Nigeria; Scottish Journal of Physical Education pp. 12-13, 1985.

Otutuloro, B.A., A Keynote Address On the Launching of Lagos State Amateur Sports Association. Lagos 1959.

- Psacharopoulos, G., Rates of Return to Investment in Education Around the World; Comparative Education Review Vol. 16 No. 1, 1972.
- Quadri, W.A., Cost-Effectiveness of The Various Courses Within The Grade II Teacher's Programme in Ogun-State 1976-1980; M.Ed. Thesis Unilag-1983 Lagos.
- Ryan, J., Planning Out-of-School Education for Development; UNESCO Int. Inst. for Educational Planning Parris, 1971.
- Sho-Silva, D.K., The Need for More Coaches at National Sports Commission; Memoranda on Sports Development, September, 1984.
- Thias, H.H., and Carnoy M., Cost-Benefit Analysis in Education: A Case Study of Kenya Int. Bank for Reconstruction and Development; The Manchester School of Economic and Social Studies, Vol. 33, Washington September, 1972.
- University of Lagos; Faculty of Education Brochure 1969/70 Session, University of Lagos Press, 1969.
- Weisbrod, B.A., Education and Investment in Human Capital Journal of Political Economy, Vol. 70, No. 5.
- Woodhall, M., Economic Aspect of Education: A Review of Research in Britain and Windsor, U.K., National Foundation for Educational Research in England and Wales. 1972.

Dailies and Magazines

- Aba, K.E., Good Coach is the Answer, Complete Football Magazine, October 1986:7, Lagos Nigeria.
- Abiola, M.K.O., An address Delivered at a Dinner Organised by J.K. Randle Jr., Sunday Punch April 26, 1987:15, Lagos.
- Adedeji, Sunday, Expatriate Coaches, Complete Football Magazine September 1986:6, Lagos.

Bene, Iyinboh, First-Ever Grade I Dip. Sports Coaching Courses Take-off at the NIS Lagos, Sports Information vol. 2 1982:4, Lagos.

Emmanuel, Kassay, Good Coach is the Answer, Complete Football Magazine, October 1986:7, Lagos.

John, S., NFA takes Bold Step on Foreign Technical Adviser, Guardian November 19, 1986:15, Lagos.

NIS., Academic Sessions 1985/87 Brochure 1985:2, Lagos.

NIS., NIS Products 1976-1981, Sports Information Vol.2 1982:3, Lagos.

NSC, Williams Report on the Commission of Inquiry into the Administration of Sports in Nigeria, Lagos 1983.

NSC, Preparation for Nigeria's Participation at the Los Angeles Olympic Games 1984, Report of the NSC Caretaker Committee, 1984.

Odegbami, Segun, What Pattern: and who Calls the Shot? Complete Football Magazine October 1986:14, Lagos.

APPENDIX "A"QUESTIONNAIRE ON APPROPRIATENESS OF COURSE-
SYLLABUS FOR PHYSICAL EDUCATION ORIENTED
OCCUPATION

Dear Sir/Ma,

This questionnaire is designed to investigate the appropriateness of courses offered in our Universities and the National Institute for Sports (NIS) to the objectives of the programmes which the courses offered are meant to serve. The questions are particularly focusing on Physical Education as an academic discipline.

It is in recognition of the uniqueness of physical education as a "specialist subject" that your expertise has been sought to grade the courses accordingly.

I appeal for your sincere cooperation.

Thank you sir/ma.

Segun Quadri
Ph.D. Candidate
Postgraduate School
Dept. of Physical & Health Education
University of Lagos.

Instruction:

Kindly award a mark between 1 and 3 to the courses in order of degree of appropriateness to the stated objectives.

3 is for Very Appropriate

2 is for Appropriate

1 is for Not Appropriate.

Write each mark awarded in the corresponding box to the course and the objective.

STATEMENTS OF OBJECTIVES

COURSE-SYLLABUS	To train as a sport coach	To train as a physical education teacher	To train as a physical education expert
(a) Human Anatomy			
(b) Psychology of Coaching			
(c) Sport Administration and Management			
(d) Principles and Practice of Training and Conditioning			
(e) Sport Facilities, Equipment and Supplies			
(f) Principles and Methods of Coaching			
(g) Sociology of Sport			
(h) Theory of Training and Conditioning in Sport			
(i) Exercise Physiology			
(j) Test and Measurement in Sport			
(k) Biomechanics			
(l) Coaching Practicum/Internship			
(m) Laboratory Experience			
(n) Rules of Sports and Officiating			
(o) Game Strategies			
(p) Practice of Theories of Sports e.g. Hockey Basket ball, Volley ball etc.			
(q) Teaching Practice/Practicum			
(r) Theory of Teaching			

STATEMENTS OF OBJECTIVESCOURSE-SYLLABUS

	To train as a sport coach	To train as a physical education teacher	To train as a physical educa- tion expert
(s) Psychology of Teaching			
(t) Child's Development			
(u) History of Education			
(v) Psychology of the Child			
(w) Movement Education			
(x) Methods of Teaching			
(y) Physical Education in Primary and Secondary Schools.			

APPENDIX "B"QUESTIONNAIRE ON QUALITY OF SPORT COACHES

Please put a ☐ in the box corresponding to the qualification you have.

1. GCE/WASC/Tr. Grade II Cert./and below ☐
- NCE/Dip. Cert. in P.E. ☐
- B.Sc./B.A. ☐
- M.A./M.Sc./M.Ed./Ph.D. ☐
2. GRD. III Coaching Cert. and below ☐
- GRD. II Coaching Cert. ☐
- GRD. I Coaching Cert. ☐
- Any other Higher Coaching Cert. ☐

How relevant are the following courses to sport-coaching as a profession. Please put a tick ☐ in the appropriate box.

3. (a) Human Anatomy.
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (b) Psychology of Coaching
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (c) Sport Administration and Management
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐

- (l) Coaching Practicum/Internship
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (m) Laboratory Experience
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (n) Rules of Sports and Officiating
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (o) Game Strategies
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (p) Practice of Theories of Sports, e.g.
 Hockey Basketball, Volley ball etc.
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (q) Teaching Practice/Practicum
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (r) Theory of Teaching
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐
- (s) Psychology of Teaching
 Relevant ☐ Not Relevant ☐
 Very Relevant ☐

(t) Child's Development

Relevant ☐ Not Relevant ☐Very Relevant ☐

(u) History of Education

Relevant ☐ Not Relevant ☐Very Relevant ☐

(v) Psychology of the Child

Relevant ☐ Not Relevant ☐Very Relevant ☐

(w) Biomechanics

Relevant ☐ Not Relevant ☐Very Relevant ☐

(x) Movement Education

Relevant ☐ Not Relevant ☐Very Relevant ☐

(y) Methods of Teaching

Relevant ☐ Not Relevant ☐Very Relevant ☐

(z) Physical Education in Primary and Secondary Schools

Relevant ☐ Not Relevant ☐Very Relevant ☐

(a) Psychology of the

Child's Development

Which of these courses did you offer during your course of training? Please put a tick ☐ in the box provided before each item.

4. (a) Human Anatomy ☐
- (b) Psychology of Coaching ☐
- (c) Sport Administration and Management ☐
- (d) Principles and Practice of Training and Conditioning ☐
- (e) Sport Facilities, Equipment and Supplies ☐
- (f) Principles and Methods of Coaching ☐
- (g) Sociology of Sport ☐
- (h) Theory of Training and Conditioning in Sports ☐
- (i) Exercise Physiology ☐
- (j) Test and Measurement in Sport ☐
- (k) Biomechanics ☐
- (l) Coaching Practicum/Internship ☐
- (m) Laboratory Experience ☐
- (n) Rules of Sports and Officiating ☐
- (o) Game Strategies ☐
- (p) Practice of Theories of Sports ☐
- (q) Teaching Practicum/Practice ☐
- (r) Theory of Teaching ☐
- (s) Psychology of Teaching ☐
- (t) Child's Development ☐

- (u) History of Education ☐
- (v) Psychology of the Child ☐
- (w) Kinesiology ☐
- (x) Movement Education ☐
- (y) Methods of Teaching ☐
- (z) Physical Education in Primary and Secondary Schools ☐

5. How will you rate the facilities and equipment available for use during the course of training? Please put a tick ☐ in the appropriate box.

Adequate ☐ Not Adequate ☐ Very Adequate ☐

6. How will you rate the effectiveness of the facilities and equipment during your course of training?

Effective ☐ Not Effective ☐

Very Effective ☐

7. How will you rate the qualification of your lecturers/trainers during your course of training?

Qualified ☐ Not Qualified ☐

Highly Qualified ☐

Plaster for the first year. ☐

APPENDIX "C"

QUESTIONNAIRE ON PRODUCTION COST OF PHYSICAL
EDUCATION GRADUATES IN THE UNIVERSITY AND THE
NATIONAL INSTITUTE FOR SPORTS (NIS)

Dear Students,

This questionnaire is to find out from you certain information about the cost of your education. A sincere appeal is hereby made to you rely on any of your friends views to determine answers to the questions.

Kindly read through the questionnaire before you attempt to answer the questions. A choice of answers has been provided for you to pick one which is appropriate or nearly appropriate.

You need to put a tick ☐ only in the corresponding box to the appropriate answer.

Thank you.

Yours,

Segun Quadri.

INSTRUCTION: Put a tick in the box corresponding to your choice of answer.

Feeding:

I have always spent on food

(a) an average of 3.00 daily ☐

(b) an average of ₦5.00 daily ☐

(c) above ₦5.00 daily ☐

Accommodation:

I am accommodated in the student hostel

(a) as a squarter for the 1 - 2 years ☐

(b) as a squarter for 3 - 4 years ☐

- (c) as a squatter for 4 years and above ☐
- (d) as a legal tenant for 1 - 2 years ☐
- as a legal tenant for 3 years ☐
- as a legal tenant for 4 years and above ☐

Transportation:

I have always come from home for lectures

- (a) It is preferable ☐
- (b) It is not preferable ☐

I have always spent

- (a) a maximum of N2.00 for transport daily ☐
- (b) a maximum of N5.00 for transport daily ☐
- (c) a above of N5.00 for transport daily ☐

Books:

I have always spent on book and handouts

- (a) an average of N200.00 per session ☐
- (b) an average of N350.00 per session ☐
- (c) above N500.00 per session ☐

Other Equipment:

I have always spent on laboratory equipment or sport equipment

- (a) an average of N200.00 per session ☐
- (b) an average of N350.00 per session ☐
- (c) above N500.00 per session ☐

Examination Passed:

My last examination passed before I was admitted into this University/HIS

(a) * was West African School Certificate Examination ☐

(b) was HSC/NCE Examination ☐

(c) was a Diploma Examination ☐

Forgone - Income:

I was an officer on Grade level when I was a worker

(a) Grade level 05 - 07 ☐

(b) Grade level 08 - 09 ☐

(c) Grade level 10 and above ☐

Suppose you had got a job, what grade level of salary would you be placed now

(a) Grade level 05 - 07 ☐

(b) Grade level 08 - 09 ☐

(c) Grade level 10 and above ☐

Duration of Course:

What was the duration of the last course you attended

(a) 1 - 12 months ☐

(b) 1 - 30 months ☐

(c) 1 - 48 months ☐

What is the duration of the present course or programme

(a) 1 - 12 ☐

(b) 1 - 36 ☐

(c) 1 - 48 ☐

Basic Qualification:

My basic and professional qualification was

(a) West African School Certificate/GCE/
Tr. Grade II Certificate ☐

(b) HSC ☐

(c) NCE ☐

Sex:

(a) Male ☐

(b) Female ☐

Age:

(a) I am between 20-25 years old ☐

(b) I am between 25-30 years old ☐

(c) I am between 30-35 years old ☐

QUESTIONNAIRE ON PERFORMANCE RATING OF
SPORT-COACHES

1. Please put a tick () in the box corresponding to the qualification(s) you possess.

- (A) (a) Grade III Coaching Certificate ☐
 (b) Grade II Coaching Certificate ☐
 (c) Grade I Coaching Certificate ☐
 (d) Any other Higher Coaching Certificate ☐
 (B) (a) GCE/WASC/TR. GRD. II Certificate and below ☐
 (b) NCE/Dip. Certificate in Physical Education ☐
 (c) B.Sc./B.A. in Physical Education ☐
 (d) M.A./M.Sc./M.Ed./Ph.D. ☐

2. How old is the coach?.....

3. What is the sex of the coach?.....

4. What year did he/she start to coach?...

5. What sport does he/she coach?.....

6. How often did he/she produce a national athlete in the past five years. (Please put a tick () in the appropriate box).

Outstanding ☐ Good ☐ Unsatisfactory ☐

7. How often did he/she go on national assignment in the last five years?

Outstanding ☐ Good ☐ Unsatisfactory ☐

8. How often did he/she go on international assignments in the last five years?

Outstanding ☐ Good ☐

Unsatisfactory ☐

9. How often did he/she produce an international athlete in the last five years?

Outstanding ☐ Good ☐

Unsatisfactory ☐

10. How often did he/she produce a gold medal team in the last five years?

Outstanding ☐ Good ☐

Unsatisfactory ☐

11. How often did he/she produce a silver medal team in the last five years?

Outstanding ☐ Good ☐

Unsatisfactory ☐

12. How often did he/she produce a bronze medal team in the last five years?

Outstanding ☐ Good ☐

Unsatisfactory ☐