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Private Monetary Rates of Return to Humanities and Education Programs in Public Universities in Osun State, Nigeria

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***Abstract*—**This study estimates the private cost of Humanities and Education programs in public universities in Osun state, Nigeria, as well as the private monetary returns to Humanities and Education programs in public universities in the state. It also estimates the private rates of return to Humanities and Education programmes in public universities in Osun state; with the view of providing information on the relative profitability of investments in Humanities and Education programs in public universities in Osun state. The study adopted a descriptive survey research design. The population for the study consisted of all Humanities and Education students from public universities in Osun State and all Humanities and Education graduates who are workers in Osun state establishments. The sample was made up of 600 students and 120 workers. The students were selected through simple random sampling technique from the two public universities in the state while the workers were purposively selected from Osun state establishments. These workers were graduates of Humanities and Education programs. The selected programs included Bachelor of Arts (B.A.) in English, Bachelor of Education (B.Ed.) in English, B.A. in Religious Studies, B.Ed. in Religious Studies, B.A. in Yoruba and B.Ed. in Yoruba. Two research instruments were used, namely: Private Costs of University Education Questionnaire (PCUEQ) and Age Education Earnings of Workers Questionnaire (AEEWQ). The data were analyzed using compounding and discount cash flow techniques. The results showed that the private costs of Humanities and Education programs in public universities in Osun state were N855,935.59 and N694,269.34 respectively. The private monetary returns to Humanities and Education programs in public universities in the State were N9,052,859.28 and N9,052,859.28, respectively. The private rates of return to Humanities and Education programmes in public universities in Osun state were 27.36% and 34.40% respectively. The study concluded that it was more profitable to invest in Education programs than in Humanities programs at public universities in Osun state, Nigeria.

***Keywords*—**Rates of return, private cost, investment, education.

I. Introduction

SINCE 1960, education has been seen as a project an investor puts all his capital into to make profit. Fortunately, education is an investment that yields returns in the future. The level of education of an individual and his choice of a program at the university would determine how much he would earn in his lifetime. Given that monetary rewards are not the only factors affecting a person's educational choice, it is still reasonable to believe that its financial returns can influence the choice an individual makes for a particular program. Notably, an individual would prefer to study a program that would yield the highest returns than bother much about satisfying some 'non-substantial' needs [1]. Thus, the measure for most considerable interest to an individual is most likely to be the private rates of return (RoR). The private RoR in this context considers only the costs that are borne and the benefits that accrue solely to the individual.

The RoR analysis is most frequently applied to education. RoR provides a means of appraising future benefits in the light of the costs that must be incurred in the present [2], and therefore, forms one of the significant techniques of planning education. The RoR analysis of educational ventures can be defined as the measurement of the future benefits of an educational level, course or discipline when viewed against the cost of that educational level [3]. RoR analysis is fundamental because it recognizes that expenditures that go into education that become an investment which is capable of yielding returns in the future. However, it has been observed that the choice of courses in varsities for most individuals is determined by the financial benefits in the future. On the contrary, many students choose to study courses in the university from other alternatives without having a fore-knowledge of which of the courses would yield a higher return. Soppe et al. [4], therefore, emphasized an evaluation of each of the existing alternatives before a choice is made. Furthermore, RoR analysis and cost-benefit analysis are closely related; sometimes, they are used interchangeably. While cost-benefit analysis relates solely to business ventures, RoR analysis applies more to schooling when viewed from the investment perspective. It should also be noted that while costs are borne at the current time, benefits are derived in the future, which may be longer than the expected yield-time of other investments.

Higher education is an investment which is supposed to yield profits to both individuals and the government. Decisions on which programs to study at the university usually rest on uncomputed and unscientific information or mere hearsays. Moreover, people tend to generalize the profitability of the investment in a particular program based on the pockets of one or two graduates which might just be coincidental.

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It has been observed that most Nigerian university students do not willingly choose to obtain degrees from the Faculty of Education, but usually find themselves there by chance. These students choose to study in the Faculty of Humanities, than to study in the Faculty of Education; but when they are denied admission, they resort to other faculties, like the Faculty of Education as an option. However, such requests are not sometimes treated favourably, thereby making the candidate to miss the admission in that particular year. If he/she chooses a course from the Faculty of Education (his/her first choice perhaps), he might not have missed the admission. Nevertheless, there are no quantitative data to support his/her choice in the first instance; there are no data to show the monetary profitability of studying in the two faculties. Private RoR analysis, therefore, opens up a scientific basis for the choices of applicants of Humanities and Education programs if they care about monetary benefits.

Students and parents– among other investors– often clamour more for courses in Humanities than in Education in public universities in Osun state, as recorded by The Admissions Officer of Obafemi Awolowo University (OAU). Most university applicants prefer the Faculty of Humanities to the Faculty of Education, that is, they prefer to study B.A. in English than to study B.Ed. in English and to study B.A. in Religious Studies than B.Ed. in Religious Studies. OAU Unified Tertiary Matriculation Examination (UTME) statistics of applicants for 2016/2017 session [17] showed that while 1,017 students applied for B. A. English, only 298 students applied for B. Ed English. Notwithstanding, 54students applied for Yoruba, while 24students applied for Yoruba Education.

Suffice it to say, their insistence on Humanities might not be unconnected with perceived higher pecuniary and perhaps non-pecuniary benefits of Humanities programs over Education programs in such universities; an idea which is not based on any scientific evidence. This has led to a high rate of requests to change programs from Education to Humanities in spite of, at times, higher cut-off marks required for Humanities programs. Therefore, there was the need to compute the private costs of training of students in the Faculties of Education and Humanities in public universities in Osun state. There was also the need to compute the pecuniary benefits accrued to Humanities and Education graduates in public universities in Osun state. These are intending to compute the profitabilities of investment in both faculties, and assist in rational decisions on the choice of either of the faculties.

In a nutshell, there was the need to measure in quantitative terms the profitability of investment in Humanities and Education programmes in public universities in Osun State.

II. Literature Review

Education economists have described education to operate within the context of consumption and investment. Some scholars believe that education is a good that can be consumed once, and as for others, they see it as an investment for the future. Since the beginning of the 20th century, education has been widely embraced as an economic good for investment [5]. Therefore, education could be described as an investment because the choice of investment in education demands the loss of alternative opportunities. Investing in business could be an alternative forgone when an individual decides to invest in education.

A. Cost of Education

Education is an economic activity because resources must be expended to achieve it. These resources could be money, human, material, and even some alternatives forgone [6]. As observed in [7], the resources equally mean the cost that can be forfeited to attain a particular objective. Nonetheless, the resources in context are measured in monetary terms to determine the required amount payable to obtain products and services [15], [16]. Education is a money-gulping venture that does not yield immediate returns as in investing in a business. Consequently, governments in all nations– as well as parents and students– give up a lot of scarce resources for education. According to [8], the cost of education is what we give up to educate people in schools. Durosaro [9] described education cost as synonymous with educational expenditure. He said the cost of education is defined as the real resources used in the production of educational capital asset in the form of the educated student. Baker [10] noted that educational cost is the real resources used up in the production of all human assets, and the private cost is one of the components of educational cost. Durosaro [6] went further to show these components diagrammatically.

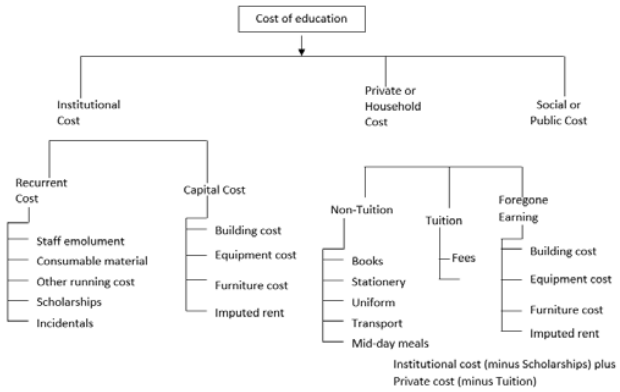

Fig. 1 Structure of Education Cost [6]

Fig. 1 shows that the burden of the cost of education is usually shared into three components. They are as follows:

(a) Institutional cost
(b) Private or Household cost
(c) Public or Social cost

Institutional cost refers to that aspect of the cost of education that is being borne by educational institutions (i.e. schools) in order to fulfil the goals and objectives that has been documented in the National Policy of Education. The private or household costs are the costs that are being incurred directly by the student or his household members. Examples of private or household cost include: tuition fee, non-tuition fee, educational expenditures like the purchase of books and

stationeries, school uniform fees, transportation fees (to and from school), mid-day meal fees and any other fees paid by the student or family members as a result of getting educated. Lastly, the social or public cost of education is what is spent on education by the society or government

B. Benefits of Education

Education produces both monetary and non-monetary benefits to students and the society at large. Adelokun et al. [11] identified the benefits of education in the famous "Seven-Point-Analysis of Benefits of Education. They are:

i. *Direct Financial Returns:* It shows that there is a positive relationship between education and earnings or salaries. There is a positive impact which education has on the earning power of graduates in education. All things being equal, more education means more earnings if the appropriate education is received. The direct financial returns to education, therefore, is a powerful motive for attending formal education.
ii. *Financial Option:* Formal education brings about an increase in opportunities for university graduates. Every higher education received in a sane society usually increase the skills of the graduate, thereby increasing his job opportunities.
iii. *Hedging Option:* The hedging option refers to the time, energy and money which the recipient of education can save as a result of his education [11]. Many educated people can afford equipment and machines that will make life more comfortable for them in their homes and offices. Their earnings and their level of exposure usually allow them to buy machines and also give them the 'know-how' of operating the machines. For instance, an educated person who has a washing machine will be able to spend quality time on other productive activities while using the machine.
iv. *Non-market Option:* This refers to the skills that are acquired through formal education which facilitate the "do-it-yourself" approach to many tasks. When a university graduate fills an application form to renew his vehicle licence, or when he helps his children with their homework, he is enjoying the non-market option benefit of education.
v. *Residence-related Beneficiaries:* This type of benefit is also called spill-over benefit. The university graduate does not enjoy the residence-related benefit; instead, this benefit is enjoyed by his family members, neighbours, friends and relations. In some countries, especially in African countries, both nuclear and extended family members depend on university graduates and therefore benefit from their education; which is why when a university graduate gives cash gifts to his/her family members, it is called residence-related benefits.
vi. *Employment-related Beneficiaries:* These are the benefits enjoyed by the graduate's employer, colleagues and the organization he works in. In the workplace, the education of a worker has a positive impact on his productivity and the productivity level of his colleagues at work. Education imparts appropriate skills in students which facilitate their productivity after graduation. This, in turn, implies higher returns to him and the work-environment at large.
vii. *Societal Benefits:* These are the benefits enjoyed by the society at large. The government of every country and even international bodies benefit from the education of individuals. Many university graduates make contributions to the growth and development of their societies, countries and international bodies as a result of their university education and the kind of exposure university education gives to them. Therefore, an educated citizen is a prerequisite for economic growth and development.

When the RoR to programs under investigation are calculated, educational stakeholders will be able to determine whether there is a higher or lower rate of return to the programs. A more rational and logical decision will be made by the student or parent, based on the information about the RoR. The costs of being trained in the faculties or programs will be calculated. The benefits to be derived will also be calculated. The RoR can be calculated based on the cost and the benefits to be derived from being trained in the faculties or departments. The fact that a program has a more significant benefit compared to another program does not mean that the program will have a higher rate of return. The benefits must be compared with the costs before a decision can be made on the profitability of the programs. A program with less monetary benefit can be more profitable if when the cost of being trained is subtracted from the benefit. The result is higher than the program with more significant benefit. However, it has a high cost of training, thereby making the profitability lower. In the same vein, the fact that a man is earning more salary does not mean that there is a higher rate of return on his university training because it is possible that he spent more money during his training in the university. This is the reason why costs and benefits are the significant determinants of monetary RoR to programs in the university.

III. Research Questions

The following research questions were raised to guide the study:

a) What are the private costs of Humanities and Education programs in public universities in Osun State, Nigeria?
b) What are the private monetary returns to Humanities and Education programs in public universities in Osun State, Nigeria?
c) What are the private monetary RoR to Humanities and Education programs in public universities in Osun State, Nigeria?

IV. Aim of the Study

This study is aimed at estimating the private monetary RoR to Humanities and Education programs in Osun state, Nigeria, quantitatively. In order to do this, the study investigated the private cost of programs in the two faculties. The private benefit to both forms of investment was calculated, and from

these two sets of data, a private rate of return to each faculty was derived. This study also provides a suitable basis for the choice of programs in either faculty if the objective of the student is to enjoy the maximum financial benefit.

V. Scope of the Study

The study aims at computing the current costs and the future benefits of studying programs in the faculties of Humanities and Education. Moreover, from this, the private RoR were also computed. Cost variant that was used is the quantifiable monetary cost. The benefits were mainly the monetary ones, but the study is also aware of the non-monetary benefits, which can be derived from the programs under investigation. The cost estimates were collected from students in OAU, Ile-Ife and Osun State University, Osogbo. The benefit estimates were collected from workers who have obtained university degrees from the faculties under investigation, and who work in Osun State establishments. The computed benefits were salaries and not earnings. This is because earning might be too encompassing for computing to be made, and are likely to change at different times. Using earnings might mean using figures which are subject to certain inconsistencies, thus reducing the reliability of the data. The use of workers in the public sector as respondents, therefore, became imperative.

VI. Methodology

The population of the study was categorized into two, namely: students population and workers population. The students' population comprised all students of the faculties of Humanities and Education at Osun State University, Osogbo and OAU, Ile-Ife, Osun state.

The workers' population for the study also comprised all the workers in public establishments in Osun state who are graduates of programs in the Faculties of Humanities and Education which are spread across the 30Local Government Areas in the state.

The sample comprises 600 students in public universities in Osun State and 120 workers who work in public establishments in the state where 100 students were selected from each of the following programmes: B.A. English, B.Ed. English, B.A. Religious Studies, B.Ed. Religious Studies, B.A. Yoruba and B.Ed. Yoruba, and 20 graduates of the programs each, were selected using the purposive sampling technique. The programs under investigation were chosen because English, Religious Studies and Yoruba are programs common to both faculties. Data on cost were gathered from the administered PCUEQ, while benefits were gathered from the administered AEEWQ using a cross-sectional approach. Costs of education were gathered at various levels of part one to four for the programmes under investigation in the two faculties

From the lists of students in B.A. English, B.Ed. English, B.A. Religious Studies, B.Ed. Religious Studies, B.A. Yoruba and B.Ed. Yoruba, 100 students were selected from all programs in the two public universities in Osun State. They were selected using the random sampling technique by picking from a box containing 'Yes' and 'No' options. The institutional sample of workers' establishments for the investigation was selected from public establishments in the state. A total of 120 graduates of the programs under investigation were sampled, making it 20 graduates per programme. The study adopted an equal number of workers for all the programs. The public establishments were used because of the same salary structure being used throughout the state. The purposive sampling technique was used to select the sample frame.

The instruments used in the study were questionnaires titled PCUEQ and AEEWQ which were adopted from [1]. The private costs were calculated using the estimates in the PCUEQ for each of the levels in the universities. The private costs were further computed, using the compounding technique. The formula is found in Appendix I. The costs had to be compounded because they are spread over four years and because money has a time value.

In computing the benefits of programs in the two faculties, the future stream of incomes even though they represented current salaries from the AEEWQ and Osun state salary scale, were also discounted using the Discount Cash Flow Technique as seen in Appendix II. This had to be done because the rate of interest is not zero, and because money has net productivity over time [12]. The benefits were computed pre and post-tax. The private RoR were subsequently based on the post-tax figures. The cost and benefits were calculated; the results were compounded and discounted respectively. An alpha coefficient of 0.67 (Dennison's Alpha) was further used to multiply the discounted benefits in order to cater for such factors as ability, family background, mortality rate, unemployment and depreciation rate as well as 'luck' [13], [14]. The private monetary RoR to Humanities and Education programs were therefore computed using the formula for private computing RoR, as shown in Appendix III.

VII. Results and Discussion

A. What Are the Private Costs of Humanities and Education Programs in Public Universities in Osun State, Nigeria?

To answer this research question, the private cost of education programs in public universities in Osun State was obtained through PCUEQ in the two public universities in Osun State. They were computed as shown in Table I.

TABLE I
Private Cost of Education Programmes in Public Universities in Osun State (2016/2017 – 2017/2020)

Level	N	CMPC	AMPC	MPI	TPC
100	82	198,256.00	309,457.00	21,915	287,542.00
200	89	146,621.00	197,293.22	39,864	157,429.22
300	62	150,007.00	174,008.12	43,341	130,667.12
400	67	158,860.00	158,860.00	40,229	118,631.00
Total	300	653,744.00	839,618.34	145,349.00	694,269.34

Source: PCUEQ
N – Number of Respondents; CMPC – Crude Mean Private Costs; AMPC – Actual Mean Private Costs; MPI – Mean Personal Income; TPC – Total Private Costs.

Table I shows the private cost of Education programs in public universities in Osun State. The cost of N 653,744.00 was incurred as CMPC, N839,618.34 for AMPC, i.e. compounded cost, N145,349.00 for MPI and TPC incurred during the years was N7694,269.34. The Compounding cost formula: A[1+r]n was used to calculate the Actual Mean Costs; where r = 16% = 16/100 = 0.16. The cost for 400 level was not compounded because the students were in 400 level when the research was conducted. This is the reason why the CMPC is the same as the AMPC for 400 level.

The private cost of Humanities programs in public universities in Osun state was obtained from the Private Cost of University Education Questionnaire (PCUEQ) in the two public universities in Osun State, as shown in Table II.

TABLE II
PRIVATE COST OF HUMANITIES PROGRAMMES IN PUBLIC UNIVERSITIES IN OSUN STATE (2016/2017 – 2017/2020)

Level	N	CMPC	AMPC	MPI	TPC
100	82	220,519.00	344,207.23	20,896	323,311.23
200	89	179,853.00	242,010.20	25,334	216,676.20
300	62	170,051.00	197,259.16	33,132	164,127.16
400	67	189,754.00	189,754.00	37,933	151,821.00
Total	**300**	**760,177.00**	**973,230.59**	**117,295.00**	**855,935.59**

Source: PCUEQ
N – Number of Respondents

Table II shows the CMPC, AMPC, MPI and TPC as N760,177.00, N973,230.59, N117,295.00 and N855,935.59 respectively.

In comparing Tables I and II, the total cost of Humanities programs is higher than the cost of Education programmes.

B. Research Question 2: What Are the Private Monetary Returns to Humanities and Education Programs in Public Universities in Osun state?

Table III presents the Age-Education Earnings Profiles of university Humanities Graduates in Osun State establishments. Table IV presents the Age-Education Earnings Profiles of University Education Graduates in Osun State establishments.

Tables III and IV present the earnings profile for Humanities and Education graduates in Osun state between ages 23 and 57 years in public establishments (taking the average age of completion of training as 22 years).

The benefits to Humanities and Education graduates in public universities in Osun state were computed from the Age-Education Earning of Workers Questionnaire (AEEWQ) and Osun state salary scale. It was found that in Osun state, both graduates of Education and Humanities earn the same basic salaries. However, the special allowances received by graduates of Education is more than the allowances received by graduates of Humanities. For this study, only their basic salaries were used for the computation of the benefits accrued to graduates of both faculties. The figures were then compiled under the Age Education Earnings Profile Tables III and IV, for each of Humanities and Education graduates. While, for instance, an average graduate of both faculties earns a total of N16,041,218.05 as salary throughout their work-life (i.e. from 23 to 57 years of age), their tax totalled is N367,610.94. At the same time, their post-tax earnings amounted to N15,673,607.11. In order to care for the time productivity of money, the post-tax earnings were discounted in column 5 using A(1/(1+r)n). The discounted incomes are shown in column 5 of Tables III and IV. Total discounted earning for both categories of graduates equals N13,511,730.27. These earnings were further adjusted for factors other than education which could account for such earnings such as sickness, death, natural disaster, unemployment etc. This is referred to as Denison Alpha Coefficient [5]. This was computed as N9,052,859.28.

TABLE III
AGE EDUCATION EARNINGS PROFILE: UNIVERSITY HUMANITIES GRADUATES

Age	Annual Basic Salary	Tax	Post-tax	Discounted Earnings	Earnings Adjusted with Den.
22	254,874.25	5,840.86	249,033.39	214,683.95	143,838.25
23	263,754.20	6,044.36	257,709.84	222,163.65	148,849.65
24	272,634.15	6,247.86	266,386.29	229,643.35	153,861.05
25	281,514.10	6,451.36	275,062.74	237,123.05	158,872.44
26	290,394.05	6,654.86	283,739.19	244,602.75	163,883.84
27	299,274.00	6,858.36	292,415.64	252,082.45	168,895.24
28	300,419.45	6,884.61	293,534.84	253,047.28	169,541.68
29	310,993.55	7,126.93	303,866.62	261,953.98	175,509.17
30	332,141.75	7,611.58	324,530.17	279,767.39	187,444.15
31	342,715.85	7,853.90	334,861.95	288,674.10	193,411.64
32	353,289.95	8,096.22	345,193.73	297,580.80	199,379.14
33	353,679.00	8,105.14	345,573.86	297,908.50	199,598.70
34	355,305.55	8,142.41	347,163.14	299,278.57	200,516.64
35	376,932.10	8,638.02	368,294.08	317,494.90	212,721.58
36	388,558.65	8,904.46	379,654.19	327,288.09	219,283.02
37	400,185.20	9,170.90	391,014.30	337,081.29	225,844.46
38	408,023.55	9,350.53	398,673.02	343,683.64	230,268.04
39	426,059.35	9,763.85	416,295.50	358,875.43	240,446.54
40	444,095.15	10,177.17	433,917.98	374,067.22	250,625.04
41	456,175.85	10,454.02	445,721.83	384,242.96	257,442.78
42	475,245.50	10,891.03	464,354.47	400,305.57	268,204.73
43	494,315.15	11,328.05	482,987.10	416,368.19	278,966.69
44	504,552.90	11,562.66	492,990.24	424,991.59	284,744.36
45	514,746.70	11,796.27	502,950.43	433,577.96	290,497.23
46	518,402.30	11,880.04	506,522.26	436,657.12	292,560.27
47	546,071.50	12,514.13	533,557.37	459,963.25	308,175.38
48	573,740.70	13,148.21	560,592.49	483,269.38	323,790.49
49	577,994.30	13,245.69	564,748.61	486,852.25	326,191.01
50	609,393.20	13,965.25	595,427.95	513,299.96	343,910.97
51	640,792.10	14,684.81	626,107.29	539,747.67	361,630.94
52	672,191.00	15,404.36	656,786.64	566,195.38	379,350.90
53	703,589.90	16,123.92	687,465.98	592,643.08	397,070.87
54	734,988.80	16,843.48	718,145.32	619,090.79	414,790.83
55	766,387.70	17,563.04	748,824.66	645,538.50	432,510.80
56	797,786.60	18,282.59	779,504.01	671,986.21	450,230.76
Total	**16,041,218.05**	**367,610.94**	**15,673,607.11**	**13,511,730.27**	**9,052,859.28**

C. Research Question 3: What Are the Private Rate of Returns to Humanities and Education Programs in Public Universities in Osun State, Nigeria?

$$PRoR = 1/n\ [(B-C)/C \times 100/1] \quad (1)$$

where B = sum of the benefits, *PRoR* = Private Rate of Returns, C = Total Costs, n = No. of years (work-life). Therefore, the *PRoR* to Education programs in public universities in Osun State, Nigeria, is:

PRoR = 1/35[(9,052,859.28-694,269.34)/694,269.34 x 100/1]
PRoR= **34.40%**

The *PRoR* to Humanities programs in public universities in Osun State, Nigeria, is PRoR = 1/35[(9,052,859.28 – 855,935.59)/ 855,935.59 x 100/1]

PRoR= **27.36%**

TABLE IV
AGE EDUCATION EARNINGS PROFILE: UNIVERSITY EDUCATION GRADUATES

Age	Annual Basic Salary	Tax	Post-tax	Discounted Earnings	Earnings Adjusted with Den.
22	254,874.25	5,840.86	249,033.39	214,683.95	143,838.25
23	263,754.20	6,044.36	257,709.84	222,163.65	148,849.65
24	272,634.15	6,247.86	266,386.29	229,643.35	153,861.05
25	281,514.10	6,451.36	275,062.74	237,123.05	158,872.44
26	290,394.05	6,654.86	283,739.19	244,602.75	163,883.84
27	299,274.00	6,858.36	292,415.64	252,082.45	168,895.24
28	300,419.45	6,884.61	293,534.84	253,047.28	169,541.68
29	310,993.55	7,126.93	303,866.62	261,953.98	175,509.17
30	332,141.75	7,611.58	324,530.17	279,767.39	187,444.15
31	342,715.85	7,853.90	334,861.95	288,674.10	193,411.64
32	353,289.95	8,096.22	345,193.73	297,580.80	199,379.14
33	353,679.00	8,105.14	345,573.86	297,908.50	199,598.70
34	355,305.55	8,142.41	347,163.14	299,278.57	200,516.64
35	376,932.10	8,638.02	368,294.08	317,494.90	212,721.58
36	388,558.65	8,904.46	379,654.19	327,288.09	219,283.02
37	400,185.20	9,170.90	391,014.30	337,081.29	225,844.46
38	408,023.55	9,350.53	398,673.02	343,683.64	230,268.04
39	426,059.35	9,763.85	416,295.50	358,875.43	240,446.54
40	444,095.15	10,177.17	433,917.98	374,067.22	250,625.04
41	456,175.85	10,454.02	445,721.83	384,242.96	257,442.78
42	475,245.50	10,891.03	464,354.47	400,305.57	268,204.73
43	494,315.15	11,328.05	482,987.10	416,368.19	278,966.69
44	504,552.90	11,562.66	492,990.24	424,991.59	284,744.36
45	514,746.70	11,796.27	502,950.43	433,577.96	290,497.23
46	518,402.30	11,880.04	506,522.26	436,657.12	292,560.27
47	546,071.50	12,514.13	533,557.37	459,963.25	308,175.38
48	573,740.70	13,148.21	560,592.49	483,269.38	323,790.49
49	577,994.30	13,245.69	564,748.61	486,852.25	326,191.01
50	609,393.20	13,965.25	595,427.95	513,299.96	343,910.97
51	640,792.10	14,684.81	626,107.29	539,747.67	361,630.94
52	672,191.00	15,404.36	656,786.64	566,195.38	379,350.90
53	703,589.90	16,123.92	687,465.98	592,643.08	397,070.87
54	734,988.80	16,843.48	718,145.32	619,090.79	414,790.83
55	766,387.70	17,563.04	748,824.66	645,538.50	432,510.80
56	797,786.60	18,282.59	779,504.01	671,986.21	450,230.76
Total	**16,041,218.05**	**367,610.94**	**15,673,607.11**	**13,511,730.27**	**9,052,859.28**

VIII. DISCUSSION

The results of this study showed that:TPC of Education programs in public universities in Osun state, Nigeria was N694,269.34. TPC of Humanities program in public universities in Osun State, Nigeria was N 855,935.59. An average graduate from the Faculty of Education earns a total of N9,052,859.28 as salary throughout his work life (23-57 years). An average graduate from the Faculty of Humanities earns N9,052,859.28 as salary throughout his work life (23-57 years).

The Private Rate of Return (*PRoR*) to Education programs in public universities in Osun State was 34.40%. The *PRoR* to Humanities programs in public universities in Osun State was 27.36%. The *PRoR* to education is higher than that of Humanities in public universities in Osun state when estimated from a public service perspective.

IX. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

i. Prospective students of Education and Humanities in public universities in Osun state, Nigeria, should be encouraged through sensitization to pursue programs in the faculty of Education because of its higher *PRoR*.
ii. The state government should award scholarships and bursary awards to undergraduate students in order to reduce the costs incurred by Education and Humanities students, and by consequence, increase their returns.
iii. Students should be encouraged to secure paid jobs while in school during long vacations in order to reduce the financial burdens on their parents, and by implication, reducing their cost of education. This could be done in the form of work-study programs which would give room for rendering services for remuneration within the University system during school sessions.
iv. It is recommended that experts in educational planning work out a strategy for a better co-efficient aside the already existing Dennison Alpha co-efficient in the context of developing nations' education sector. Notably, a better co-efficient for developing nations will engender the best estimate on the rate of returns for educational programs.

X. CONCLUSION

In this paper, we computed the private monetary rate of returns to Humanities and Education Programs in public universities in Osun state, Nigeria. These computations are necessary for choosing the right course to study in Osun state public universities if the monetary return is of utmost priority to the student.

Further research on this work should plan to compute social RoR to Humanities and Education programs in public universities in Nigeria. Also, experts in educational planning should make efforts to work on a suitable co-efficient for developing countries, because of the worse economic conditions captured in Dennison Alpha co-efficient of the developed world, to avoid likely spurious rate of return estimations in developing countries.

APPENDIX I

The formula for Compounding Costs of training in Education and Humanities:

A[1+r]n

where A = Amount to be compounded; r = average rate of interest; n = Number of years.

APPENDIX II

The formula for Discounting Benefits of Graduates of Education and Humanities in Osun State:

$$A[1/(1+r)^n]$$

where n = lifetime of the individual work-life; A = Expected income from age 23 to 57 years; r = average rate of interest.

APPENDIX IIII

The formula for Private Computing RR for Graduates of Education and Humanities:

1/n [(B-C)/C x 100/1]

where B = sum of the benefits, C = Total Costs, n = No. of years (work-life).

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