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**Influence of motivation on teachers' productivity in public senior secondary schools in Bauchi metropolis, Nigeria**

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**Abstract**

*Motivation across the globe is a wide range of discussion. Most of the secondary schools' teachers are poorly motivated, for instance, irregular payment of salary, poor medical service, lack of accommodations, poor incentives inadequate teaching facilities, lack of attending workshops and seminars among others. This study investigated the impact of Motivation on Teachers' Productivity in Public Senior Secondary Schools in Bauchi Metropolis, Bauchi State, Nigeria. The study adopted a descriptive survey research design. The population of the study consists of 150 teachers selected from 5 public senior secondary schools in Bauchi metropolis of Bauchi State. 108 respondents were selected using simple random technique. The research instrument used for data collection in this study was a questionnaire designed by the authors. The data collected was computed using percentages and frequency distribution tables. The hypotheses were subjected to inferential statistics while Chi-square test was tested at 0.5 level of significance. Findings of this study indicated that there is a significant relationship between financial incentives and teachers' productivity in public senior secondary schools in Bauchi Metropolis. The study findings also indicated that that training and development such as attending seminars, workshops improved teachers' productivity. Therefore, study concluded that annual leave allowances, payment of salary, free medical care, and promotion as well as working conditions influence teachers' productivity through motivation. The study findings also indicated that training/development such as career advancement, workshops, seminars and teachers' competence improve teachers' productivity within public senior secondary schools in Bauchi metropolis. The study recommends that government should emphasize on teachers' promotion and prompt payment of salary when due in order to improve their productivity. Government should continue organizing workshops and seminars to improve teachers' productivity as well as increase the teachers' competency.*

**Keywords:** Financial incentives, Job performance, Motivation, Teachers' Productivity, Training and development.

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**1. Introduction**

Motivation plays an important role in the school because it increases teacher morale and performance. The behavior of teachers can be change through motivation in any school. From situation to situation, the level of motivation differs within an individual (Robbins et al., 2010). Motivation results from the interaction of cognition-related factors, such as the intensity of will, incentive value of the goal, and individuals' and others' expectations (Finn, 2020; Trout, 2017). Motivation makes most of the

employees feel good about their jobs and perform better (Bojnec & Tomsic, 2020).

At present, it can be said that many factors exist which promote teachers' motivation. These factors may be viewed as material, psychological, etc. It is also found that a teacher's daily experience on the job determines the activities which are psychologically most rewarding (Sheena & Melca, 2020). Moreover, without motivation, teachers' performance would be highly hindered. The level of motivation of workers will determine the teachers' response to the organizational rules,

responsibilities and opportunities. Also, motivation is the force that initiates, guides and maintains goal-oriented behaviors (Callo, 2014).

Looking at critical success factors for institutional growth in the public sector in Uganda with particular focus on secondary schools, Ombuya (2015) cited training, improved working environment, handsome salary and wages and motivating rewards as central to teachers' performance. In Kenya, just like elsewhere, teachers encounter performance challenges, in which irregular work attendance is common, professional documents are rarely prepared, supervision of school activities are ignored, class work are inadequate and generally, learners are literally left on their own, Odongo (2011). It was observed that without attempts put in place to motivate teachers, improved students' performance would be difficult to realize. Reporting for a study conducted in Singoiroi Division in the Bomet County on factors influencing teachers' job performance in public primary Schools, Kisiruli (2012) indicated that working environment must be improved to enhance working productivity.

Organizations need to place all efforts to ensure that incentives such as intrinsic motivators, extrinsic motivators and performance management approaches are used in order to retain, attract, increase workers efforts, satisfaction and commitment. Enumerating factors influencing teachers' productivity in public institutions in Nigeria, Emenike (2013) observed that; working conditions, availability of working tools and resources, improved knowledge and skills through regular training, accessibility to information and a sense of recognition, superior remuneration and handsome reward system, are the critical ingredients of worker job performance.

Obviously, despite the leading roles teachers play in the classroom towards attaining educational objectives, their motivation has remained a very serious

problem in Nigeria. Ndu (1998) opines that teachers' motivation has been very low, that the situation of teachers in the school system was so bad that it had reached "an intolerable low point". As a result, the societal image of a teacher has made the "noble" profession unattractive as being inadequate for meeting economic, social and psychological needs. Under this condition, teachers' welfare needs are hardly considered by different stakeholders in Nigerian educational system. But, rather every parent want his children to acquire knowledge and skills, good morals and value without giving serious thought to how these would be transmitted without the teachers and more importantly, how teachers would perform without being motivated (Ukpong & Uchendu, 2012).

The achievement of quality education rests squarely on the shoulders of teachers who need appropriate motivation to produce the desired educational productivity. Given the fact that education is one of the important factors that help in bringing about rapid social and economic development in any given nation, the role of principals and teachers cannot be downplayed. However, concerted efforts are always made through effective and efficient motivational strategies by the school principals to ensure teachers' productivity in the school system (Kennedy, 2016; Akinwumi; 2000). The measurement of productivity in any industry has been given the required attention and pursued with some vigor to an extent that a body of knowledge has evolved out of such efforts. Teacher motivation encompasses forces both within and external to the individual. The internal teacher motivation comprises of the needs, wants and desires which exist within an individual; as such influence the teachers thought which in turn leads to a positive change behavior toward improving learning (Owan, 2017; Kelvin, 2016).

Productivity is something, a person does, which is normally affected by motivation.



When teachers are motivated, their level of productivity automatically rise towards high level. In schools teacher's productivity can be seen in their interaction with students, with other teachers and with their superiors. However, teachers in secondary schools in Tanzania have been reported to perform the least due to a number of challenges which hinder their effective working (Shahzad, 2007). Most teachers have reported their dissatisfaction as emanating from lack of housing, lack of improved salaries and other compensation needed to motivate and raise their performance (Kelvin, 2016).

Akinwumi (2000) maintained that the relationship between leader motivational style and productivity depend primarily upon the interaction and understanding of the leader's behaviours with subordinate characteristics. In summary, he discovered that the employee-oriented pattern of leadership tends to enhance employee satisfaction. The concern for teachers' productivity is crucial because of its apparent direct relationship with the standard of education. In essence therefore, teachers must be motivated to be able to deliver their best. It is a fact that teachers will continue abandon the classroom for other more lucrative jobs as long as their conditions remain poor. The motivation across the globe is a wide range of discussion. Most of teachers who working in public secondary schools are poor motivated, for examples Irregular salary payment, delay in salary payment, poor incentives, lack of proper housing and inadequate teaching facilities, lack of attending workshops and seminars among others.

Ozigi (1992), who found out that teachers were unhappy, frustrated, uninspired and unmotivated. He then concluded that the nation's educational system was doomed. Among, reasons for teacher low performance; Okoro (1998) observes that in spite of the roles teachers play in the education system, teachers were neglected

in terms of support and welfare. Teachers were isolated from all other workforce in terms of recognition, respect or recommendation for political post and welfare packages. So, when teachers are not treated fairly, they may not motivate the students to learn in order to improve quality of our secondary students' performance.

However, it has been observed that many workers especially secondary school teachers regret choosing teaching career due to poor promotion schemes, part payment or non-payment of teachers' salaries and other incentives that accrue to them. In some cases, there had been no on-the-job training, recognition, salary/fringe benefits and working conditions, unwillingness to work and absenteeism hence providing avenue for negative attitude as a result of inadequate motivation (Ndukwu & Edo, 2020).

Teachers refused to teach effectively in class causing a decline in productivity because of irregular payment of salaries, promotion and working condition. In Bauchi State, for example, the teachers' motivation is a public outcry which lead the students' low level of performance particularly in public secondary schools. Yet, the government doesn't provide incentives to teachers in terms of annual leave allowances, prompt payment of salaries at when due in order to motivate and retain them, especially in public senior secondary schools. Several studies covered the influence of motivation across the globe. However, none of the above aforementioned scholars cover the impact of motivation on teachers' productivity in public senior secondary schools in Bauchi Metropolis Bauchi State, Nigeria. Therefore, this study sought to fill the knowledge gap on the financial incentives as well as training and development influence teachers' productivity within the area of study.

### Research Hypotheses

The following hypotheses were formulated:

**H<sub>1</sub>:** there is a significant relationship between financial incentives and teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis.

**H<sub>0</sub>:** there is no significant relationship between training/development and teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis.

### 2. Literature Review

Mustafa and Othman (2010) examined the perceptions of high school teachers about the effects of motivation on their performance at work. They found that there is a positive relation between motivation and working performance of teachers, i.e., the greater the level of motivation the higher will be the teacher's job performance or if provide a high level of motivation. Mustafa and Othman (2010) examined the perception of teachers about the effects, of motivation on the teacher's job performance in teaching and learning process, they found that there is a positive relationship between motivations and working performance of teachers, for example the greater level of motivation the job performance will increase, but the absent of motivation to teachers always demonize teachers in academic performance and lead to teacher absenteeism and poor performance.

A study conducted by Fadeyi et al., (2015), was carried out to examine the relationship between teachers' welfare scheme and job performance in selected Secondary Schools in Isin Local Government Area of Kwara State, Nigeria. The study adopted descriptive and quantitative research methods to find out the relationship existing between the variables and drew inferences on the data collected. The hypotheses were tested at 0.05 level of significance. The data were analyzed using Analysis of Variance and Chi-Square Statistics. The findings indicated that there is significant relationship between teachers' salary,

promotion and students' academic performance. It was also revealed that there is significant relationship between fringe benefit and classroom management. The paper concludes that if attention is given to teachers' welfare, this will bring about positive development in the educational system. It was recommended that teachers should be placed on meaningful salary scale and given opportunities to further receive training in their various disciplines for better performance to be achieved.

Luthans (2005), posited that welfare schemes are the strategies employed in motivating teachers for better job performance. These are in form of salary increment, gratuity, and regular promotion, ensuring job security, and establishing cordial relationship among teachers. Adeyemo et al., (2013), used a self-administered questionnaire to collect data from 100 teachers who were selected by the use of simple random sampling while the four schools were selected through purposive sampling. The study results revealed that majority of the teachers (61.0%) under study are not satisfied with their condition of service. Three quarter of teachers (75.0%) under study are not satisfied with the fringe benefits attached to their salaries while majority of the respondents (66.0%) are not satisfied with the condition of service of teachers. It was observed that the condition of service of teachers, teachers' Fringe benefit payment, and teachers' promotion of in-service training have a direct influence on the student's performance in mathematics.

Ombuya (2015), sought to investigate the influence of motivation on teachers' job performance in public secondary schools in Rachuonyo South Sub-county. The study adopted a quantitative research paradigm employing a descriptive survey research design. The study targeted a population of 1568 teachers in public secondary schools in Rachuonyo South Sub-county from which a 10% sample size of 158 respondents was selected using stratified

random sampling techniques. The study revealed that motivation was crucial in enhancing teachers' commitment to job performance, given that most public secondary schools in Rachuonyo South Sub-county had qualified teachers and were therefore expected to perform their tasks well, yet this remained a tall order as a result of the presence of motivation gaps. It was concluded that motivation strategies such as frequent in-service training, regular promotion and the general improvement of the working conditions that formed the major study variables, were critical in enhancing teachers' commitment to their performance.

Kulkarni (2013), added that training and development programs play a vital role in every organization. These programs improve Employee Performance at workplace, it updates Employee Knowledge and enhances their personal Skills and it helps in avoiding Managerial Obsolescence. With the use of these programs, it is easier for the management to evaluate the job performance and accordingly take decisions like employee Promotion, rewards, compensations, welfare facilities, etc. These training programs also help the managers in succession planning, employee retention and motivation. It creates Efficient and Effective employees in the Organization.

Enrolling staff in training sessions boosts their productivity while also providing them with suitable working conditions and encouraging them to work harder. This is attributable to the characteristics of service that help to enhance the institution's manners efficiency (Dorta-Afonso, et al. 2021; Bayad & Govand, 2021). Training developed capacity of the lecturers through designing effective educational research, developing relevant school curriculum, instructional management and evaluating of school climate. This implies that academic staff must possess thorough understanding of the learning process as well as the ability to communicate adequately in their

respective area of specializations. In this respect, human skills and development must be seen as a factor that promotes an organizational set up (Edo et al., 2018). The advantage is that the application of acquired skills will go a long way to ensure increase in academic advancement. Ndukwu and Edo (2020) identifies seminars, workshops, refresher courses, conferences and correspondence courses as in-service training strategies to sustain human capital quality in the university system. This ingredient facilitates changes and improves the quality of teaching and learning in educational institutions.

Ryan and Deci (2000) indicated that individual teachers' characteristics equate with performance can also adversely impact on motivation levels. These scholars further noted that the interest in teaching has extremely reduced due to high attrition of teachers. Common experiences indicated that most of the teachers only accepted to teach based on lack of jobs in their related area of specialization. As a matter of fact, the capacity of performance and maintaining of credibility completely reduced. Another study by Bennell et al., (2004) noted that incentives for schools and teachers in the public education system frequently weak due to ineffective incentives and sanctions. This was particularly the case when teachers cannot be effectively disciplined for unacceptable behaviour (absenteeism, lateness, poor teaching, and abusive behaviour towards pupils) by school managements because of less incentive that can exaggerate active performance.

Wanjala (2012), having done a study in Vihiga Sub-County with a focus on the influence of motivation on teachers' work performance, indicated that teaching was a domain that required sacrifices given that most institutions had done very little to motivate them, and this was to blame for perennial poor academic performance. While giving a report on teachers' job performance in public secondary schools in

the Sub-County, Rachuonyo South Sub-County Quality Assessment.

Since incentives play a major role in employee productivity, the concept of incentives attracts a lot of attention, particularly when it comes to hiring skilled workers who can efficiently achieve the institution's goals. The value of rewards derives from the urge for workers to be appreciated and compensated for their efforts. Individual talents alone would not enable them to operate at a high level of efficiency unless there is an incentive structure in place that promotes their internal incentives and therefore motivates them to work very hard (Chandrawaty & Widodo, 2020). Furthermore, tangible benefits may be positive, such as bonuses, aids, promotions, and extraordinary extra cash over and above the wage, or negative, such as refusing workers bonuses and promotions, or even lowering their wages (Stefurak et al., 2020).

### **Theoretical Framework**

A study of employee motivation by (Herzberg 1966), suggested that employees are influenced by two types of rewards which he calls 'motivators' and 'hygiene' factors. Motivators are intrinsic rewards such as recognition, responsibility, achievement and the actual work, while 'hygiene factors' are extrinsic. These make work less unpleasant. He further argued that hygiene factors have little effect on increasing effort because they do not promote psychological growth, and deduces it would be more productive to try to improve the intrinsic rewards of teaching, such as recognition of the value of teachers' work and the time they are able to devote to the children in their classes.

Looking at Herzberg's hygiene factors point of view, salary/ fringe benefits, working environment and recognition significantly affect the job performance level of sales force. It is discovered also that the relationship between salary and job performance has proven that the employees attached more importance to money if they

receive a pay increase that satisfied with their needs and expectations (Peretomode, 1991).

This theory is applicable in this study due to the fact that some of the variables such as salary, working conditions, promotion are part of the intrinsic and extrinsic factors of motivation which can directly improve the productivity of teachers'. Herzberg theory of motivation played a vital role on investigating the influence of motivation on teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis, Bauchi State Nigeria.

### **3. Methodology**

The research design adopted in this study is a descriptive survey research design. The population of the study consist of 150 teachers selected from five (5) public senior secondary schools (Ministry of Education, 2022). This study used sample-size computation formula developed by Krejcie and Morgan (1970) and arrived at 108 as selected from the target population of five hundred (150). Simple Random Sampling Technique was adopted. It is a situation whereby some parts of the population were randomly selected to make sure that everybody has the chance of been selected. Simple random sampling technique was used. A five (5) likert type scale was used and the respondents were asked to select one of the five options: Agree, Strongly Agree, Disagree, Strongly Disagree, and Neutral. Thus, 108 copies of questionnaire were administered and retrieved 97.

To test the reliability of the instrument, the researchers administered the instrument in two other schools within Bauchi Metropolis, which was not part of the study. This constitutes the pilot study group. A split-half correlation coefficient was used to determine the reliability of the instrument. A correlation coefficient of 0.78 alpha level was recorded for the scale. Validity is a measure of the degree to which differences found with a measuring instrument depict true differences among

the items being measured, other measures put in place to address issues of instrument. Validity took the form of exposing the questionnaire to the experts and peers for judgment and review respectively. In this study, split-half reliability measure was employed by dividing the questionnaire items into two equal parts. The first part of the research instrument having administered and the result obtained. The second part was subsequently administered and the results noted. Chi-square was then used to compare the two scores obtained and by giving an alpha value of 0.5, indicating that the data collection instrument was reliable. The data collected was coded and tabulated by computing the frequency of the percentage of all the responses provided by the teachers. Hypotheses were analyzed using Chi-

**Table 1.1: Questionnaire Return Rate**

Target Population	Sample Size	Return Rate	Return Rate Percentage %
150	108	97	89.81%

Table 1.2 reveals that out of the 108 copies of questionnaire administered to the respondents 97 were received back dully completed giving rise to a response rate of 89.81%. a response rate of 50% is deemed

**Table 1.2: Demographic Characteristics of Respondents**

Sex	Frequency	Percentage
Male	70	72.2%
Female	27	27.8%
<b>Total</b>	<b>97</b>	<b>100</b>
<b>Age of Respondent</b>		
Below 25	18	18.6%
25-34	43	44.3%
35-44	15	15.5%
45 and above	21	21.6%
<b>Total</b>	<b>97</b>	<b>100</b>
<b>Level of Education</b>		
Diploma/NCE	56	57.7%
Degree/HND	34	35.1%
Masters'	5	5.2%
Other	2	2%
<b>Total</b>	<b>97</b>	<b>100</b>
<b>Salary Scale</b>		
Less than 35,000 naira	12	12.4%

square ( $X^2$ ). A chi-square statistic is a test that measures or compares the expected and actual results, given the size of the sample and the number of variables in the relationship. The purpose of this test is to determine if there is a relationship between the variables (Adam, 2022). Another reason for using chi-square statistics is that the study adopted a five (5) likert scale based on ordinal scale of measurement.

#### 4. Result and Discussion

##### Questionnaire Return Rate

Copies of the questionnaire were administered to the respondents by the research assistants, while closely being supervised by the researcher and the following return rate registered as illustrated in table 1.1

adequate for analysis and reporting, a response of 60% is good and a response rate of 70% and above is very good (Mugenda, 2003).

Sex	Frequency	Percentage
36,000-45,000	37	38.1%
46,000-55,000	26	26.8%
56,000-65,000	15	15.5%
66,000 and above	7	7.2%
<b>Total</b>	<b>97</b>	<b>100</b>
<b>Years in Service</b>		
1-5 years	5	5.2%
6-10 years	48	49.5%
11-15 years	18	18.5%
16-20 years	16	16.5%
21 and above years	10	10.3%
<b>Total</b>	<b>97</b>	<b>100</b>

Source: Field Survey (2022)

The table above shows that 70 (72.2%) of respondents were males and 27(27.8%) were females. Reflected in the above table indicating that teaching at a public senior secondary school seems a preserve for males. Whereas, the study did not treat gender as an extraneous variable to be controlled for.

The above table also indicated that 18(18.6%) of respondents whose questionnaire copies were received fell below 25 years, 43(44.3%) in the age of 25-34 years, 15(15.5%) were in the age of 35-44 years, and 21(21.6%) being above 45 years. The statistics shows that majority of the teachers are younger ones than elderly teachers formed the bulk of teaching fraternity in public senior secondary schools in Bauchi metropolis. This is the age period within which individuals become stable in their jobs and less inclined to be committed to teachers' productivity in the hope for promotion.

Another finding shows that 56(57.7%) of the respondents had acquired education at Diploma/NCE level, 34(35.1%) had degree, 5(5.2%) obtained a masters' degree, and 2(2%) had other forms of education. The statistics reveals that public senior secondary schools teaching is a confine of teachers with high level of education, yet job performance was insufficient and hence

ought to be properly motivated for increased commitment to improve teachers' productivity (Ombuya, 2015).

The above table shows that 12(12.4%) of the respondents received less than 35,000 naira as their salaries, 37(38.1%) received 36,000-45,000, 26(26.8%) had the salary of 46,000-55,000, 15(15.5%) received 56,000-65,000, 7(7.2%) had the salary of 66,000 and above. The statistics shows that majority of the teachers' received the salary less than \$100 dollars per month, hence may affect teachers' productivity in Public Senior Secondary Schools in Bauchi metropolis.

The above findings shows that 97 respondents whose questionnaire copies were received, 5(5.2%) stated having served for 1-5 years in service, 48(49.5%) had served for 6-10 years, 18(18.5%) indicated 11-15 years, 16(16.5%) stated 16-20 years, and 10(10.3%) having served for a duration above 21 years. Implied by the statistics in the above table is that most teachers had served for relatively short period of time, hence may have become complacent in the teachers' productivity.

**Research Question One:** To what extent does financial incentives affect teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis?



**Table 1.3: Financial Incentives affect Teachers' Productivity**

Financial Incentives	Agreed	Strongly Agreed	Disagreed	Strongly Disagreed	Neutral
Annual leave allowance	42(43.3%)	53(54.6%)	0(0%)	0(0%)	2(2.1%)
Payment of salary	36(37.1%)	51(52.6%)	7(7.2%)	3(3.1%)	0(0%)
Free medical care	61(62.9%)	11(11.3%)	21(21.6%)	3(3.1%)	1(1%)
Promotion	43(44.3%)	19(19.6%)	11(11.3%)	4(4.1%)	20(10.3%)
Working conditions	59(60.8%)	21(21.6%)	5(5.2%)	2(2.1%)	10(10.3%)

Source: Field Survey, (2022)

Table 1.3 indicates that out of 97 respondents who filled the questionnaire disclosing the extent to which annual leave allowance improves teachers' productivity, 42(43.3%) agreed, 53(54.6%) strongly agreed, 2(2.1%) neutral while none either 0(0%) disagreed and strongly disagreed. This means that if teachers are properly motivated in terms of government paying their annual leave allowance can improve high productivity.

Concerning the issues of payment of salaries, 36(37.1%) agreed, 51(52.6%) strongly agreed, 7(7.2%) disagreed, 3(3.1%) while none being neutral. This means that payment of salaries regularly will increase the teachers' productivity. On the issue of free medical care, 61(62.9%) agreed, 11(11.3%) strongly agreed, 21(21.6%) indicated they disagreed, 3(3.1%) strongly disagreed while 1(1%) indicated they were neutral. Implied by the statistics was that most teachers' in public senior secondary schools in Bauchi metropolis perceived that free medical care will increase teachers' productivity. On the aspect of promotion, 43(44.3%) agreed, 19(19.6%) strongly agreed, 11(11.3%)

disagreed, 4(4.1%) strongly disagreed, with 20(10.3%) indicated they were neutral. The result shows that promotion system was substantial and fair enough. However, failure to promote teachers will affect or it will yield low productivity. Concerning the issues of working conditions, 59(60.8%) agreed, 21(21.6%) indicated they strongly agreed, 5(5.2%) disagreed, 2(2.1%) strongly disagreed, while 10(10.3%) were neutral. The statistics shows that once there is working conditions for the teachers' their level of productivity will increase on daily basic. The above result supported with the work of Thu and Khoi, (2014) indicated that Salary and bonus policies affect employee motivation. Moreover, salary, bonus, and welfare are factors that have the most impact on employee motivation (Jankingthong & Rurkkhum, 2012; Anh (2017). Anh (2017), a safe environment with reasonable working condition, and a well-organized workshop may help promote employee motivation. In the organization, working conditions such as safety protective equipment make employees feel secure and focused on their work.

H<sub>1</sub>: there is a significant relationship between financial incentives and teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis

**Table 1.3.1: Test of Hypothesis using Chi-square ( $X^2$ ) on Financial Incentives and Teachers' Productivity.**

Observed (O)	Value	Expected (E)	Value	(O – E)	(O – E) <sup>2</sup>	(O – E)2/E
42		48.2		-6.2	38.44	0.79
53		31		22	484	15.61
0		8.8		-8.8	77.44	8.8
0		2.4		-2.4	5.76	2.4
2		6.6		-4.6	21.16	3.21
36		48.2		-12.2	148.84	3.09
51		31		20	400	12.90
7		8.8		-1.8	3.24	0.37
3		2.4		0.6	0.36	0.15
0		6.6		-6.6	43.56	6.6
61		48.2		12.8	163.84	3.39
11		31		-20	400	12.90
21		8.8		12.2	148.84	16.91
3		2.4		0.6	0.36	0.15
1		6.6		-5.6	31.36	4.75
43		48.2		-5.2	27.04	0.56
19		31		-12	144	4.65
11		8.8		2.2	4.84	0.55
4		2.4		1.6	2.56	1.07
20		6.6		13.4	179.56	27.21
59		48.2		10.8	116.64	2.42
21		31		-10	100	3.23
5		8.8		-3.8	14.44	1.64
2		2.4		-0.4	0.16	0.07
10		6.6		3.4	11.56	1.75
<b>Total</b>						<b>135.17</b>

Table 1.3.1 above, it shows that the calculated  $X^2 = (135.17)$  is greater than the critical table value (26.30). This implies that the alternative hypothesis is accepted. Therefore, there is a significant relationship between financial incentive and teachers' productivity in public senior secondary schools at 0.05 level of significance and 16 degree of freedom.

**Hypothesis One:** There is a significant relationship between financial incentives and teachers' productivity in public senior secondary schools in Bauchi metropolis. The above table present Chi-square ( $X^2$ ) report on the financial incentives influence teachers' productivity. The calculated Chi-square  $X^2 = 135.17$  is greater than critical

table value =26.3. The Chi-square statistics was found to be significant relationship between financial incentives and teachers' productivity was therefore, accepted. This result was in line with the findings of Chipkoet (2000) that said financial incentives motivational strategies such good condition of service, prompt payment of salary, free medical care and promotion have been found to be successful in increasing motivation in the school system. Another study by Bennell et al., (2004) noted that incentives for schools and teachers in the public education system frequently weak due to ineffective incentives and sanctions. This was particularly the case when teachers cannot

be effectively disciplined for unacceptable behaviour (absenteeism, lateness, poor teaching, and abusive behaviour towards pupils) by school managements because of less incentive that can exaggerate active performance. Ovidiu-Iliuta (2013) examined low and high paid workers' job performance in the European Union (EU). The result shows that when low paid employees were compared to high paid

employees, low paid employees showed a low level of job performance. The result also indicated that the gap between low paid employees and high paid employees' job performance expanded hence affecting the extent of performance by low earners.

**Research Question Two:** To what extent does training and development influence teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis?

#### 1.4: Training and Development influence Teachers' Productivity

Training and Dev.	Agreed	Strongly Agreed	Disagreed	Strongly Disagreed	Neutral
Career job	31(31.9%)	47(48.5%)	9(9.3%)	8(8.2%)	2(2.1%)
Career Advancement	26(26.8%)	38(39.2%)	6(6.2%)	7(7.2%)	20(20.6%)
Workshops	30(30.9%)	27(27.8%)	18(18.6%)	12(12.4%)	10(10.3%)
Seminars	21(21.6%)	43(44.3%)	14(14.4%)	13(13.4%)	6(6.2%)
Teachers' competence	51(52.6%)	20(20.6%)	6(6.2%)	17(17.5%)	3(3.1%)

Source: Field Survey (2022).

Table 1.4 indicates that out of 97 respondents who completed the questionnaire 31(31.9%) agreed that career job is one of the variables of training and development, 47(48.5%) strongly agreed, 9(9.3%) disagreed, 8(8.2%) strongly disagreed, while 2(2.1%) were neutral. This result shows that career job is very vital in the development of teachers. With regard to career advancement, 26(26.8%) agreed, 38(39.2%) strongly agreed, 6(6.2%) disagreed, 7(7.2%) strongly disagreed, with 20(20.6%) were neutral. This shows that career advancement is one of the key variable or indicators for training and development in any organization. On the aspect of workshops, 30(30.9%) indicated they agreed, 27(27.27.8%) strongly agreed, 18(18.6%) disagreed, 12(12.4%) strongly disagreed, while 10(10.3%) were neutral. This indicated that allowing the teachers to attend workshops improve their level of productivity. Concerning the issues of seminars, 30(21.6%) agreed, 43(44.3%) strongly agreed, 14(14.4%) disagreed, 13(13.4%) strongly disagreed, with 6(6.2%) they were neutral. The result indicates that attending seminars will

directly affect or increase teachers' productivity in schools. On the issue of teachers' competence, 51(52.6%) agreed, 20(20.206%) strongly agreed, 6(6.2%) disagreed, 17(17.5%) strongly disagreed, while 3(3.1%) they were neutral. The above findings confirmed that teachers' competency is one of the factors of training and development because without competency the teachers cannot be able to teach as well as increase their productivity. The above findings corroborated with Dung and Vy (2011) have indicated that training opportunities that satisfy the development needs of employees may stimulate them to perform better. In addition to this, career development is an essential goal of any worker which influences their work responsibilities. The promotion has a great impact on employee engagement, promoting greater dedication (Robbins & Judge, 2014). Hence, Career development has a positive impact on the teachers' productivity (Dinh & Nguyen, 2022).

**Ho:** there is no significant relationship between training/development and teachers' productivity in Public Senior Secondary Schools in Bauchi Metropolis.

**Table 1.4.1: Test of Hypothesis using Chi-square ( $X^2$ ) on Training/development and Teachers' Productivity.**

Observed (O)	Value	Expected Value (E)	(O – E)	(O – E) <sup>2</sup>	(O – E) <sup>2</sup> /E
31		31.8	-0.8	0.64	0.02
47		35	12	144	4.11
9		10.6	-1.6	2.56	0.24
8		11.4	-3.4	11.56	1.01
2		8.2	-6.2	38.44	4.69
26		31.8	-5.8	33.64	1.06
38		35	3	9	0.26
6		10.6	-4.6	21.16	1.99
7		11.4	-4.4	19.36	1.69
20		8.2	11.8	139.24	16.98
30		31.8	-1.8	3.24	0.10
27		35	-8	64	1.83
18		10.6	7.4	54.76	5.17
12		11.4	0.6	0.36	0.03
10		8.2	1.8	3.24	0.39
21		31.8	-10.8	116.64	3.67
43		35	8	64	1.83
14		10.6	3.4	11.56	1.09
13		11.4	1.6	2.56	0.22
6		8.2	-2.2	4.84	0.59
51		31.8	19.2	368.64	11.59
20		35	-15	225	6.43
6		10.6	-4.6	21.16	1.99
17		11.4	5.6	31.36	2.75
3		8.2	-5.2	27.04	3.29
<b>Total</b>					<b>73.02</b>

The result of table 1.4.2 indicated that the calculated calculate Chi-square = (73.02) was greater than the critical table value (26.30) at the degree of freedom (16) and 0.05 significant levels. Hence, the null hypothesis of no significant relationship between training/development and teachers' productivity was rejected. Therefore, the alternative hypothesis is accepted.

**Hypothesis Two:** There is no significant relationship between training/development and teachers' productivity in public senior secondary schools in Bauchi metropolis. The above table present Chi-square ( $X^2$ ) report on the training/development and teachers' productivity. The calculated Chi-

square  $X^2 = 73.02$  is greater than critical table value =26.3. The Chi-square statistics was found to be no significant relationship between training/development and teachers' productivity was rejected. This view agreed with the perception of Edo (2008) who consented that training is an instrument used for improving the performance of an individual staff with assigned job responsibilities. In support of the above Edo, et al (2018) proposed that the process always targets development of capacity to play their roles and fit in assigned responsibilities optimally for the attainment of quality service delivery. The above findings also corroborated with the work of Mehmood (2008) who identifies

seminars, workshops, refresher courses, conferences and correspondence courses as in-service training strategies to sustain human capital quality in the university system. This ingredient facilitates changes and improves the quality of teaching and learning in educational institutions.

## 5. Conclusion and Recommendations

### Conclusion

Based on the findings, it is therefore concluded that annual leave allowances, payment of salary, free medical care, and promotion as well as working conditions influence teachers' productivity through motivation. Hence, various measures inform of training/development such as career advancement, workshops, seminars and teachers' competence improve their productivity in every organization.

### Recommendations

- a. Annual leave allowance should be paid to teachers at appropriate time
- b. Government should emphasize on teachers' **promotion** when due in order to improve their productivity.
- c. Teachers salary should be paid when due instead of delaying it over a period of time.
- d. All relevant working condition of services should be provided to enhance high level of teachers' productivity.
- e. Government should continue organizing workshops and seminars to improve teachers' productivity as well as increase the teachers' competency.

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