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The (Non) Influence of Monetary Incentives on Teacher Job Performance in Edo Central Senatorial District, Nigeria

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Abstract

In many developing countries Performance-Based Pay rewards (PBP) are a solution for improving teacher motivation. This study tested examines how teachers in Edo State, Nigeria felt about monetary incentives to increase job performance. Random sampling was used selecting a 20% sample of 164 of 820 teachers. Participants completed a questionnaire, and the data were analyzed using the Pearson Product Moment Correlation Coefficient. The study confirms no significant relationship between monetary incentives and teacher performance. Some possible explanations are provided and conclude that the use of monetary incentives in education in the state of Edo, Nigeria should be further reviewed.

Keywords

performance-Based Pay (PBP) rewards, teacher performance and motivation, teaching quality

1. Introduction

Education in every country is key to the development of individuals, communities, and societies. However, according to a UNESCO report (2017), fifty-seven million future citizens (children) are still failing to learn, simply because they are not in school, and "Nigeria accounts for more than one in six out-of-school children globally" (p. 7). Although primary education is officially free and compulsory in Nigeria, 10.1 million children aged 5-14 years are not in school" (UNESCO Institute for Statistics (UIS) and UNICEF (2015). This is a concern. A deeper understanding as to why so many children do not attend school in Nigeria is worthy of investigation. A part of this problem involves the teaching profession. As the UNESCO report (2014) confirms, student attendance and access are not the only crisis - "the quality of teachers to deliver effective teaching and learning is holding back learning even for those who make it to school" (p. i). Although many Nigerian states are trying to improve the quality

of education by focusing on producing and supporting competent teachers, student learning outcomes continue to remain low. For example, many children do not attain the competency levels in literacy and numeracy that they need to progress with their education by the time they leave primary school (UNESCO, 2017). It is well established by the multiple reports and studies conducted in Nigeria (for example by UNESCO, UNICEF, World Bank reports) that there is a teaching and learning crisis, and improving teacher quality is imperative.

One of the biggest problems facing improving teacher quality is the reported high rates of teacher absenteeism from school and from the classroom while at school: a prominent identified problem in many developing countries (Damon et al., 2018; World Bank, 2018). For this reason, many developing countries have considered using initiatives to motivate teachers. A popular initiative is Performance Based Pay or Rewards (PBP). However, a review of past studies that have implemented PBP demonstrates contradictory outcomes; some studies show positive results while others show no difference. Therefore, before implementing any PBP incentives it is necessary to explore the intricacies of PBB; specifically, how teachers feel about and how best or what is best to be implemented as a monetary incentive within the specific context. Consequently, improving the quality of educators is a problem of great magnitude. It is complex and interdependent on multiple factors; improving one area does not guarantee improvement all around in the education system and this calls for context-specific evidence and solutions. The objective of this study was to gather evidence-based research about the perceptions of PBP incentives among a group of teachers from the Edo Central Senatorial District in Nigeria.

This qualitative study investigated the thoughts and feelings of the 164 public secondary teachers - a random sample of teachers (representing 20% of the teacher population in the state) - from 5 areas of Edo Central Senatorial District of Nigeria about Pay Based Payment. More specifically: What do the teachers think about a PBP plan? Do they agree with monetary incentives as a way to increase motivation and job performance to improve student learning outcomes? The findings provide a snapshot of the reaction from this sample of teachers based on the suggestion of a proposed PBP plan. Overall, these preliminary findings indicate monetary incentives are not welcomed and would not necessarily motivate teachers or increase their job performance. Our findings also provide evidence-based research for recommendations to the government for future planning and policy changes about rewards and incentives for the teaching sector. The findings and potential reasons are discussed in this paper.

2. Background

Like many developing countries, an educated workforce is necessary to help develop and maintain a high standard of living. Increasing the human capital of a nation is likely one of the most effective ways to reduce poverty and increase upward economic mobility (World Bank, 2018). Based on numerous studies (Bold et al., 2017; Hanushek & Rivkin, 2010; Nye, Konstantopoulos, & Hedges, 2004; Park &

Hannum, 2001; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004; Sanders, 1998; Sanders & Rivers, 1996; Vignoles et al., 2000), researchers have determined teacher quality is the main school-based predictor of student achievement and that several consecutive years of outstanding teaching can offset the learning deficits of disadvantaged students. As such, a government's interest in improving the quality of education should be directly linked to having quality teachers for the indirect social and economic benefits of the country. However, addressing this problem is extremely complex and multi-layered. Based on the premise that education is only as good as its teachers and education and quality improve when teachers are supported, and it deteriorates if they are not, then improving teacher quality is essential to alleviating the teaching and learning crisis. The continued poor academic performance of students in public secondary schools in the state of Edo, Nigeria has been a source of concern for those working in the system (UNESCO, 2014, 2017). The problem persists on how to best approach improving the quality of teachers and more specifically in the case of this research in Edo State, Nigeria. Concerned stakeholders (such as the authors) currently working in a school environment in the state explored the possibility of a solution based on implementing performance-based pay (PBP) rewards and incentives to motivate teachers as an approach to help improve student performance. PBP provokes questions about the context, the government's reputation, the expectation of the reward, and so forth. The ultimate question is: If you pay teachers based on performance, then do you get better teachers, or do they work harder? In other words, will the teaching workforce attract more committed teachers who are motivated and willing to engage in continuous professional development to ensure that the quality of teaching and student learning increases? This study aims to answer these questions based on teachers' perspectives.

3. The Focus on Teacher Quality

A growing body of research (Hanushek & Rivkin, 2010; Snilstveit et al., 2016) has indicated that teaching is the most important school-based determinant of student learning. Therefore, teachers are considered by stakeholders as the most influential in schools; they play a significant role in achieving school goals such that their efforts are among the public sector the most important human resource in the school system (Hanushek & Rivkin, 2010; Snilstveit et al., 2016). These facts have spurred global attention to attracting, retaining, developing, and motivating quality teachers (World Bank, 2018). However, it is difficult to determine specific dimensions of universal teacher quality based on differences in context. Therefore, the solution to improving teacher quality is not linear nor simple; many scholars have argued (Rockoff, 2004; Rivkin et al., 2005; Aaronson, Barrow, & Sander, 2007; Bruns, Filmer, & Partinos, 2011; Metzler & Woessmann, 2012; Chetty, Friedman, & Rockoff, 2014a, 2014b; Bau & Das, 2017) that context is critical to guide improvement efforts (e.g., research and policy design). For example, Evans and Popova (2016) conducted a 15-year comprehensive study of more than 200 randomized, controlled trials in improving education and teacher quality. In their study, they were unable to converge to a consensus about the most effective ways to increase the quality of

education teachers. Based on their study that concluded the areas of concern point to systemic governance, accountability, and management issues. Consequently, improving teacher quality is a fruitful endeavor that constitutes continued research. One area that has drawn much attention to improving teacher quality has been to implement a system for job incentives, which will be discussed further in this paper.

4. The Complexity of Improving Teacher Quality in Developing Countries

Related to education, Bold et al. (2017) suggested that any learning crisis is, at its core, a teaching crisis. A growing body of research indicates (Bruns et al., 2016; Hanushek & Rivkin, 2010; Snilstveit et al., 2016) that teaching is the most important school-based determinant of student learning. UNESCO's (2017) extensive study of teachers from developing countries suggests that to support and improve teachers, there are a few common proven strategies; however, all are prefaced with governments making teacher quality a national priority and included in a strategic educational plan to adopt, attract and retain the best teachers, improve teacher education, allocate teachers more fairly and provide incentives in the form of better salaries and attractive career paths. When governments are not committed or say they are committed but do not follow through, this affects teachers' motivation and adds to the complexity of unlocking the potential of teachers. One example of this is seen in one of the most noted problems revealed in the UNESCO (2017) study; developing countries where governments have not made teaching quality a priority is high teacher absenteeism. Nonetheless, as in all professions, some teachers are demotivated or uncommitted, or are simply not good at their job; the right course of action is complex.

Unpacking why teacher absenteeism exists receives a lot of attention in many developing countries, and the most common problem appears to be related to rising job expectations (i.e. monitoring local elections, invigilating, marking primary school exams, and not receiving their salaries or lack of confidence to receive payment for their work (UNESCO, 2017)). Specifically, teachers may stop going to work because: i) they have not received their pay for months, ii) they must travel and wait to receive salaries, iii) they do not have sufficient training or professional development support to do their job (Adelabu, 2005). Based on these points, the solution appears to be required at a system-wide level, rather than on the level of individual recrimination of teachers.

Based on the assumption that increased effort will lead to teaching effectiveness, many international development organizations and governments have attempted to improve teaching effectiveness by promoting performance (or incentive) pay to raise teacher effort (Barrera-Osorio & Raju, 2015). Previous research in the areas of Nigeria (Adelabu, 2005; Oyebolu & Muraina, 2010) confirmed that this perspective solution of offering PBP did increase teacher effectiveness. As well, other studies (Barrera-Osorio & Raju, 2015; Bold et al., 2017) in similar low-income and developing countries (e.g., Pakistan, sub-Saharan Africa, Kenya, Uganda) found that PBP for teachers had a positive impact both on school management and pupils' academic achievement. Both Adelabu (2005) and Oyebolu and

Muraina (2010) found that teachers' motivation and job satisfaction levels were positively affected by PBP rewards: They concluded that PBP increased teacher motivation by adequately rewarding productivity gains. These imply that there is a direct correlation between teacher quality and PBP. Based on this research evidence, it appears that PBP is a viable solution for the Edo state government. Or is it? There are other studies (Abd-el-Fattah, 2010; Ayeni, 2015) that contradict the degree of effectiveness of PBP, and understanding why is important. A review of the literature (UNESCO, 2014; 2017) in developing countries suggests that context and a person's previous experiences in the education system (i.e., the ability of the government to follow through with promises) are predictors of an initiative's ability to improve teacher quality. Consequently, this makes it difficult to predict the outcomes of specific initiatives such as PBP and therefore yields contradictory results: Some studies in various countries have shown positive results, and others have not. Failure to address the complexity and multiple layers of the problem of improving teacher quality not only has represented a waste of time and resources that countries spend on education, but more importantly, it continues subpar education and does not target goals to improve education (Glewwe & Muralidharan, 2015).

In addition to policies to improve teacher quality Molina et al. (2018) found that most developing countries do not regularly monitor teaching practices or process quality. *Process quality* refers to the interactions between teachers and students in the classroom. Instead, education systems (i.e. government-regulated public education) often choose to monitor elements of structural quality—discrete elements that are indirectly related to teaching and learning and are easily observed, such as class size, teachers' qualifications, and teacher training (Ladics et al., 2018; LoCasale-Crouch et al., 2016; Pianta, 2016). Overall, although many developing countries are making efforts and have specific intentions (i.e., putting a process in place) to improve the quality of teaching by using structural qualifiers such as PBP; however, these processes sometimes ignore elements of quality and sustainability.

5. The Use of Educator Incentives in Nigeria and Other Developing Countries

The ability to recruit, elicit effort from, and retain civil servants is a central challenge for state governments in developing countries. Nowhere is this more evident than in the education sector, where rising access to government schooling has failed to translate into hoped-for learning gains, even as teacher salaries account for the bulk of expenditure on education and a large part of the civil service payroll (Bau & Das, 2017). Specific to Nigeria, Adelabu's (2005) study and review of relevant documents confirmed there is an overall teacher motivation crisis in Nigeria. She concluded that the Nigerian educational system appears to be staffed by teachers with poor morale and low levels of commitment to their work. A common response to increasing teacher motivation is the use of incentives. As with many other institutions, financial incentives as an effective way to increase work quality, and performance to achieve goals (Kinicki & Kreitner, 2012). However, there are some general conditions noted in much of the research on PBP that needs to be adhered to prior to implementation. According to

the study conducted by Bold et al. (2017) if a pay policy is based on some measure of teacher performance, then two main points should be considered: First, the presence of PBP incentives can affect the attractiveness of the teaching profession and different people (maybe better, maybe worse) applying for teaching jobs; second, the teachers they hire may be inclined to work harder if more pay is provided.

As well, Bold et al. (2017) add, to ensure the use of incentives achieves its intended outcomes a few criteria should be considered. First, the more aligned incentives are with the behaviors and outcomes they expect from teachers, the more likely they will obtain them. Second, because teaching is a challenging job, incentives help recognize teachers' work and know the results they have achieved are valued so that they continue working hard to sustain incentives. Third, some types of incentives can influence the profile of the teaching profession and make it more competitive, dynamic, and performance-driven as others see effort and outcomes being rewarded. In any case, either of these points could translate in the end to different learning outcomes for students. For example, based on a recent study (Bau & Das, 2017) that implemented PBP incentives in a low-income country in private and public education sectors, three basic criteria were identified to reach the expectations: (a) ensure there is a minimum mechanism to hold teachers accountable, (b) ensure there are rewards for high-performing teachers, and (c) ensure there are sanctions for low-performing teachers. They confirm that when these criteria are in place the use of incentives to motivate teachers was increased.

Recently, many governments in developing countries (i.e., those countries such as Pakistan working directly with the World Bank and UNESCO educational funding supplements) have piloted PBP to help reduce absenteeism and increase teacher efforts. Teacher absentee rates are found to be high in many low-income countries (such as Pakistan and Nigeria) and appear to result from many teachers being occasionally absent rather than a few teachers being frequently absent. As well, when teachers are present in school, a large share of them was found to be off task (i.e., not engaged with teaching and learning practices) (Glewwe et al., 2010; Chaudhury et al., 2006). An example of one such program to address these two consistent problems was administered by the Pakistani government as a teacher performance pay program in Punjab, Pakistan. The program began in 2010 and was administered over three years with the use of control groups to test the use of PBP and teacher motivation. Its design was to incentivize incumbent teachers to raise school performance by increasing their effort rather than by directly increasing their skills. The Pakistani government offered yearly cash bonuses to teachers linked to three school-level indicators: (a) the gain in student exam scores, (b) the gain in school enrollment, and (c) the level of student exam participation. The study showed evidence of the positive effects of teacher performance pay programs, which fall under the class of incentive-based, supply-side education interventions. It was determined by the researchers as an exemplary model for other developing countries (Barrera-Osorio & Raju, 2015). More generally, the study contributes evidence on the effectiveness of PBP in a developing country and can serve as a roadmap for improving teacher quality through two of the most identified persistent problems reducing absenteeism and increasing effort

while in school.

As stated previously, the missing caveat (and added complexity) in many programs such as PBP is that teachers may lack the know-how to improve student exam scores. This signifies a link between teacher effort and outcome (such as expected to raise student exam scores). Even with increased efforts teachers may not know what exact strategies to pursue to raise student exam scores, and whether what they intend to pursue is the most efficient way to raise student exam scores. In this situation, teachers may hold greater effort, but it is misdirected to achieve the intended outcome (Fryer, 2013). Consequently, regardless of the introduction and implementation of PBP, the initiative may not achieve the objectives of increasing teaching effectiveness if it is limited to only increasing teacher effort rather than combined with increasing a teacher's knowledge and skills. Scholars have rigorously evaluated some teacher performance pay ventures in low-income countries (See, for example, Glewwe, Ilias, & Kremer, 2010; Duflo, Hanna, & Ryan, 2012; Muralidharan & Sundararaman, 2011) have concluded that although performance pay does indeed influence teacher quality, they have also cautioned that their findings are not necessarily generalizable or transferable because of the various and important contextual differences. Therefore, PBP programs need to be measured on a context-by-context basis as to their potential effectiveness and tie into the complexity of the problem with increasing teacher effort to increase student learning.

6. Theoretical Perspectives Informing the Study

The theoretical framework of this study is based on expectancy theory or commonly referred to as the expectancy theory of motivation (Vroom, 1964). The theory proposes individuals will behave or act in a certain way because they are motivated to select a specific behavior over other behaviors due to what they expect the result of that selected behavior will be (Condrey, 2005). The intention is that the motivation of the behavior selection is determined by the desirability of the outcome (i.e., monetary payout). The key variables in the theory are expectancy, valence, outcome, instrumentality, force, ability, and choice. For clarity in this study, it is important to provide the following definitions and examples of expectancy, instrumentality, and valence.

Expectancy is the belief that increased effort will lead to increased performance. That is, if I work harder, then this will be better. This is affected by such things as having the right resources available; having the right skills to do the job; having the necessary support to get the job done (e.g., supervisor support, or correct information on the job). *Instrumentality* is the belief that if you perform well that a valued outcome will be received. The degree to which a first-level outcome will lead to the second-level outcome. That is, if I do a good job, there is something in it for me. This is affected by such things as a clear understanding of the relationship between performance and outcomes, trust in the people who will take the decisions on who gets what outcome, and transparency of the process that decides who gets what outcome. *Valence* is the importance that the individual places upon the expected outcome. For the valence to be positive, the person must prefer attaining the outcome to not attaining it.

For example, if someone is mainly motivated by money, he or she might not value offers of additional time off.

The three elements are important in choosing one element over another because they are clearly defined by effort performance expectancy (E>P expectancy) and performance-outcome expectancy (P>O expectancy). That is E>P expectancy is an assessment of the probability that one's efforts will lead to the required performance level, and P>O expectancy is the probability that one's successful performance will lead to certain outcomes. In short, expectancy theory is related to people's perceived likelihood that their efforts will enable them to successfully attain their performance goals. Relevant to this research, the theory suggests that Edo state education officials will need to relate rewards directly to performance and most importantly to ensure that the rewards provided are those deserved and wanted by the recipients (Montana & Charnov, 2008). Based on this, Vroom's (1964) expectancy theory is often referred to as the expectancy theory of motivation**.** Motivation is a product of the individual's expectancy that a certain effort will lead to the intended performance, the instrumentality of this performance to achieve a certain result, and the desirability of this result for the individual, known as *valence*. Therefore, the individual is motivated to make changes and choices to act based on estimates of how well the expected results of a given behavior are going to match up with or eventually lead to a desired or expected result, or in this case reward. Fundamental to motivation is people's perceptions. Even if an employer thinks they have provided everything appropriate for motivation, and even if the intention is good, it doesn't mean that others won't perceive that it doesn't work for them.

In relation to the variables of this study, which are incentives leading to increased motivation to perform better among the teachers of Edo State school system, an expectancy of a teacher in the secondary school may be high (up to 100 percent). That is, the teacher is confident that if she or he puts in her or his best efforts, she or he will be adequately rewarded (i.e., performance and instrumentality). An expectancy can also be low (down to 0 percent), such as when a teacher believes or is convinced based on previous experiences that his or her performance will most likely be unappreciated and/or not rewarded. Based on the expectancy theory, a teacher's motivation to voluntarily improve performance can be high or low depending on their perception of expected rewards; one estimates if their efforts will or will not lead to the desired outcome and adjust behavior accordingly. However, at the core of the theory is the cognitive process of how an individual processes the different motivational elements. This is done before choosing to act or change according to the desired behavior expected. Therefore, the outcome is not the sole determining factor in deciding how to behave; the key is that Vroom's expectancy theory of motivation emphasizes that it is not about self-interest in rewards but about the associations people make towards expected outcomes and the contribution they feel they can make towards those outcomes.

7. Methods

7.1 Participant Data

A quantitative study involving 164 secondary teachers in public secondary schools in Edo Central Senatorial District of Nigeria. Edo Central Senatorial District is comprised of 5 areas: Esan West, Esan Central, Esan Southeast, Esan Northeast, and Igueben Local Government Areas. The 164 teacher participants were randomly selected by a computer-generated selection process from each area and represented 20% of the total 820 teachers in all the public secondary schools in Edo Central Senatorial District. Table 1 outlines the number of teachers randomly selected from each of the five areas to demonstrate an equal selection from each.

Table 1. Distribution of Teachers of Public Secondary Schools in Edo Central Senatorial District According to Schools and Local Government Areas

Name of LGA Region	Number of Public Sector Schools	Total Number of Teachers	Sample size
Esan Central	13	144	29
Esan Northeast	12	188	38
Esan Southeast	18	135	27
Esan West	17	264	53
Igueben	10	89	17
Total	70	820	164

7.2 Data Collection

We collected data from 148 respondents using a quantitative 20-item questionnaire, entitled “Teachers’ Incentives and Job Performance Questionnaire” (TIJPQ). It was divided into three sections: (a) background information, (b) types of monetary incentives available to teachers, and (c) teachers’ job performance. All sections were scored on a four-point rating scale. The instrument was reviewed and validated by two experts in the Educational Management and Educational Measurement Evaluation Department of Ambrose Alli University.

A reliability test was determined by a pre-test of the instrument administered to 20 teachers in two district areas by the researchers. The split-half method was adopted by dividing the items into two halves, even and odd numbers. The scores of the two halves were correlated using the Pearson Product Moment Correlation Coefficient which yielded a coefficient of (r) 0.88. The degree of reliability of the entire instrument was determined by using the Spearman-Brown Prophecy Formula and yielded a coefficient of 0.93. The Pearson Product Moment Correlation Coefficient was used to test the hypothesis formulated.

8. Results

Our findings revealed that monetary incentives did not have a significant relationship with teachers' job performance in the Edo Central Senatorial District of Nigeria. Table 2 reveals that the mean score for monetary incentives was 1.65 while that of job performance was 2.20. Since the mean scores are below 2.50, this demonstrates a weak relationship between the two variables.

Table 2. Mean Comparison of Monetary Incentives and Job Performance

Variables	Number of respondents	Mean
Monetary Incentive (X)	148	1.65
Job performance (Y)	148	2.20

To further verify the significance of these differences, the data were subjected to Pearson product-moment correlation coefficient (r) for correlating variables. Table 3 demonstrates the relationship between monetary incentives and job performance. The independent variable [X] (monetary incentives) had a very low relationship with the dependent variable [Y] (job performance).

Table 3. Relationship between Monetary Incentives and Job Performance

X	Y	X^2	Y^2	XY	DF(n-2)	r calculated	r critical
1.65	2.20	33.12	47.85	36.33	146	0.001	0.195

r = .19 and less -very low.

The calculated correlation for the relationship between monetary incentives and job performance was 0.001 at a 0.05 level of significance. When the calculated value was compared with the strength of the Pearson product correlation coefficient relationship, we realized that from the available computed data, the independent variable (monetary incentives) had a very low relationship with the dependent variable (job performance). Also, when the calculated value of 0.001 was compared with the critical value of 0.195, the null hypothesis of this study was retained as the statistics revealed that there was a very low correlation, which was not significant. The null hypothesis determines there is no correlation, which means that monetary incentives available to teachers in Edo State, Nigeria, do not have a meaningful impact on teachers' job performance.

Table 4 shows the various incentives available to teachers at the time this study was conducted. It indicates that incentives numbers 1, 6, 7, and 9 did not feature among teachers in public secondary schools in Edo Central Senatorial District as the response from the respondents reflect zero percent while others like furniture allowance, annual leave bonus, meal subsidy, domestic allowance, utility allowance, and housing allowance were common among teachers. The percentage representation for

furniture allowance was 2.7%, annual leave bonus 33.1%, meal subsidy 10.8%, domestic allowance 1.4%, utility allowance 8.8%, and housing allowance 43.2% while the lowest of them all was domestic allowance with 1.4%.

Table 4. Incentives Available to Teachers and the Percentage Representation

S/N	Monetary incentives	Responses	%
1	Hazard Allowance	-	-
2	Furniture Allowance	4	2.7
3	Annual Leave Bonus	49	33.1
4	Meal subsidy	16	10.8
5	Domestic Allowance	2	1.4
6	Free Health Services	-	-
7	Subsidized Health Services	-	-
8	Utility Allowance	13	8.8
9	Christmas Gift Awards	-	-
10	Housing Allowance	64	43.2
	Total	**N=148**	**100**

The results reveal that housing allowance scored the highest among the incentives available to teachers. This may likely be that all the teachers in public secondary schools in Edo Central Senatorial District enjoy housing allowance as they all responded positively to the item. Annual leave bonus was the second incentive that was positively responded to followed by meal subsidies and others. These findings can be hypothesized to exist in the public secondary schools in Edo Central Senatorial District based on their past experiences: teachers did their jobs and were promised some important outcomes (a favorable performance review, a pay rise, and a promotion) but it was not forthcoming as expected or did not commensurate with their level of motivation. The result becomes high expectancy and positive valences, but low instrumentality.

9. Discussion and Future Implications

This research, which was focused on a selection of secondary teachers in Edo State, Nigeria, perceived the significance of performance-based incentives to increase job performance leading to increased student performance. This finding is consistent with the contradictory research that exists in Nigeria. Some national-level research (Belfield & Marsden, 2005; Oyebolu & Muriana, 2010) found a positive alignment between monetary incentives and job performance; however, in this study, the teachers do

not feel the same. Other research (for example, Ololube, 2006) found that Nigerian teachers were overall dissatisfied with their pay and fringe benefits, material rewards, and advancement. Abd-ell-Fattah (2010) also corroborated these findings that teachers' ratings of their job satisfaction did not differ significantly before and after applying a new pay increase. The data in this study clearly shows a significantly low and insignificant relationship between monetary incentives as a potential solution to increase job performance among the study's participants. Subsequently, the predicted lack of change in job performance and motivation demonstrated in these studies confirms the tenants of expectancy theory; an incentive that is not perceived to have a positive impact on the teacher or what they value as a reward, may not boost the motivation of the teacher towards for a change in behavior despite the association of a reward such as an increase in pay.

These findings can relate to previous literature that suggests better alignment to teacher expectations when implementing PBP to expected outcomes. The specific reasons why the participants of this study did not perceive PBP as a motivation for change is not the scope of this research; however, some speculations can be made by using the lens of expectancy theory, previous literature, and research on using monetary incentives such as PBP to yield more positive and expected outcomes. Subsequently, the Edo State government can use these recommendations to construct and implement a comprehensive PBP that will increase teacher motivation and in turn lead to improved student outcomes in the state.

Concerning expectancy theory, previous studies of PBP, and the findings from this study, the Nigerian government should make efforts to complete further investigation into the perceptions of secondary teachers of Edo State as to why there is a limited desire to accept PBP. There are a few areas of concern outlined below.

According to Adelabu (2005) prior to the Nigeran government implementing a PBP in Edo state, teacher motivation and morale in Nigeria needs to be put into historical perspective and context and state regulation of schools and teachers. There must be a means to understand what is considered beneficial to them to be motivated to make changes, and why or why not. That is, overall, the government must ensure that the criteria of PBP are perceived by teachers to be worth their efforts (Vroom, 1964). For the government to achieve this belief among teachers, they must feel their efforts will be rewarded appropriately, will lead to changes, and that the expectations placed upon them are realistic and achievable; their criteria all align with expectancy theory. The government will need to rethink how to reverse the reported low correlation to PBP found in this study. They may want to rely on previous studies to guide them as they move forward with their planning and implementation of PBP incentives. For example, based on the findings of Bau and Das (2017), to improve the success of intended outcomes of PBP to motivate teachers and improve teacher quality ensure; there is a mechanism to hold teachers accountable; there are rewards for high-performing teachers; there are sanctions for low-performing teachers. Specific to Nigeria, Youlonfoun (1992) suggests there is evidence that other factors can undermine motivation and commitment to teaching. For example, previous studies concluded that the irregular and late payment of salaries and the non-payment of

fringe benefits (Amadi, 1983; Mbanefoh, 1982) was a major problem in the teaching profession in Nigeria, which diminished the motivation expected from PBP. As a result, school principals noted that in response teachers were not willing to work because of delays in the payment of their salaries (Ayeni 2015). However, Ayeni (2015) and Ubom (2002) both found that when Nigerian teachers were paid their salaries promptly, this induced greater commitment to teaching. This means, improving the payment schedule must become one of the key foci for a successful PBP incentive in Nigeria.

Implementing a PBP will also require a conceptual change that targets effort-performance and performance-outcome expectancy among the teachers and an informed PBP planned PBP that was suggested by Montana and Charnov (2008) to be aligned with the teachers' perceived valued rewards that would lead to their motivation for them to put effort forth for positive changes in their job performance leading to the expectancy of increased student performance. At this point, the Nigerian government of Edo may not have sufficient information to effectively make this alignment.

Another area for Edo state to consider is some of the previously identified and necessary criteria of PBP outlined in previous research and current literature on monetary incentives. That is, the presence of PBP incentives can affect the attractiveness of the teaching profession, and different people applying for teaching jobs and teachers may indeed work harder. However, first, consider some other plausible explanations in other similar research. For example, even with a PBP, teachers in Edo Central Senatorial District may still feel underpaid compared to other professionals in terms of reasonable payment and fringe benefits commensurate with the job they do. This explanation is consistent with that of Ololube's study (2006) that found Nigerian teachers are dissatisfied with their pay and fringe benefits, material rewards, and advancement. As well, it is common for teachers in State Secondary Schools to take charge of their situation and seek secondary work in other educational institutions such as Colleges of Education and other establishments to supplement their salaries. As well, Oloube's study found that some incentives such as hazard allowance, housing allowance, and annual leave bonus are meager or not paid at all when compared to other public workers in the State government establishments like the university system and the health sector. This point of view may be explained as a function of the weight of monetary incentives; that is, they are meager or not paid at all when compared to other public workers in the State government establishments like the university system and the health sector. This will leave teachers feeling underpaid compared to other professionals, in terms of reasonable payment and fringe benefits commensurate with the job they do. Therefore, this diminishes motivation even in the presence of a PBP incentive.

Overall, these implications provide some possible directions to explore and address prior to implementing a PBP system in Edo Central Senatorial District, Nigeria; a move from teacher motivation to a contextual approach. More specifically, these findings highlight the need to understand and assess complementarities between teacher effort, ability, and skills in generating high-quality education. As previous research indicates (Bold et al., 2018) in developing countries, teachers, on average, both teach too little and lack the necessary skills and knowledge to teach effectively when they

are teaching. It is difficult to think of any intervention in education that would have dramatic effects on learning outcomes if it does not simultaneously address low teacher effort, low knowledge, and poor skills. However, there is current evidence that has proven that both teacher effort and skills can be raised, leading to improved learning outcomes (see, for example, the reviews in Kremer, Brannen, & Glennerster, 2013; and Glewwe & Muralidharan, 2015), but neither of these alone (as seen in failed efforts of PBP such as Ayeni, 2015) will likely be enough to significantly change the quality of education when many teachers do not even master their students' curriculum. The results, therefore, imply that there is not only a need to address teacher motivation but it is also coupled with increasing teacher quality such as a teacher's knowledge and skills; one may not necessarily lead to the other. This problem identified is large in magnitude and broad in scope, suggesting that specific interventions such as PBP will not be enough. Teacher recruitment, preparation, deployment, incentives, and motivation, along with ongoing professional development, will all likely matter in creating a cadre of professional educators who provide high-quality education. As previously stated, the missing caveat in structural focus such as PBP is that even though motivation is increased, teachers may lack the knowhow to improve the quality of their teaching to lead to increasing student learning outcomes, essentially blocking the link between teacher motivation to perform better and begin able to perform better. The key research and operational challenges are to find approaches that target the combination of motivation and increase teacher quality based on the country's context.

Based on the findings of the study, it is concluded that monetary incentives are not always the answer to boosting motivation and job performance. As evidenced in the negative correlation between PBP and teacher motivation, the teachers (participants of this study) in Edo Central Senatorial District suggest that PBP that provides more money is not the plausible solution to improve their motivation or job performance. The Edo State Government, Ministry of Education, and other stakeholders should continue to review in more detail the current monetary incentives available to teachers and how they might improve the incentives offered to achieve the intended educational goals. That is not to say the PBP incentives should not be a consideration; however, further research must be considered to help educate policymakers to ensure that the reward scheme is based on context-specific research-based evidence (i.e., specific to Edo State), planned and implemented with alignment to teacher expectations to make it effective and yield the expected outcomes. This study is a first step in providing evidence-based narratives that speak to context and situational circumstances that can play a role in solutions to the learning crisis in Nigeria that cannot always be left to the most common or substantiated solutions from out-of-context research.

Declaration of Conflicting Interests

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Declaration of Interest Statement

No potential conflict of interest was reported by the authors.

References

Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and student achievement in the Chicago public high schools. *Journal of Labor Economics*, *25*, 95-135. https://doi.org/10.1086/508733

Abd-ell-Fattah, S. M. (2010). Longitudinal effect of pay increase on teachers' job satisfaction: A motivational perspective. *The Journal of International Social Research*, *3*(10), 11-21.

Adelabu, M. A. (2005). *Teacher motivation and incentive in Nigeria*. Retrieved from https://www.researchgate.net/publication/254134841

Amadi, P. (1983). The dilemma of the Nigerian teacher. *The Fountain*, *20*(14), 114-116.

Ayeni, A. J. (2015). Teachers' motivation as strategy for sustenance of instructional task quality and standards in secondary schools in Ondo State, Nigeria. *Journal of Education and Human Development*, *4*(4), 91-101. https://doi.org/10.15640/jehd.V4n4a12

Barrera-Osorio, F., & Raju, D. (2015). *Teacher performance pay: Experimental evidence from Pakistan*. World Bank. https://doi.org/10.5040/9781474209922

Bau, N., & Das, J. (2017). The misallocation of pay and productivity in the public sector: Evidence from the labor market for teachers. *World Bank Policy Research Working Paper*, (8050). https://doi.org/10.35489/BSG-RISE-WP_2017/016

Belfield, R., & Marsden, D. (2005). Performance pay for teachers: linking individual and organisational level targets.

Bold, T., Filmer, D., Martin, G., Molina, E., Stacy, B., Rockmore, C., Svensson, J., & Wane, W. (2017). Enrollment without learning: Teacher effort, knowledge, and skill in primary schools in Africa. *Journal of Economic Perspectives*, *31*(4), 185-204. https://doi.org/10.1257/jep.31.4.185

Bold, T., Filmer, D., Molina, E., & Svensson, J. (2018). *The lost human capital: Teacher knowledge and student achievement in Africa*. CEPR Discussion Paper 12956. Retrieved from the World Bank website: http://documents.worldbank.org/curated/en/149531557254443590/pdf/The-Lost-Human-Capital-Teacher-Knowledge-and-Student-Achievement-in-Africa.pdf

Bruns, B., De Gregorio, S., & Taut, S. (2016). Measures of effective teaching in developing countries. *Research on Improving Systems of Education (RISE) Working Paper No*, *16*(009). ttps://doi.org/10.35489/BSG-RISE-WP_2016/009

Bruns, B., Filmer, D., & Partinos, H. A. (2011). *Making schools work: New evidence of accountability reform*. World Bank Publication. http://dx.doi.org/10.1596/978-0-8213-8679-8

Chaudhury, N., Hammer, J. Kremer, M. Muralidharan, K., & Rogers, F. H. (2006). Missing in action: Teacher and health worker absence in developing countries. *Journal of Economic Perspectives*, *20*(1), 91-116. https://doi.org/10.1257/089533006776526058

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014a). Measuring the impacts of teachers: Evaluating bias in teacher value-added estimates. *American Economic Review*, *104*(9), 2593-2632. https://doi.org/10.1257/aer.104.9.2593

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014b). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. *American Economic Review*, *104*(9), 2633-2679. https://doi.org/10.1257/aer.104.9.2633

Condrey, S. E. (2005). Toward strategic human resource management. In S. Condrey (Ed.), *Handbook of human resource management in government* (pp. 1-14). Jossey Bass.

Damon, A., Glewwe, P., Wisniewski, S., & Sun, B. (2018). What education policies and programmers affect learning and time in school in developing countries? A review of evaluations from 1990 to 2014. *Review of Education*, *7*(2), 1-93. https://doi.org/10.1002/rev3.3123

Duflo, E., Hanna, R., & Ryan. S. P. (2012). Incentives work: Getting teachers to come to school. *American Economic Review*, *102*(4), 1241-78. https://doi.org/10.1257/aer.102.4.1241

Evans, D. K, & Popova, A. (2016). What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews. *The World Bank Research Observer*, *31*(2), 242-270. https://doi.org/10.1093/wbro/lkw004

Fryer, R. G. (2013). Teacher incentives and student achievement: Evidence from New York City public schools. *Journal of Labor Economics*, *31*(2), 373-407. https://doi.org/10.1086/667757

Glewwe, P., & Muralidharan, K. (2016). Improving school education outcomes in developing countries: Evidence, knowledge gaps, and policy implications. *Applied Economics, Handbook of Economics of Education*, *5*, 653-743. https://doi.org/10.1016/B978-0-444-63459-7.00010-5

Glewwe, P., Ilias, G., & Kremer. M. (2010). Teacher incentives. *American Economic Journal: Applied Economics*, *2*(3), 205-227. https://doi.org/10.1257/app.2.3.205

Hanushek, E. A., & Rivkin, S. G. (2010, January). *Generalizations about using value-added measures of teacher quality.* Paper presented at the annual meeting of the American Economic Association, Atlanta, GA. https://doi.org/10.1257/aer.100.2.267

Kinicki, A., & Kreitner, R. (2012). *Organizational behavior: Key concepts, skills & best practices* (Vol. 1221). New York, NY: McGraw-Hill Irwin.

Kremer, M., Brennen, C., & Glennerster, R. (2013). The challenge of education and learning in the developing world. *Science*, *340*(6130), 297-300. https://doi.org/10.1126/science.1235350

Ladics, J., Molina, E., Wilichowski, T., & Yarrow, N. (2018, March). The Measurement Crisis: An Assessment of How Countries Measure Classroom Practices. In Paper presented at the 2018 *Research on Improving Systems of Education (RISE) Annual Conference*. UK Oxford.

LoCasale-Crouch, J., Konold, T., Pianta, R., Howes, C., Burchinal, M., Bryant, … Barbarin, O. (2007).

Observed classroom quality profiles in state-funded pre-kindergarten programs and associations with teacher, program, and classroom characteristics. *Early Childhood Research Quarterly*, *22*, 3-17. https://doi.org/10.1016/j.ecresq.2006.05.001

Mbanefoh, B. N. (1982). Factors responsible for teacher attrition in secondary schools. *Dissertation Abstract International*, *2*(1).

Metzler, J., & Woessmann, L. (2012). The impact of teacher subject knowledge on student achievement: Evidence from within-teacher within-student variation. *Journal of Development Economics*, *99*(2), 486-496. https://doi.org/10.1016/j.jdeveco.2012.06.002

Molina, E., Fatima, S. F., Ho, A. D. Y., Melo Hurtado, C. E., Wilichowksi, T., & Pushparatnam, A. (2018). Measuring Teaching Practices at Scale: Results from the Development and Validation of the Teach Classroom Observation Tool. *World Bank Policy Research Working Paper*, (8653). https://doi.org/10.1596/1813-9450-8653

Montana, P. J., & Charnel, B. H. (2008). *Management*. Hauppauge, NY: Barrons Educational Series, Inc.

Muralidharan, K., & Sundararaman, V. (2011). Teacher performance pay: Experimental evidence from India. *Journal of Political Economy*, *119*(1), 39-77. https://doi.org/10.1086/659655

Nye, B., Konstantopoulos, K., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, *26*(3), 237-257. https://doi.org/10.3102/01623737026003237

Ololube, N. P. (2006). Teachers job satisfaction and motivation for school effectiveness: An assessment. *Essays in Education*, *18*(1), 9.

Oyebolu, S., & Muraina, K. O. (2010). Performance-reward based for teachers: Implications for educational outcomes in Nigerian secondary schools. *Academic Leadership: The Online Journal*, *8*(4), 48. https://doi.org/10.58809/FNRM7378

Park, A., & Hannum, E. (2001, June). Do teachers affect learning in developing countries? Evidence from matched student-teacher data from China. In Conference *Rethinking Social Science Research on the Developing World in the 21st Century* (pp. 1-41). Citeseer.

Pianta, R. C. (2016). Teacher-student interactions: Measurement, impacts, improvement, and policy. *Policy Insights from the Behavioral and Brain Sci*ences, *3*(1), 98-105. https://doi.org/10.1177/2372732215622457

Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, *73*(2), 417-458. https://doi.org/10.1111/j.1468-0262.2005.00584.x

Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, *94*(2), 247-252. https://doi.org/10.1257/0002828041302244

Sanders, W. L. (1998). Value-added assessment. *School Administrator*, *11*(55), 24-27.

Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*.

Snilstveit, B., Stevenson, J., Menon, R., Phillips, D., Gallagher, E., Geleen, M., ... & Jimenez, E. (2016).

The impact of education programmers on learning and school participation in low-and middle-income countries.

Ubom, I. U. (2002). Teachers attitude, motivation and job performance: implications for guidance and counseling". *A journal of Basic Education in Nigeria*, *2*(2), 39-45.

United Nations Educational, Scientific and Cultural Organisation (UNESCO). (June 2017). *Reducing global poverty through universal primary and secondary education Policy paper 32 Fact Sheet 44.*

United Nations Educational, Scientific and Cultural Organisation (UNESCO). (2014). Teaching and learning: achieving quality for all. *Education for All Global Monitoring Report.*

Vignoles, A., Levacic, R., Walker, J., Machin, S., & Reynolds, D. (2000). *The relationship between resource allocation and pupil attainment: A review* (No. 2). Centre for the Economics of Education, London School of Economics and Political Science.

Vroom, V. H. (1964). *Work and motivation*. John Wiley.

World Bank. (2018). *World Development Report 2018: Learning to Realize Education's Promise*. The World Bank. https://www.worldbank.org/en/publication/wdr2018