

# Government's Restructuring Pay Policy and Job Satisfaction: The Case of Teachers in the Ga West Municipal Assembly of Ghana

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This paper examines the 'aftermath effect' of the new civil service pay policy on job satisfaction among the teachers in Ghana. The study found that income, personal growth, bonus and organizational type had both direct and indirect effects on job satisfaction. The two-way analysis, as well as the multivariate analysis of variance, indicated that gender, age group, and educational background also played a role in determining the level of satisfaction among the teachers. The high unemployment rate (11%) and the implementation of the Single Spine Salary Structure (SSSS) for the public sector in 2010 are also contributing factors to the retention of teachers.

*Keywords:* job satisfaction; management; single-spine-salary-structure; MANOVA; stepwise regression; Ghana

### Introduction

The teaching profession in most developing countries leaves much to be desired. The conditions of service compared with other sectors raise many questions about the increasing importance of the teaching profession. Ghana, like most developing countries is faced with similar challenges. There is a strong correlation between job satisfaction and performance (Danchev & Ilgun, 2013).

In this study, therefore, we explore the relationship between job satisfaction and performance by drawing from other studies of related factors in relation to job satisfaction theories and models. As a result, job satisfaction factors were contextualized in Ghana using teachers in the Ga West district as the unit of analysis. This was done in view of understanding the impact of government's restructuring pay policy on job satisfaction. Job satisfaction, as a concept, is understood in different ways by different researchers; for instance, Lawler states that the generality of job satisfaction is informed by the difference between all things an employee feels he should receive from his job and all those things he actually does receive (Lawler, 1973). Locke

views job satisfaction as the pleasurable emotional state resulting in the appraisal of one's job as achieving or facilitating the attainment of one's job values (Locke, 1969).

Paul Spector describes job satisfaction as the degree to which employees like (satisfaction) or dislike (dissatisfaction) their jobs (Spector, 1985, 1997). However, there are other theories and concepts with different dimensions. For example, Evans revealed that the lack of general agreement in ascribing a definite definition to the concept (job satisfaction) may lead to misunderstandings among the researchers and that may influence the construct validity of job satisfaction measurements (Evans, 1998). Notwithstanding, in this study, we define teacher satisfaction operationally as the willingness to stay at post given competing alternatives.

The salaries of teachers in Ghana accounts for less than 35% of the public service wage bill to government despite the fact that the sector employs more than 75% of the total public service workforce (Domfeh, 2013). Given the same level of qualification, the workers in public health and security services (such as the police) are well remunerated than their counterparts in the teaching field. In fact, the lowering condition of service and incentives has seen the mass exodus of trained teachers to other sectors deemed lucrative thereby creating further shortage in the number of trained teachers in the various second cycle institutions (GNAT & TEWU, 2009). It was against this backdrop that in 2006 the Kufuor's administration, in consultations with various stakeholders, engineered a mechanism to halt these itinerant tendencies by introducing a uniform pay structure. The philosophy of this uniform pay structure was based on individual qualification with minor differences as may be determined by other factors.

In June 2007, an Act of Parliament (Act 737, 2007) established the Fair Wages Salary Commission (FWSC) with the mandate to ensure fair, transparent, and systematic implementation of government's public service pay policy dubbed 'Single Spine Salary Structure' or SSSS. However, the policy was implemented by the Mills administration on January 1st, 2010. Among others, the policy was to minimize disparities, discrepancies, and distortions in salaries of the public sector, and to make the public service budget easier and manageable for estimation and forecasting (FWSC, 2009, 2013). However, the question whether this new policy has succeeded in injecting stability into the teaching profession is an important issue that has not yet been explored. For this case, several questions need to be answered. For instance, do income and incentives have any correlation with the job satisfaction of teachers and for that matter, performance? Are there other (hidden) factors that ought to be considered? Are there differences in the level of satisfaction between male and female teachers? Do educational background and location of the school have an impact on the satisfaction of teachers? These and other questions shall form the basis of this research. It should be noted however, that problems encountered in job satisfaction research are due to the numerous and various instruments used to measure this phenomenon (Evans, 1998). That notwithstanding, the focus of this study is to explore and examine these avalanche of instruments to determine the most suitable and influencing factor in predicting job satisfaction among the teachers in the Ga West Metropolis in Accra, Ghana.

Based on the perspectives elaborated, the study in a nutshell seeks to achieve the following objectives:

- 1. To identify the factors that affect (directly and indirectly) job satisfaction among the teachers in the Ga West Municipal Assembly.
- 2. To assess the impact of age, gender, educational background and schools' location on the level of satisfaction taking cognizance of the recent salary restructuring policy.
- 3. To make policy recommendation based on these findings to the District education Directorate and beyond to enhance the general output of teachers in the metropolis.

### **Review of Literature**

### **Theories on Job Satisfaction**

Over the years, various scholars have attempted to elucidate the term 'job satisfaction.' These attempts created different distinctions, especially between affective and job satisfaction with yet another strand called job cognitive. The most famous of these job satisfaction models is that of Locke. Locke's Range of Affect Theory is premised on the fact that satisfaction is determined by the difference between what one desires in a job and what he actually has on the job (Locke, 1969). In fact, several theories on job satisfaction have been put forward; the dispositional theory is of the view that most people have natural dispositions that allow them to gravitate towards certain level of satisfaction regardless of their jobs (George, 1992; Judge & Locke, 1993; Staw & Cohen-Charash, 2005; Staw & Ross, 1985; Watson & Slack, 1993). Yet, Judge, Kluger, Locke, and Durham (1998) proposed a theory similar to the dispositional theory, but extended their argument to the effect that there are four core self-evaluations that determine one's disposition towards job satisfaction: self-esteem, general self-efficacy, locus of control, and neuroticism (Judge et al., 1998). Another popular theory, the equity theory, examines how fairness is viewed by persons with regards to social relationship (Cosier and Dalton, 1983). The discrepancy theory on the other hand, sheds light on the source of anxiety and dejection. It states that a person who has not fulfilled a given responsibility may have feelings of anxiety and regret for non-performance and that such individuals tend to have dejection for their jobs for not being able to achieve their aspirations and dreams (Locke, 1969, 1976).

Herzberg, Mausner, and Synderman (1959) proposed two-factor theory (the Motivator Hygiene Theory) in an attempt to contribute to this discourse. Their theory deals with motivation and job satisfaction in an organisation. However, Frederick's Hygiene factors encompass variants of environmental conditions, such as supervisory practices, company policies, pay, and other related conditions at the workplace. Yet, this theory (Herzberg twofactor theory) has been criticized in several dimensions. For instance, Ngimbudzi (2009) argued that what Herzberg considers as 'satisfiers' may be treated as 'dissatisfiers' in other contexts and that the 'satisfiers' failed the generalization test. Moreover, Robbins & Judge (2008) advanced five main critiques (i.e. methodological limitedness, unreliable and questionable measurements, theory inconsistent with other studies and assumptions on productivity with less emphasis on its relationship to job contentment) to this two-factors theory. Meantime, the Job Characteristics Model (JCM) proposed by Hackman and Oldham (1974) is the most used framework for understanding the impact of a particular job feature on job satisfaction and outcomes. Indeed, five core job satisfaction characteristics (feedback, autonomy, task significance, task identity, and skill variety) are identified with the model. These characteristics are seen to be relevant on three critical psychological states (knowledge of the actual results, experienced responsibility for outcomes and experienced meaningfulness) with eventual effect on the outcome of the work (work motivation, absenteeism, job satisfaction etc.). The core characteristics, according to the authors, may be grouped together to form a motivating potential score (MPS) for a job, or even be an indicator of how a particular job is likely to be affected by the attitudes and behaviour of employees.

Generally, these theories have some limitations, especially in terms of empirical proofs. Nevertheless, Maslow's (1954) Needs theory has been the most relied on theoretical framework, which may be attributed to the fact that Maslow's model deals with five levels of human needs such as physiological, safety or security, self-actualisation, ego, and social dimension.

# **Job Satisfaction Instruments**

Several and diverse job satisfaction instruments have been used in conventional researches of this nature. For example, the Job Descriptive Index (JDI) (Roznowski, 1989; Smith, Kendall, & Hulin, 1969), the Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967), the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1974), the Job in General Scale (JIG) (Ironson et al., 1989), the Global Job Satisfaction (GJS)

(Pond & Geyer, 1991; Quinn & Shepard, 1974; Rice, gentile, & McFarlin, 1991) and the Job Satisfaction Survey (JSS) (Spector, 1985) are some of the tools employed. Whereas some of the surveys assess the global job satisfaction without reference to any specific facets (e.g. JIG, GJS), others use the facet approach (e.g. JDI) or a combination of both approaches (e.g. JSS, MSQ) (Fields, 2002; Spector, 1997).

Yet, there are also instruments that are used to measure only one specific job satisfaction dimension. Examples are the works done on satisfaction with the Work Schedule Flexibility Scale (Rothausen, 1994) and the Pay Satisfaction Questionnaire (Heneman & Schwab, 1985). This variety of the instruments provides researchers with several alternatives for effective research. On the other hand, it makes research results incomparable. Additionally, these instruments require careful selection in order to reflect the objectives of a particular research. In view of this, Spector argued that instruments and their scales sometimes do not represent the research sample. He claimed that job satisfaction instruments are general, and as such developed for typical organizations such as white collar and/ or businesses, and may not always be applicable for all samples (Spector, 1997). Moreover, there are instruments that are developed based on a specific organizational sector (e.g. medical doctors/other staff in the health service sector). Indeed, instruments for this group may not reflect aspects of other organizational sectors (e.g. white-collar, teachers, police officers). In a confirmatory analysis, Astrauskaite, Vaitkevicius, and Perminas (2011) identified eight sets of variables in their studies. These include organizational type, work hours, level of appreciation, bonus, desire for personal growth, job philosophy, age, and gender. Their results showed that most of these variables had significant statistical effect with high Cronbach's alpha and reliability.

Meanwhile, Astrauskaite et al. (2011) and Spector (1997) pointed out that teachers differ from typical employees in many ways. They argued that instruments usually used to measure such job satisfaction dimensions as appreciation, communication, coworkers, fringe benefits, job conditions, nature of work, organization itself, organizational policies and procedures, pay, personal growth, promotion opportunities, recognition, security and supervision may not always be applicable to analyze job satisfaction in the teaching field. Nevertheless, some researchers (Rosser, 2005; Sharma and Jyoti, 2009; Tillman and Tillman, 2008) believe that these factors may be used in studying job satisfaction among teachers. The consensus on these dimensions is specifically, on supervision, work itself, promotion and recognition, because these are important dimensions in measuring the teachers' satisfaction with their work (Rosser, 2005; Sharma and Jyoti, 2009; Tillman and Tillman, 2008). Moreover, several researchers have used the same measurements or dimensions but with different wording (synonym). For instance, Kreitner and Kinicki (2004) defined job satisfaction with the synonym 'motivation,' which he argued contains those psychological processes that cause the arousal, direction and persistence of goal directed voluntary actions. Motivation depends on integrating both intrinsic and extrinsic factors to have committed employees. Similarly, Board (2007) emphasised the importance of incentives (tangible) and injecting efficiency and effectiveness as means to increasing performance for task not performed before, to encourage 'thinking smarter' and to sustain and maintain both quantity and quality to achieve goals. Primary factors, such as recognition, rewards and incentives are vital for motivating employees. Aarabi, Subramaniam, and Akeel (2013) confirmed this assertion by using payment, job security, promotion, freedom, friendly environment, training, and employee job performance to measure organizational motivation, and found positive relationship among these factors. On reward and recognition/appreciation (which comes in various forms, e.g. income/pay, bonus, fringe benefits etc.), other researchers proposed keeping high spirit among employees in order to boost their morale; this may directly impact performance and output through job satisfaction (Ali & Ahmed, 2009; Baron, 1983; Barton, 2002; Danish & Osman, 2010; Flynn, 1998; Forson, Jakkaphong, & Carsamer, 2013; La Motta, 1995; Lawler, 2003; Morris, 2004).

Most researchers, in an attempt to use quantitative method, have mainly employed an analysis of variance in order to look at the differences between variables on job satisfaction and gender or other related variable depending on the research questions. With the use of this approach, Zhongshan (2007) reported that job contentment among Chinese teachers increased as they advanced in age and decreased among younger teachers. This view has been supported in related studies to imply that the older the teachers are, the higher the probability that they will be satisfied with their profession, while the contrary stands for younger teachers (Bennel & Akyeampong, 2007; Greensberg and Baron, 1995). Other factors such as marital status, number of years on the job, type and nature of school (private or public), location of school (remote or rural) and promotion/appreciation from studies conducted in the UK, Greece, China and Tanzania have supported this notion albeit mixed results (Bennel & Akyeampong, 2007; Crossman and Harris, 2006; Dinham and Scott, 2000; Greensberg and Baron, 1995; Koustelios, 2001; Zhongshan, 2007).

Meanwhile, most research works on teacher job satisfaction in Ghana have relied heavily on qualitative approach, even though some have used simple cross tabulation and frequency distribution. However, these approaches only elicit responses, consequently it is not possible to capture the predictive strengths and impacts of the variables being measured within

a given theoretical framework (Azornu, 2012; GNAT & TEWU, 2009; Ohene-Kunto, 2012).

It is evident from the above that most research works were interested in investigating only the differences in job satisfaction in relation to gender, age etc. In fact, fewer of these works have actually attempted investigating the predictive strengths of the so-called variants of job satisfaction/motivation in a regression model, let alone use path analyses to establish such effects directly or indirectly. Consequently, this research work considered these limitations and used a combination of multivariate multiple regression (stepwise), path diagram and analysis of variance to capture the predictive nature of these variables, as well as the impact of other categorical variables on job satisfaction simultaneously. The factors used in this study are however drawn from the four main classifications of environmental, strategic employee recognition, individual, and psychological dimensions taking stock of the six main models of job satisfaction discussed in the literature.

### **Conceptual Framework and Research Model**

Having reviewed the various theories on job satisfaction (motivation), the variables below were identified as bearing profound relationship with job satisfaction, and were thus incorporated into our research model to outline their relationship (direct and indirect) with the dependent variable. Note that for simplicity in the path diagram, the study was limited temporarily to six continuous variables (Burns & Burns, 2008; Stevens, 1996; Tabachnick & Fidel, 2013) but included other categorical variables subsequently as shown in the brackets. Conceptually, the variables used are described below:

- Endogenous variable: Job Satisfaction.
- Exogenous variables: Income, Personal Growth, Bonus, Appreciation, Work Freedom, Organizational type (Age, Gender, Location and Educational background).

### **Hypothesized Theoretical Equation**

Based on the research model above, six structural equations were derived as shown below:

$$Y_{job \ satisfaction} = \alpha + \beta_1 income + \beta_2 organisational \ type$$
  
+  $\beta_3 personal \ growth + \beta_4 bonus + \varepsilon_1$  (1)

$$Y_{personal\ growth} = \alpha + \beta_{13} income + \beta_7 appreciation + \beta_5 bonus + \varepsilon_2$$
 (2)

$$Y_{income} = \alpha + \beta_8 work \ freedom + \varepsilon_3$$
 (3)

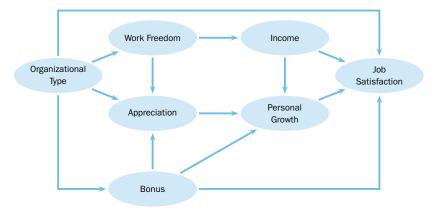


Figure 1 Conceptual Framework and Research Model

$$Y_{appreciation} = \alpha + \beta_{10}$$
work freedom +  $\beta_{12}$ organisation type   
+  $\beta_6$ bonus +  $\varepsilon_4$  (4)

$$Y_{work\ freedom} = \alpha + \beta_9 organisational\ type + \varepsilon_5$$
 (5)

$$Y_{bonus} = \alpha + \beta_{11}$$
 organisational type +  $\varepsilon_6$  (6)

Where  $\alpha$ ,  $\beta$  and  $\varepsilon$  are the constants, standardized coefficients and error terms respectively.

### **Statement of Hypotheses**

Based on the vast literature available and the conceptual framework in relation to the structural equations presented above, we hypothesized that the set of exogenous variables identified has direct and indirect links with the endogenous variable (Job satisfaction). In order to aid in testing this general hypothesis, specific hypotheses (H1-H6) below were pursued.

- H1 Income, organizational type, personal growth, and bonus have positive and direct effect on job satisfaction.
- H2 Income, appreciation, and bonus have direct and positive effect on personal growth but indirect effect on job satisfaction through personal growth.
- H3 Work freedom directly affects income negatively, but indirectly affects job satisfaction through income, appreciation, and personal growth.
- H4 Work freedom, organization type, and bonus directly affect appreciation positively but indirectly affect job satisfaction through personal growth positively.
- H5 Organizational type directly affects work freedom negatively but indi-

- rectly affects job satisfaction through income, appreciation, and personal growth.
- H6 Organizational type has positive direct effects on bonus with simultaneous positive direct and indirect effects on job satisfaction through appreciation and personal growth

# **Research Methodology**

### Sample Size and Unit of Analysis

The data used was obtained from survey conducted using random sampling technique to select eight basic schools in the Ga West Municipal Assembly in the Greater Accra Region of Ghana. There are different views on sample size for these kinds of analyses, but the recommendation in most cases is to have large sample size. In view of this, Stevens (1996) recommended at least 15 participants per predictor in order to have a reliable equation in the case of factor analysis. Tabachnick and Fidel (2013) then provided a formula for calculating sample size requirements, taking into consideration the number of independent variables; thus, N > 50 + 8m (where m denotes the number of independent variables). In line with these and other requirements (Yamane, 1967), a total of 600 self-administered questionnaires were distributed among the elementary schools with random selection of respondents. 436 (≈ 73%) of these questionnaires were adequately completed and returned. The questionnaire was divided into two parts; the first part captured the demographic characteristics of respondents with the level of measurement being nominal/dichotomous on gender, location of school, educational qualification, age, marital status and type of school. The second part encompasses questions that sought for answers in order to be able to measure the views and perceptions of respondents.

Job satisfaction is an issue rooted in psychology, especially within organizational behaviour or science. In measuring job satisfaction, a scale of 1-10 was used with 1 being the lower and 10 being the highest level of satisfaction among the teachers. For other items, the advice of Kerlinger (1978) and Gall, Gall, and Borg (2007) on five-point likert scale type of questions was adhered to (1 – strongly agree, 2 – agree, 3 – strongly disagree, 4 – disagree and 5 – undecided).

### **Data Analysis**

Data was analyzed in two different ways in line with the research objectives using IBM SPSS PASW version 18. In the first part, we tried to establish the causal relationship between the set of exogenous variables and endogenous variable in stepwise multiple regression models based on the hypothesized structural equations from the conceptual framework. The rationale for doing this was to figure out how much each variant contributed to the determination of the level of satisfaction by computing path coefficients.

In the second part, we used both two-way analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) to analyze the effects of the other categorical variables (gender, age groups, educational background, and location of the schools) on job satisfaction. In all cases, the assumptions guiding the use of these methods were strictly observed. Diagnostic checks were performed on all of the assumptions to avoid violation upon which violated assumptions observed were corrected.

# **Empirical Results and Discussion Demographic Characteristics**

Aggregation of the responses from the survey indicated that out of the 436 self-administered questionnaires completed and returned (from the eight randomly selected schools), 185 came from male respondents, representing 42.1% while 254 (57.9%) came from females. About two-thirds (264) of the respondents, representing 60.1% were aged between 18-40 years, whereas 21.6% were within the age cohort of 41–49. The remaining 17.8% were above 51 years of age. The educational qualification ranged from senior secondary school leavers (having received on the job training through induction courses) to few master degree holders. 197 (44.9%) of the respondents were teachers cert. 'A' holders and 103 (23.2%) were SSS graduates. Again, 96 (21.9%) were diploma certificate holders and the remaining (10%) were bachelor and master degree holders. Additionally, 200 (45.6%) of the respondents reported the location of their schools to be in peri-urban centers, while 171 (39%) had their schools located in rural centers. The remaining respondents (68; 15.5%) were from schools located in urban centers.

# **Diagnostic Check for Multivariate Assumptions**

We facilitated diagnostic checks using both graphical and statistical approaches to ensure that there was no violation of critical assumptions. Preliminary descriptive statistics, especially for the six main variables indicated critical violation of assumptions; specifically, preliminary correlation matrix and tolerance, and variance inflation factor (VIF) indicated minor multicollinearity between bonus and income (r = 0.763), which was a concern. The mean score of the selected variables was between 4.75-2.42 with a standard deviation of 1.86-1.042. On skewness and kurtosis, the distribution was negative but within the acceptable range of  $\pm 1$ . The Pearson correlation coefficient (r) between income and personal growth was high (r = 0.720) and a test of normality using Kolmogorov-Smirnov and Shapiro-Wilk indicated that the selected variables were highly significant (p < 0.01),

Variable	(1)	(2)	(3)	(4)	(5)	(6)
(1) Income	1					
(2) Bonus	0.685*	1				
(3) Personal Growth	0.669*	0.683*	1			
(4) Organizational Type	0.449*	0.457*	0.609*	1		
(5) Appreciation	0.469*	0.459*	0.577*	0.471	1	
(6) Work Freedom	-0.181*	-0.207*	-0.255*	-0.102*	* -0.201*	1
Mean	4.300	4.440	4.660	4.510	3.910	2.400
Std. Deviation	1.523	1.529	1.487	1.617	1.795	1.035
Skewness	-0.274	-0.278	-0.393	-0.194	0.077	0.466
Kurtosis	-0.571	-0.568	-0.453	-0.835	-0.937	-0.41

**Table 1** Descriptive Statistics and Correlation Matrix (N = 436)

**Notes** \* p < 0.01; \*\* p < 0.05 (2-tailed).

suggesting violation of the assumption for normality. Note that this is a common phenomenon with a large set of data (Pallant, 2011). We used another statistical measure (Cooks Mahal Distance) to check for normality, linearity and outliers, and observed outliers in most of the variables. This might have affected the distribution trend; hence the data was trimmed to resolve the assumptions violated accordingly. Table 1 shows the descriptive statistics after resolving the violated assumptions.

After trimming the data set for outliers, the distribution was fairly normal. The P-P and Q-Q plots are a confirmation of this. On linearity and homoscedasticity, the residuals had linear relationship with the predicted dependent variable and were almost the same for all the predicted scores.

## **Predictive Strength Assessment**

We assessed the predictive strength of the variables identified. The coefficients for the direct and indirect effects for the various latent variables  $(\beta)$ were estimated in relation to job satisfaction. There was significant number of direct and indirect relationship as recorded in the path diagram and summarized in Table 2. Note that the ultimate attention was on the manifest variable (job satisfaction) with recursive direction (see Figure 2). The bivariate correlation between the endogenous and exogenous variables indicated that there was a significant relationship between them. The product moment Pearson coefficients were r = 0.434, r = 0.370, r = 0.450, and r = 0.422 for income, organizational type, personal growth and bonus respectively, and all the variables were statistically significant (p < 0.01 two tailed). Note, however, that the change component presented in the last section of Table 2 is the difference between total correlation and total effects. A summary is presented in Table 2.

From the path diagram (Figure 2) and in accordance with the baseline

Corr. Variables **Effects** Change Dependent Independent Direct Indirect Total Job Income 0.434 0.164\* -0.1350.029 0.405 Satisfaction Organizational Type 0.370 -0.130\* -0.210-0.3400.710 Personal Growth 0.450 -0.450\*-0.4500.900 0.422 -0.252\* -0.353-0.605 0.183 Bonus Personal 0.669 0.299\* 0.299 0.370 Income Growth 0.576 0.334\* 0.334 0.242 Appreciation Bonus 0.683 0.683\* 0.103 0.786 -0.103 -0.181 0.000 Income Work Freedom -0.181\* -0.181Work Freedom -0.199 -0.109\* -0.109 -0.090 Appreciation 0.475 0.471\* 0.793 -0.318Organizational Type 0.322 0.307 Bonus 0.464 0.307\* 0.157 Work Freedom Organizational Type -0.102-0.102\*-0.1020.000 Organizational Type 0.457 0.457\* 0.457 0.000 Bonus

**Table 2** Summary of Direct, Indirect and Total Effect and Correlation Coefficients (N = 436)

**Notes** \* p < 0.01.

stepwise regression, the influencing relationship with direct linkage to job satisfaction accounted for over 26% in the cross variable variance. Income, organizational type, personal growth and bonus were all statistically significant (p < 0.01) with direct path coefficients (pc) of pc = 0.164, pc =-0.130 and pc = -0.450 and corresponding indirect effect of pc = -0.135, pc = -0.210, and pc = -0.353 respectively, for income, organizational type and bonus respectively. This accounted for a total effect of pc = -0.029, pc = -0.340, pc = -0.450 and pc = -0.605 for the respective variables (Table 2). When personal growth was used as the dependent variable to establish the causal relationship to job satisfaction, the bivariate correlation revealed significant Pearson coefficients of r = 0.669, r = 0.576, and r = 0.683 respectively. Income, appreciation, and bonus showed direct path coefficients (pc = 0.299, pc = 0.334 and pc = 0.683 respectively), with an indirect effect of 0.103 on bonus. The model (Figure 2) accounted for 59.9% of the cross variance explanation and as such it was an improvement over the first equation (1). Our finding suggests that teachers perceive income, work appreciation and bonus as the main factors relevant for their advancement especially, for personal growth. Additionally, the existence of these factors guarantees the extent to which teachers may be satisfied (thus serves as intervening factors). This is consistent with earlier theories and results in the literature (Danchev & Ilgun, 2013; Forson et al., 2013; Ngimbudzi, 2009).

However, models three, five and six did not show any significant change. The effects of work freedom, organizational type and bonus on appreciation

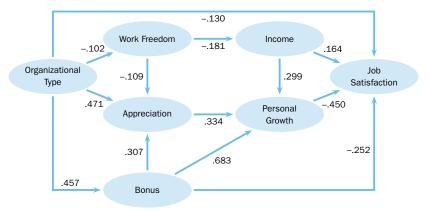


Figure 2 Path Coefficients of Structural Equation for Hypothesis Testing

also reported significant mix of direct and indirect effects (Figure 2). A direct path coefficients of pc = -0.109, 0.793 and 0.307 were recorded with an indirect effect of 0.322 on bonus yielding a total effect of -0.090, -0.318 and 0.157 for these variables respectively. The model (Figure 2) accounted for 30.8% of the cross variable explanation in the variance. However, organizational type (used as a proxy for job philosophy), bonus and personal growth had weaker effect on job satisfaction with negative coefficients. In other words, though they were relevant, they were not strong in deciding the level of contentment, while the presence of appreciation and bonus did. These findings were indeed, consistent with theories in the literature (Judge et al., 1998; Herzberg, 1959; Hackman and Oldham, 1974; Maslow, 1954).

Figure 2 is a path diagram showing the standardized path coefficients (betas) of the effects among the hypothesized direction (direct or indirect) to job satisfaction. It should be mentioned that the path diagram shown here is without the estimated total effects as that has to be computed separately together with other parameters such as the coefficient of determination in the stepwise regression analyses.

# **Impact Assessment of Categorical Variables**

The study moved a step further to assess the impact of age and gender on the level of job satisfaction taking into account the interaction effects in a two-way analysis of variance. This would be followed by MANOVA to assess the impact of educational background and the location of school on combined dependent variables selected from the most predictive factors in the stepwise regression. This is to investigate if any of the age groups and gender determine job satisfaction.

A test on one of the assumptions on homogeneity of variance is conducted using the Levene's test of equality of error variances. A more stringent significant level was set (p < 0.01) to evaluate the subsequent results of the two-way ANOVA. We found a non-significant level of 0.418 larger than 0.01, implying this assumption is not violated. A two-way between-groups analysis of variance was conducted to explore the impact of gender and age on the level of job satisfaction. Teachers were divided into five groups according to their ages (i.e. Group 1: 18-24 years; Group 2: 25-32 years; Group 3: 33-40 years; Group 4: 41-49 and Group 5: 50 and above). The interaction effects between gender and age group were not statistically significant, F(4,423) = 0.492, p = 0.741. On the other hand, there was a statistical main effect on gender and age groups, F(1,423) = 8.440, p = 0.004; F(4,423) = 3.821, p = 0.005 with a relatively small effect size (partial eta squared = 0.020; 0.035 respectively). Since gender variable had less subcategory, we were unable to estimate the post-hoc comparison using Tukey HSD test. The post-hoc comparison on the different age groups indicated the mean scores for the years 18–24, 25–32 and 50+ groups (M = 28.60, SD = 6.094; M = 25.65, SD = 4.920; M = 25.75, SD = 6.178) were significantly different from the age groups (M = 26.77, SD = 5.918; M = 26.62, SD = 5.706), implying the level of contentment among these age cohorts was higher than the latter. The age groups 33–40 and 41–49 (M = 26.77, SD = 5.918; M = 26.62, SD = 5.706) were insignificant. The results are both consistent and inconsistent with other studies that suggest age and gender does determine teachers' level of satisfaction. Younger teachers are poised to be satisfied with the teaching profession holding other conditions constant, as opposed to what other researchers have suggested (Bennel & Akyeampong, 2007; Crossman & Harris, 2006; Dinham & Scott, 2000; Greensberg & Baron, 1995; Koustelios, 2001; Ngimbudzi, 2009; Zhongshan, 2007).

A two-way multivariate analysis of variance is estimated to assess the impact of location and educational background on three of the variants of job satisfaction identified from the stepwise regression. The Box's Test of Equality of covariance matrices indicated a significant value less than 0.001, implying the assumption on homogeneity of variance has been violated. Other preliminary assumption testing was conducted on linearity, normality, univariate and multivariate outliers without serious violation. Three of the dependent variables were used: organizational type, personal growth, and bonus. The independent variables were location and educational background. Levene's test of equality of error variance indicated one of the dependent variables (bonus) has a significant level larger than 0.001 with the remaining two violating the assumption on homogeneity of variance. To deal with this, the pillai trace is reported in place of the wilk lambda. The interaction effects between location and educational background on the combined dependent variables were statistically insignificant, F(3,406) = 0.011, p = 0.221. There was a statistically significant difference between education on the combined dependent variables, F(12, 1224) = 2.579, p = 0.002; pillai trace = 0.074; partial eta squared = 0.025. When the results of the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of 0.017 (i.e. dividing .05 by the combined DVs), was the bonus, F(4,408) = 2.424, p = 0.016, partial eta squared = 0.023. The post-hoc comparison using Tukey HSD on the different educational background on bonus indicated holders of SSS/Induction courses on Teachers' cert. 'A' and Bachelor degree were significantly different. That is, teachers with these educational backgrounds are satisfied with the teaching profession. There is a lot of soundness in this finding as unemployment rate in Ghana is relatively high, around 11% (see https://www.cia.gov/library/publications/theworld-factbook/geos/gh.html), as the youth might be less concerned about changing jobs. In addition, the introduction of the Single Spine Salary Structure (SSSS) by the Fair Wages Salary Commission (FWSC) could be a contributing factor to the retention of teachers in recent times. An inspection of the mean score indicated that SSS/Induction course, bachelor degree and Cert. 'A' holders reported the following level of job satisfaction (M = 3.95, SD = 1.722; M = 4.86, SD = 1.134; M = 4.67, SD = 1.533), and the Diploma and Master's degree holders reported (M = 4.46, SD = 1.271; M = 4.00, SD = 1.633), which were insignificant.

# **Conclusion and Policy Recommendation**

The findings and results confirmed the hypotheses postulated in the beginning of the study. There are both positive and negative relationships between the independent variables identified as possible factors relevant in determining the level of satisfaction among the teachers. Though it was pointed out that there are numerous challenges with regards to having definite instruments to measure the level of satisfaction among a group of people and the work engaged in, triangulating and adopting items from numerous theories and frameworks put forward by other researchers could have a lot of soundness by confirming these theories.

In this study, we found the type of organization, the income level, and the desire for personal growth to be the key determinants of job satisfaction among the teachers in the Ga West Municipal Assembly in Ghana. Meanwhile, income level in this study context is defined as teachers' basic pay excluding other fringe benefits and incentives. The type of organisation discussed in this study refers to the teachers in the public sector and the philosophy. Work freedom is the time available to teachers after their official

duties on the job. Bonus contains the incentives and fringe benefits introduced by the new salary structure. Appreciation is the social recognition teachers enjoy as mentors and as the source of knowledge in the society. Personal Growth is explained as the manner in which the sector serves as a launch-pad for both career and academic advancement.

There was a negative effect on the type of organization, which implied the causal relationship was weak. Other key factors such as appreciation (recognition) and the work freedom one has on the job did not have direct effects, but worked through other factors in establishing their relationship to job satisfaction. These factors are equally relevant in determining teachers' level of satisfaction. This finding is consistent with other studies especially in line with income, incentives, and performance (Danchev & Ilgun, 2013).

In assessing the impact of age and gender on the level of job satisfaction among the teachers, a two-way analysis of variance was used. The results indicated gender was a key determinant in the teachers' level of satisfaction. However, the study was unable to establish which of the gender categories was more satisfied with the teaching profession. This is an area that can be studied in subsequent research using either qualitative or quantitative research approach to unearth which specific gender is satisfied with the profession. The study also established that teachers with SSS/Induction course, Cert. 'A,' and bachelor degree including certain age cohorts were relatively satisfied with the teaching profession. This result is consistent with other studies in the literature (Bennel and Akyeampong, 2007; Crossman and Harris, 2006; Dinham & Scott, 2000; Greensberg and Baron, 1995; Koustelios, 2001; Ngimbudzi, 2009; Zhongshan, 2007). The astronomical high unemployment rate of 11% and the SSSS implemented in 2010 could have possibly created a fertile ground for the youth to find a cause to remain satisfied with the teaching profession. However, since this study could not establish how this level of satisfaction translates into job performance or output, it is recommended to perform further studies in order to unearth this relationship. Though, since its inception, the new salary structure has succeeded in stabilising the movement of teachers out of the profession, it is too early to forecast if the trend will continue considering the numerous industrial strike challenges the policy is currently facing (Adoboe, 2013). Additionally, one of the key measures in the new policy was to link payment to productivity, which should reflect in the Gross Domestic Product (GDP) in the subsequent years. However, this link is yet to be established. Government expends more than 70% of its revenue on this new pay policy with less than 30% left to cater for infrastructure, water, electricity etc., which cast doubts on its sustainability (Fosu, 2013; FWSC, 2013).

In conclusion, the knowledge of the results presented in this study is rel-

evant in diverse ways. These results would help policy makers to know the exact factors on which to focus in order to attract the best candidates for the teaching profession, as well as retain existing teachers. Additionally, the impact of the pay restructuring policy could be assessed using job retention as the measure of its success or failure. Where teachers are seen to be dissatisfied with their job, the level of apathy is high, which adversely affects their general output. In addition, the results can also serve as a framework within which the Ga West Municipal Assembly (Ghana Education Service) can work to improve the teaching profession, to establish efficient job environment, to increase the level of satisfaction not only in the greater Accra Region of Ghana, but even other African nations with similar problems, to emulate for better employee performance, and to enhance productivity.

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