Effect of Intrinsic Motivational Factors on the Employees’ Performances in the Public Sector of Ghana

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Abstract:
The objective of this study was to determine the levels of intrinsic motivational factors on the Employees job Performances in the Public Sector of Ghana by components of the motivational construct (interest and pleasure, job characteristic, immediate work environment) and subsequently examined the extent to which these components influenced the employees job Performances in the Public Sector of Ghana. A sample size of four hundred (400) respondents was chosen from selected Ministries, Departments and Agencies to present a reasonable coverage of the public sector which is not only varied but also multifaceted. The research approach adopted for this study was quantitative method. Data sources used in carrying out the research were obtained from primary sources. Self-Administered questionnaires were used to collect data from the respondents. Multi-stage sampling procedure was used (Stratified and simple random sampling). The data were analyzed using descriptive statistical analysis and Structural equation model (the SPSS version 21). The study findings showed that the overall level of intrinsic motivation among employees in the public sector of Ghana is below the desirable. The finding also showed that the overall level of intrinsic motivations has significant positive effect on employees’ performance by the used of structural equation model.

Keywords: Employee Job Motivation, interest and pleasure, job characteristic, immediate work environment, Employees Performance, Public Sector, Ghana

1. Introduction
The intrinsic motivation comes out from an individual pleasure or interest in the task and it does not involve working on activities for the sake of external rewards, it instead necessitates the feeling of inner pleasure in the activity itself. It can be seen as a force that involves doing activities without external incentive. Armstrong (2006) presented that intrinsic motivation inner or internal motivation that generally do not need or require external rewards including pay to influence one do well in a job. According to Riggo, (2014) individuals are intrinsically motivated when they seek enjoyment, interest, satisfaction of curiosity, self-expression, or personal challenge in the work. A person can be intrinsically motivated to do a task if there is no clear reward for the task done except the task itself or the feelings which upshot from the task.

Intrinsic motivation may be associated with self-motivation and job-based motivation because the employee enjoys performing the actual or specific tasks and relish the challenge of successfully completing the tasks. This component of motivation is believed to have a longer-term and significant effect on employees’ performance as it is inherent in the employee and not imposed by the company or its management, and it is the best form of motivation (Armstrong, 2006; Ekerman, 2006).

A critical evaluation of intrinsic motivation show that intrinsic motivation emerges when individual (employee) has the desire or urge to do a specific task or duty because the results of performing the job fulfill the individual’s own desire or belief system and therefore attaches importance to it. As noted by Deci, Koestner, and Ryan (2001) when rewards are independent of task or engagement (employee’s salary), and the employees have no expectation of these rewards (such as bonuses), the rewards would have a positive association with the employee level of intrinsic motivation. Intrinsic motivational factors include job characteristics, immediate work environment, recognition, achievement, challenge, interest and self-actualisation (Aworemi, Abdul-Azeez, & Durowoju, 2011; Włodarczyk, 2011).

The search to increase productivity has been a major concern to all organizations both in the public and private sectors. Despite technological advancements, most organizations face challenges with regards to retention of employees and high employee turnover, employee counter-productive behaviors such as absenteeism, theft, waste of resources, verbal abuse and procrastination. These negative behaviors of employees affect their performances and the performance of organizations as a whole.
Many employees blame the slow pace of public performance to the abysmal working conditions and the poor state of the public sector employee. This illustrates that employees within the public sector are either not satisfied with their working conditions or motivated to put up their all to meet the overall economic productivity.

Meanwhile, studies of employee motivation among public sector employees have been few and limited in scope; furthermore, they seem unlikely to reflect accurately the current level of motivation especially in the light of the unprecedented economic, social and educational developments in the country in recent years.

Aryeetey (2011) examined the motivational strategies of Ghana Airport Company and its impact on worker performance by applying a descriptive statistical approach. The current study improves Aryeetey (2011) methods to include multiple regression analysis and Structural equation model by the use of path analysis.

Ampofo (2012) also conducted a study with the objective of determining the factors that motivate employees and the effect of motivation on employee performance among the staff of the Ghana Education Service (GES). The study was limited to the Ghana Education Service (GES), a subset of the public sector. Though Ampofo (2012) used regression analysis, the study was limited to the Ghana Education Service (GES), a subset of the public sector. Comparing the studies of Aryeetey (2011) and Ampofo (2012), it could be seen that both studies did not consider the wider scope of the public sector.

The study seeks to assess the effect of employees’ intrinsic motivation on the performance in public sector institutions with the objective of assessing the nature and scope of motivation in public sector institutions, establishing a relationship between motivation and employee performance.

1.1. Objective of the Study

The objective of the paper is to explore the intrinsic level of employee job motivation within the public sector of Ghana and subsequently examine the extent to which extracted factors have influence on the performances of the public sector of Ghana.

1.2. Research Hypothesis

- Ho: There is no significant relationship between the level of employee job motivation and the level of performance in the public sector of Ghana.

2. Literature Review

2.1. Theoretical Review

2.1.1. Maslow’s Hierarchy of Needs Theory

Maslow’s hierarchy of needs theory was propounded by Abraham Maslow in the late 1940s. Maslow argued that human beings are motivated by their needs and these needs may be ranked from lowest to highest, however, the strongest source of motivation among the needs is the lowest unsatisfied need (Jerome, 2013; Sadri & Bowen, 2011). Maslow saw motivation as a constantly changing desire to fulfill changing the ever needs of people. Maslow believed that human needs occurred in a hierarchy of importance, which he called ‘prepotency’. Only the next level of needs in the hierarchy will act as motivators. Once a level of needs has been satisfied, they no longer act as motivators and the individual then directs attention towards the next level of needs in the hierarchy (Ifeilili & Ifedili, 2012; Ozguner & Ozguner, 2014). Maslow (1954) classified individual needs into five categories arranged in order of their relative influences.

Maslow’s five level needs, in ascending order, are physiological (e.g. food, shelter, hunger, thirst, sex), safety (desire not to feel endangered and wish for a physically and emotionally secure environment), love (the “hunger for affectionate relations with people” and belongingness), esteem (the longing for self-respect, strength, achievement, reputation, recognition by others and appreciation), and the need for self-actualization, which is the aspiration “to become everything that one is capable of becoming.

Relating Maslow’s theory of needs to public sector performance, it is argued that public sector managers should take critical evaluation of employees to determine their level on the hierarchical ladder. This would make it easier for any motivational policy geared towards improving the performance of the employees. For instance, if there is a package for newly married couples like mortgage houses and interest free car loans, young people within the safety group aspiring to reach for the social needs would be more encouraged and motivated to work hard in order to meet such requirement. However, this package may also be disincentive for older employees who may not qualify due to their age. This means that, motivational packages in the public sector should be developed strategically so not to demoralize others who would not benefit from such packages. If these packages exist, then motivation would be high and invariably increase performance. However, the absence of these packages and disproportionate allocation of same would rather cause serious infractions in the performance of the public sector. These analyses suggest that motivation is an antecedent of performance. Following these theoretical thinking, the study formulates its first research objective as follows:

- To examine the level of employee intrinsic motivation in the public sector of Ghana?

A critical review of the theoretical assumption suggests that appropriate level of employee motivation drives the level of employee performance. Thus, the level of motivation could predict the level of performance holding other factors constant. The study thus, follows this lesson to postulate as follows:

- $H_1$: The level of motivation has significant effect on the level of performance in the Ghanaian public sector
Though Maslow's hierarchy of needs theory has been widely used in literature to justify employee motivation, an evaluation of the theory is seriously issues of concerned. These issues illustrate that the theory is to some extent problematic. For instance, applying the theory to the public sector performance, it could be observed that human needs cannot be categorised across the board. The implication is that the application of the theory is not straightforward. Hence, it is extremely difficult to implement a single policy to the benefit of all. This supported by the factor analysis of Wahba and Bridwell (1976) as cited by Al Tayyar (2014) which does not support Maslow’s classification. The authors report that testing the theory was problematic, especially with regard to measuring the strength of feeling about certain needs and exactly how people ascertain that needs have been met. Consistent with this, Njanja, Maina, Kibet and Njagi (2013) argue that it is difficult to categorise needs hierarchically. Despite these criticisms Ifedili and Ifedili (2012) and Jerome, (2013) indicate that a hierarchy of needs does seem to exist, and that the needs identified by Maslow are valid and well-documented.

2.1.2. Goal Setting Theory

The Goal setting theory was developed by Locke (1968). This theory proposes that individuals’ intentions to achieve a set goal are primary motivational factor. It is believed that pursuance of goals is likely to increase performance especially challenging or difficult goals. The theory however noted that for difficult goals to motivate performance, they must be accepted by individuals in question. This implies that although difficult goals are more motivational than easy goals, the condition is that the difficult goals should be friendly to be embraced. The theory was developed based on individual goals and aspirations in life and the desire to achieve such goals. A goal is the aim of an action or task that a person consciously desires to achieve or obtain (Rudolph, 2016; Sadri & Bowen, 2011)

Relating this to the public sector performance, it is argued that workers should be made the architects and implementers of goals. When this happens, the employees would by themselves set realistic and attainable goals which would be in line with the organizations overall goal.

2.2. Empirical Review

Aryeetey (2011) applied a descriptive statistical approach to examine the motivational strategies of Ghana Airport Company and its impact on worker performance. Following the study, she concluded that intrinsic and extrinsic motivators lead to job satisfaction irrespective of the status of workers in the organization. Further the study established that motivation positively affects labour productivity. The use of descriptive statistical approach to determining motivational strategies leads to the findings of which motivational items found in literature (salary, promotion, recognition, reward etc.) has the most significant effect of employee motivation and performance. The author failed to further investigate the level significance of these explored motivators on performance. However, the current study improves Aryeetey (2011) methods to include multiple regression analysis and Path analysis (SEM). This would help reveal how some of the motivational strategies are affected with each other.

The forgoing study by Aryeetey (2011) moves in the same direction with that of Ampofo (2012) conducted a study with the objective of determining the factors that motivate employees and the effect of motivation on employee performance among the staff of the Ghana Education Service (GES). He adopted a regression statistical technique in his study on motivation. The results showed that poorly motivated workers perform abysmally. Moreover, the study showed that teachers are motivated by job security, good working conditions, authority and independence. The study was limited to the Ghana Education Service (GES), a subset of the public sector.

Tetteh, (2016) further conducted a study which primarily assessed how financial and non-financial reward benefits motivate employees at First Atlantic Merchant Bank with (FAMB) and how these in turn influence their employee retention using correlational analysis. Data analysis was done by using descriptive statistics, Pearson correlation coefficient and independent sample test, and qualitative techniques. The results of the study showed that pay, fringe benefits, allowance, promotion, training and development and recognition are motivational factors. Again, the study found that managers were found to be more motivated when given non-financial rewards whiles other staff members who are not managers were motivated by financial rewards. However, Tetteh (2016) conclusions seem to suggest cause and effect relationship. This is inconsistent with correlation analysis. Correlation tells association between variables: say A and B but fails to tell whether or not A causes B or B causes A. Therefore, to provide evidences about cause and effect relationship between the study variables, the present study uses superior methodology-regression.

3. Research Methodology

The research method specifically covers the research approach, research design, population, sampling procedures sources and data description, and data analysis technique.

3.1. Research Approach

The research approach adopted for this study was quantitative method. The justifications for adopting this approach is as follows: first, all the study objectives require numerical data to measure the relevant variables within the confines of the study problem making this approach quite relevant (Lewis, 2011). Secondly, the study seeks to determine the outcome of employee performance of the public sector when the level of employee motivation constructs is manipulated.
3.2. Research Design

The study used survey design. The justifications for chosen this design are as follows: Firstly, the study population is relatively very large (employees of public sector in Ghana) and therefore more appropriate to employ survey design since it is considered as the best design gather authentic data to characterize a population too sizable to account for directly. (Babbie, 2013; Neuman, 2013). This design was applied in this study by designing questionnaire so as to collect data from the sampled population to support the design (Blaikie, 2010; Cohen et al., 2011; De Vaus, 2014; Morgeson et al., 2013).

3.3. Population

The population for this study involved all public servants in Ghana. Employees of public sector organizations include the Civil Service, Ghana Health Service, Local Government Service, the polytechnics, subverted agencies such as the Electoral Commission, National Commission for Civic Education, Commission for Human Rights and Administrative Justice (CHRAJ) and the Statistical Service. Others include the Fire Service, Ghana Prisons and the Ghana Immigration Service among others.

3.4. Target Population

The target population is defined in terms of public institutions including ministries in Greater Accra Region. The region is the capital of Ghana and housed almost all the public institutions and ministries in Ghana. The total employees may be comparable to the combined employees in other regions. Importantly, the city represents a truly diverse societal mix within the country. Housing almost all the headquarters in Ghana, most of these public organizations are under centralization from the capital city so that any developments can be assumed to affect equally all regions and all parts of any given region. Thus, a sample limited to Accra could be seen to represent the various districts within the region. Similarly, aspects of employee motivation in that city could be seen as analogous to those applicable to other public institutions situated in other towns and cities in the country. According to a report by the Ghana Statistical Service in 2017, the total number of employees within this region is about 600,000.

3.5. Sample Size and Sampling Procedure

The current study used probability sampling within the framework of multi-stage sampling. This was applied in this study by grouping the population into strata based on ministries and agencies. Subsequently, simple random sampling was used to select five (5) of the strata for sampling procedure. Thirdly, the sample size of 384 plus 10% to cater for possible non-response rate was allocated proportionately to each selected strata. Finally, simple random procedures were applied to each selected strata based on sample size allocation with the help of fifteen research assistants. The current study applied Krejcie and Morgan (1970) to the total population of 600,000.

3.6. Sources of Data for the Study

This study was primary data which were numerical in nature. There was no readily available data relevant to answer the research questions; therefore, the data needs for employee motivation were collected from primary source.

3.7. Data Collection Instrument

The study employed questionnaire. This instrument or data collection technique was chosen because it is able to provide close-ended questions which could be used to measure variables quantitatively. These questions were mainly close ended questions. A five-point Likert scale was used where the respondents were asked to rate from 1 to 5 their agreement to the statements enlisted on the questionnaires with 1 indicating weak agreement and 5, strong agreement.

3.8. Data Analysis Procedure

Data analyses were done manually and electronically. The collected questionnaires were screened and subsequently coded. The coding procedures required that a numerical value was assigned to individual responses to the questions on the questionnaire to make them feasible for further electronic analysis. For instance, in this study 1 was assigned to ‘yes’ responses while 0 was assigned to ‘no’ responses. The Likert scale-based questions were coded with reference to the associated numerical values in the questionnaire. For instance, with the 5-point Likert scale say strongly agree responses were assigned ‘5’ whiles strongly disagree responses were assigned ‘1’.

The data were coded in Lisrel statistical software. This was used for organizing and analyzing the data used in this study. The statistical results are presented in tables and charts. The statistical analyses used were mean scale analyses and structural equation model application through the use of path analysis. Descriptive (mean scale) is relevant as the study focuses on the assessment of the level and nature of intrinsic motivational constructs. Path analysis (Structural equation modelling) is relevant as it examines the extent to which independent variables cause the dependent variables.

The study would first determine the normality of the distribution, where the data is normally distributed, the mean scale of the results would be used else the median scale would be the suitable statistical analysis (Pallant, 2007; Tabachnick & Fidell, 2007). The assessment was done using a scale of 1 to 5. The mean point of 2.9 which is formulated by the midpoint scale minus (.1) was used as the cut-off point consistent with some earlier studies such as Dess, Lumpkin and McFarlin (2005) and Yeboah (2011). Where the mean score is from 1 to 2.9, it indicates low levels and 3 to 5 representing high levels of a variable.
The path analysis of SEM is applied in this study by following the guidelines provided by Nokelainen (2018) as follows:

3.8.1. Research Question 2

To what extent do intrinsic motivational factors affect the level of performance in the public sector of Ghana?

This research question is answered as follows:

$$EP = \alpha_1 + \beta_1IP + \beta_2JC + \beta_3IW + e$$

Where: EP is the dependent variable and denotes employee’s performance

IP, JC and IW denote interest and pleasure, job characteristics and immediate work environment and represent intrinsic motivation (independent variables)

$\beta_1, \beta_2, \ldots, \beta_3$ represent the sensitivities of EP to the respective variables. The value and the level of significance determine the extent of the relationship between intrinsic motivation and performance and provide answers to the research question.

4. Results

The results are presented according to the research questions which were formulated from research objectives and are as follows:

4.1. Demographics of Respondents

This section deals with background of respondents who participated in the data collection. Out of 422 questionnaires administered, 400 of them were received representing 94.79% response rate. Besides the response rate, Table 1 reports the demographic characteristics of the participants in this study. Some of the background data include number of years in working with their institutions and years of experience.

Table 1 revealed that 269 of the respondents were females as against 131 males. This means that more females participated in the survey than male. This means that the number of females in the study is more than that of males. Thus, 67.2% of the respondents were females while 32.8% were males. The difference in the number of males and females’ participants is an indication that the number females in the public sector are increasing considerable. However, the study does not make a generalisation that females are more than males in the public sector as this is not the focus of the study. Additionally, majority of the participants (260) are married representing 65%. 125 of the respondents (31.2%) are single while 15 respondents (3.8%) are divorced.

Table 1 also reports that majority of the employee in the public sector were first degree holders. 236 representing 59.0% hold first degree. The number of respondents with second degree and doctoral degrees were observed to be the least. Only 61 representing 15.3 and 4 representing 3.8 represents second degree and doctoral degree holders respectively. Furthermore, it is also observed from Table 4.1 that about a combined number of 333 representing 80.3% were having between 1-10 years job experience. With this, majority of the respondent fall within the category of 6-10 years. Having such spell of job experience is an indication that most of the employees with the public sector are having relatively high number of job experience.

Moreover, half of the respondents have had less than 5 years with their current organization. Comparing this information with the preceding results on the years of job experience, it could be deduced that some of the employees might have either been working elsewhere before joining their current organisation. 159 employees representing 38.0% indicated they have been with their current organisation between 6-10 years. With regards to age, it is observed from Table 1 that, 188 employees representing 47.0% were between the ages of 31-40 years. The next of higher value were those less than 30 years. 133 workers comprising 33.3% make up this category. Only 18 (4.5%) of the respondents were above 50 years.

| Background data          | Frequency | Percentage |
|--------------------------|-----------|------------|
| Sex                      |           |            |
| Male                     | 131       | 32.8       |
| Female                   | 269       | 67.2       |
| Marital status           |           |            |
| Single                   | 125       | 31.2       |
| Married                  | 260       | 65.0       |
| Divorce                  | 15        | 3.8        |
| Level of education       |           |            |
| Below first degree       | 99        | 24.8       |
| First degree             | 236       | 59.0       |
| Second degree            | 61        | 15.3       |
| Doctoral degree          | 4         | 3.8        |
| Job experience in years  |           |            |
| Less than 5 years        | 145       | 36.3       |
| 6-10 years               | 188       | 47.0       |
| 11-20 years              | 46        | 11.5       |
| 20 years and above       | 21        | 5.3        |
4.2. Research Question 1

What is the level of job intrinsic motivation of employees within the public sector in Ghana? Intrinsic motivation is assessed on three factors: job characteristics, immediate work environment and interest and pleasure. The assessment was done using a scale of 1 to 5. The mean point of 2.9 which is formulated by the midpoint scale minus (.1) is used as the cut-off point. This practice is consistent with some earlier studies such as Dess, Lumpkin and McFarlin (2005) and Yeboah (2011). Where the mean score is from 1 to 2.9, it indicates low levels and 3 to 5 representing high levels of a variable. The score for measuring the level may be mean or median statistics depending on the results of normality of the variables (Pallant, 2007; Tabachnick and Fidell, 2007).

Table 2 presents the results of normality test based on Skewness and Kurtosis. With Skewness, a variable has normal distribution when its Skewness statistics fall between -2 and +2 and Kurtosis less or equal to 3.8 (Gravetter & Wallnau, 2014; Khan, 2016). It can be observed that all the variables are in range except immediate work environment which has mixed results; the intrinsic variables have normal distribution.

Figure 1 also affirms the normal distribution as evident in the clusters of the points along the diagonal straight line. The points are not scattered suggesting normal distribution.

| Intrinsic Variables | Skewness | Kurtosis |
|---------------------|----------|----------|
| JRM                 | .147     | -.943    |
| IWE                 | 2.030    | 13.486   |
| IP                  | .214     | -.715    |

Table 2: Normality Test of Intrinsic Motivation Variables

Note: JRM Denotes Job Related Motivation, IWE Is Immediate Work Environment and IP Represents Interest and Pleasure

Source: Armah (2018): Field Survey
Since the variables have normal distributions, the assessment of the level of intrinsic motivation is based on mean statistics rather than the median values. The results of the mean analysis are reported in Table 3. Most often than not, employee have inner joy and motivation which is termed as intrinsic motivation to work when their job characteristics are clearly defined and challenging enough. When employees are able to overcome such moderately challenging task their motivation is assumed to increased (Amponsah, 2012; Aryeeetey, 2011; Attrams, 2013; Abdullah et al. 2016; Brooks-Immel, 2014). In view of this, job characteristic is the first dimension on the employee intrinsic job motivation in this current study. It was measured in the direction of how employees are offered challenging works, work autonomously on their work, employees are not limited to one work and also given opportunities to learn new things. Moreover, it is also measured from the perspective of being offered good variety on their work. The mean value for job characteristics reported in Table 3 is $\bar{X} = 2.64$. This mean value falls below the cut-off point of 2.9. The result further shows that employees within the public sector have weak job-related motivation with respect to their job characteristics. This is also likely to have adverse effect on performance. The effect would further be investigated in subsequent research objective.

The immediate work environment is the second intrinsic motivational factor considered in this study. The mean value is still lower than the cut-off point ($\bar{X} = 2.69$). This value is obviously below the expected high-level value of 3-5. The immediate work environment is an intrinsic motivational factor. It seeks to determine the flexibility with which employees are able to balance their work life with their family responsibility, and how harmonious it is to work in their respective organizations. Moreover, one of the immediate work environment benefits is how recognizes staff welfare as one of its topmost priorities. Additionally, the spirit of cooperation, and the relationship between workers and management are all indicators of healthy immediate work environment. However, from the result, one can easily argue that these indicators are not up to the expectation of the employees. This might have serious adverse implication on the productivity of employees and overall performance of the public sector.

The third and last dimension is what is described as interest and pleasure. This dimension measures one of the intrinsic motivations of employees. It investigates whether employees would be happy to spend their entire career with their current organization, or feel that the problems of their respective organisations are their own problem. It also identifies whether employees within the respective public sector organisations feel emotionally attached to the organisations and have a strong sense of belonging to the organisation. The mean value as could be observed from Table 3 is $\bar{X} = 2.58$ which fall below the cut of point of 2.9. Like all the discussed dimensions, the result reveals that employees have low level of interest and pleasure towards their organisations. The implication is that employees may be dissatisfied with their organisation would be high. The low level of interest and pleasure indicates that workers are not emotionally attached to their organisation. The overall grand mean for employee intrinsic motivation in the public sector is found to be $\bar{X} = 2.64$. This is not surprising as all the dimensions of the intrinsic motivation are found to be below the cut-off point of 2.9.

| Intrinsic Motivation Dimensions | Indicator | Mean |
|---------------------------------|-----------|------|
| Job Related Motivation          | JRMo      | 2.64 |
| Immediate Work Environment      | IWEMo     | 2.69 |
| Interest and Pleasures          | IPMo      | 2.58 |
| Grand mean                      |           | 2.64 |

Table 3: Level of Employee Intrinsic Motivation
Note: Scale (Mean): 1-2.9 = Low and 3-5= High
Source: Armah (2018): Field Survey

4.3. Research Question Two on Relationship between the Level of Intrinsic Motivation and Employee Performance in the Public Sector of Ghana

This section analyses research question and it seeks to examine the relationship between employee intrinsic motivation and performance in the public sector. The research question is recalled as:
To what extent do extrinsic motivational factors influence the level of performance in the public sector of Ghana?
To answer this research question, hypothesis was developed. These hypotheses are tested using Path Analysis (structural equation model). The results are analyzed as follows:

Since intrinsic motivation itself has three dimensions, its effect on the level of performance in the public sector would be the combination of how each of these dimensions affects performance. Therefore, to get the true picture of how intrinsic motivation affects performance, the study first presents the individual dimensional effect and then the composite effect. The intrinsic factors used are interest and pleasure (IP), job characteristics (JC) and immediate work environment (IW). It is learnt from the methodology section that this research question would be analysed using path analysis (structural equation model). Like all cause and effect models, it is important to test some basic assumptions such as normality, linearity and multicollinearity. The analyses under the preceding research objective revealed that it is reasonable to assume normality for the data. Nevertheless, the study conducts the assumptions with the inclusion of employee performance.

This is to avoid any spurious regression analysis. Following the analysis of Tabachnik and Fidell’s (2007) in comparison to the study sample size, the size of 400 is much enough to warrant the test for the appropriateness of the cause and effect relationship. The normal probability plot graph is Figure 6 is used to test for linearity, normality and
homoscedasticity of residuals (Pallant, 2007). The assumption follows that reasonably straight diagonal line from the bottom left to top right suggests linearity, normality and homoscedasticity.

It can be observed that there is relatively straight diagonally shaped line from the normal probability plot of the standardised residual. This indicates linear relationships between the predictor variables or the independent variables and employee performance. Furthermore, reasonable constancy in variances of the residuals shows homoscedasticity. The points are packed together relatively suggesting there is no normality problem.

Figure 2: Normality Probability Plot for Intrinsic Motivation and Employee Performance
Source: Armah (2018): Field Survey

Table 7 and Table 8 also present the results for the test of the multicollinearity. This assumption is tested using correlation matrix, tolerance and variance inflation factor (VIF). Where the studies have shown that there are instances where multicollinearity problems are not identified through the correlation matrix. Therefore, the present study supports the matrix with the Tolerance and VIF. The tolerance measures how much of the variation in a given predictor is not explained by the other predictors included in the model. The decision rule follows that if this value is less than .10, and then there is multicollinearity problem. This indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. In order words, to avoid any multicollinearity problem the predictors included in the model should be at least .10. Similarly, the VIF values above 10 also indicate multicollinearity. Variance inflation factor is the inverse or reciprocal of the Tolerance value. It can be observed from Table 4 that none of the correlation coefficient is up to 0.8. The highest coefficient is between Interest and Pressure (IP) and Job characteristics (JC) which is 0.745. This means per the correlation matrix, correlation coefficients between independent variables or predictors are 0.9 and above, there is no multicollinearity problem.

| Pearson Correlation | IP    | JC    | IWE   |
|---------------------|-------|-------|-------|
| IP                  | 1.000 |       |       |
| JC                  | 0.745 | 1.000 |       |
| IWE                 | 0.574 | 0.636 | 1.000 |

Table 4: Correlation Matrix for Intrinsic Motivation Variables
Note: IP Denotes Interest and Pressure, JC Is Job Characteristics and IWE Is Immediate Work Environment
Source: Armah (2018): Field Survey

The study further uses the Tolerance and the VIF as earlier explained to give firm position about the multicollinearity characteristics of the data. The results are reported in Table 5. The results observed from Table 5 showed that there is no multicollinearity problem. All the variables had Tolerance values of more than 0.1. Similarly, the VIF values are less than 10. Thus, no VIF value was equal or above the 10 thresholds. It is therefore conclusive that there is no multicollinearity problem as all the three methods have yielded similar conclusion.
The results of the relevant assumptions suggest that it is appropriate to estimate the model. The study therefore estimates the effect of intrinsic motivation on employee performance using structural equation model (Path Analysis). This is done through the three dimensions of intrinsic motivation as used in the study which are Interest and pleasure (IP), Job characteristics (JC) and Immediate Work Environment (IWE). The aforementioned predictors of intrinsic motivation are the independent variables while employee performance (EP) is the dependent variable. The results of the path analysis are presented in graph and in tables. The path diagram is captured in Figure 3. The path diagram reports three types of estimates: the estimates on the effect bars (arrows) depict the unstandardized coefficients; the left estimates on the individual independent variables are the mean estimates and the right estimates on the individual independent variables are the estimates based on the variances. The estimates of interest and pleasure are the unstandardized coefficients. These coefficients are positive indicating that all the intrinsic variables have positive effect on the level of performance in the Ghanaian public sector. Thus, improvement in the level of these motivational factors may enhance the level of employees’ performance. Nevertheless, the level of significance is not produced by the path diagram. The study therefore reported the regression estimates from the SEM estimations to determine whether or not these coefficients are significant. The results are captured in Table 6.

### Table 5: Tolerance and Variance Inflation Factor Analysis of Intrinsic Motivation

|          | Tolerance | VIF  |
|----------|-----------|------|
| 1 Constant |           |      |
| IP       | 0.380     | 2.628|
| JC       | 0.573     | 1.744|
| IWE      | 0.428     | 2.337|

*Note: IP Denotes Interest and Pressure, JC Is Job Characteristics and IWE Is Immediate Work Environment.*

*Source: Armah (2018): Field Survey*

The results from the relevant assumptions suggest that it is appropriate to estimate the model. The study therefore estimates the effect of intrinsic motivation on employee performance using structural equation model (Path Analysis). This is done through the three dimensions of intrinsic motivation as used in the study which are Interest and pleasure (IP), Job characteristics (JC) and Immediate Work Environment (IWE). The aforementioned predictors of intrinsic motivation are the independent variables while employee performance (EP) is the dependent variable. The results of the path analysis are presented in graph and in tables. The path diagram is captured in Figure 3. The path diagram reports three types of estimates: the estimates on the effect bars (arrows) depict the unstandardized coefficients; the left estimates on the individual independent variables are the mean estimates and the right estimates on the individual independent variables are the estimates based on the variances. The estimates of interest and pleasure are the unstandardized coefficients. These coefficients are positive indicating that all the intrinsic variables have positive effect on the level of performance in the Ghanaian public sector. Thus, improvement in the level of these motivational factors may enhance the level of employees’ performance. Nevertheless, the level of significance is not produced by the path diagram. The study therefore reported the regression estimates from the SEM estimations to determine whether or not these coefficients are significant. The results are captured in Table 6.

### Figure 3: Path Diagram for Intrinsic Motivation and Employee Performance

*Source: Armah (2018): Field Survey*

Similar to the unstandardized estimates, the results in Table 6 indicate that all the coefficients are positive. This suggests positive effect of intrinsic motivation on the level of employees’ performance. Specifically, the coefficient for job characteristics (JC) is 0.584. The associated p-value is *** signifying less than 1%. The implication is that the coefficient is significant at 1%. Therefore, the study rejects the null hypothesis that job characteristics have no significant effect on the level of employee performance. This means that holding other factors constant, an increase in the level of job characteristics intrinsic motivation would lead to 0.584 increases in the level of employee performance. Conversely, a decrease in the level of job characteristics intrinsic motivation would lead to 0.584 decreases in the level of employee performance, all other things being equal.

Immediate Work Environment (IWE) generated coefficient of 0.016 consistent with the Path diagram estimate. The associated p-value is 0.604. This is more than 10%. It suggests that the coefficient is insignificant even at 10%. Therefore, the study fails to reject the null hypothesis that Immediate Work Environment (IWE) has no significant effect on the level of employee performance.

It can also be seen that interest and pressure (IP) has coefficient of 0.358. This is indicating positive effect on employees’ performance. This p-value is less than 1%. This suggests that the coefficient is significant at 1%. The study rejects the null hypothesis that interest and pressure (IP) has no significant effect on the level of employee performance. This means that holding other factors constant, an increase in the level of interest and pressure (IP) intrinsic motivation would lead to 0.358 increases in the level of employee performance. On the other hand, a decrease in the level of interest and pressure (IP) intrinsic motivation would lead to 0.358 decreases in the level of employee performance, all other things being equal.
Overall the results have shown that intrinsic motivational constructs have positive effect on the employees' performance. Therefore, the answer to the research objective is as follows: Intrinsic motivation has significant positive effect on the level of employees’ performance.

|       | Estimate | S.E  | C.R | P    |
|-------|----------|------|-----|------|
| EP    | ---      | .584 | .036| 16.403| *** |
| EP    | ---      | .016 | .031| .519 | .604 |
| EP    | ---      | .358 | .038| 9.465| *** |

Table 6: Maximum Likelihood Estimates of Intrinsic and Performance

Note: IP Denotes Interest and Pressure, JC Is Job Characteristics and IWE Is Immediate Work Environment

Source: Armah (2018): Field Survey

5. Discussion

The aim of this study was to empirically assess the effect of employees' intrinsic motivation on performance in the public service in Ghana. The purpose of this objective was to assess the degree of employees of the public sector inner pleasure or interest in the job they do without necessarily working for the sake of external rewards.

5.1. Research Findings

The findings are as follows:

- It was found that job characteristics related intrinsic motivation as measured by scales such as challenging works and work autonomy in the public sector is relatively low.
- The results showed that the level of intrinsic motivational arising from immediate work environment was also low among the employees in the Ghanaian public sector.
- The results further revealed that employees in the Ghanaian public sector have low level of interest and pleasure (intrinsic motivation) towards their organisations.
- Overall, the level of intrinsic motivation among employees in the public sector of Ghana is below the desirable.

5.2. Discussions and Implications

The low level of employees' intrinsic motivation found in this investigation is contrary to the expectation of this study. The general belief is that every human has inner motivation and this is expected to be high in the public sector where there is sense of security. Given the high level of unemployment rate in Ghana and frequent retrenchment in the private sector, working with the public sector becomes a luxury. This is expected to enhance the level of employees feeling of inner motivation. This is inconsistent with what the study has found.

The findings are however consistent with some prior studies (Ampofo, 2012; Attrams, 2013; Orasa, 2014). Ampofo (2012) also found that job related factors such as job security, authority and independence are source of motivation-intrinsic. Therefore, low level of these factors could undermine employees' intrinsic motivation as found in this study. Similar to the findings in this study, Orasa, 2014 also found among others that introduction of challenging work but interesting work could improve workers morale to work and have an impact on their level of motivation.

The findings mean that employees in the public sector do not enjoy performing the actual or specific tasks and do not relish the challenge of successfully completing the tasks. These findings are critical and troubling as this component of motivation is believed to have a longer-term and significant effect on employees’ performance as it is inherent in the employee and not imposed by the company or its management, and it is the best form of motivation (Armstrong, 2006; Ekerman, 2006).

The implication from the findings of the low level of job-related intrinsic motivation is that employees are not offered challenging works, work autonomy, and job variety. This has contributed to the weak job-related motivation with respect to their job characteristics. The policy implication is that to drive or enhance job related intrinsic motivation, jobs of employees are expected to be reasonably challenging, employees could be opened for reasonable job autonomy and job variety. Practically, the findings suggest that proper job description, specification and rotation may be important job features in managing job related intrinsic motivation.

The weakness in the level of employees' intrinsic motivation arising from the immediate work environment suggests that employees largely do not consider their institution as harmonious place to work; the work environment does not recognise staff welfare as one of its top priorities; the environment does not drive spirit of teamwork and co-operation in their organisation; there are challenges in workers-management relationship and weaknesses in work related safety. The policy implication is that Ghanaian public sector in its quest to develop employees’ intrinsic motivation could incorporate workers’ needs and bases of their feelings of sense of attachment to their organisation in terms of the immediate working environment in their policy. Practically, continuous depletion of intrinsic motivation (immediate working environment) may have serious adverse implication on the productivity of employees and overall performance of the public sector.
The study also saw low level of employees’ interest and pleasure in the work they do within their respect institutions in the public sector. The findings implied that employees would not be happy to spend their entire career with their current organisation. Moreover, the employees do not feel that the problems of their respective organisations are their own problem and also do not feel emotionally attached to the organisations and have a strong sense of belonging to the organisation. By extrapolation, the findings may inform the policy of the public sector in respect building employees’ intrinsic motivation as the findings have revealed that employees’ interest and pleasure in their institutions are important antecedents for such policy. Overall, the findings from this study provide better evidence not only about the level of intrinsic motivation but also about important scales relevant for developing employees’ level of intrinsic motivation.

5.3. Research Question 2
To what extent do intrinsic motivational factors affect the level of performance in the public sector of Ghana?
This research question seeks to examine the extent to which the various intrinsic motivational factors affect the level of employees’ performance in the Ghanaian public sector. The intrinsic factors used are interest and pleasure (IP), job characteristics (JC) and immediate work environment (IW). The findings and the relevant implications are presented as follows:

5.4. Research Findings:
- It was found that job characteristics had a very significant positive effect on the level of employee performance.
- It was revealed that though immediate work environment exhibited positive effect on the level of employees’ performance, the magnitude of the relationship was not significant.
- The study also showed that interest and pressure have a very significant positive effect on the level of employee performance.
- The overall level of intrinsic motivation has significant positive effect on employees’ performance.

5.5. Discussions and Implications
The positive significant relationship found between the intrinsic motivational factors: job characteristics and interest and pressure and the associated dependent variable: employees’ performance in the Ghanaian public sector meets the study expectation. Generally, the literature has demonstrated possible positive relationship between these variables. However, the relationship between immediate work environment and employees’ performance in the Ghanaian public sector is just partly consistent with the study expectation. Thus, although the positive coefficient was expected, the insignificant coefficient did not meet the study expectation.

The overall positive effect of intrinsic motivation on employees’ performance supports some of the traditional assumptions of the Maslow theory of needs. The intrinsic variables such as interest and pleasurable and exciting job demands may be associated with sense of belonging, self-esteem and actualization which according to Maslow when motivational strategies incorporate these facets may propel individuals toward contributing to the organisational accomplishments such as performance (Jerome, 2013; Ozguner, & Ozguner, 2014; Sadri & Bowen, 2011).

This implies that wish for hunger for affectionate relations in their respective institutions and belongingness, the longing for self-respect and reputation are needed by the employees to propel their productivity. Thus, these intrinsic motivational factors are important drivers for employees’ performance as found in this study.

The findings further support some earlier empirical studies (Ampofo, 2012; Aryeetey, 2011) Aryeetey, (2011) also concluded that intrinsic motivation has significant positive effect on labour productivity. In the study concluded by Ampofo (2012), the author revealed a positive relationship between motivation (intrinsic and extrinsic) on performance.

Practically, the findings imply that poor intrinsic motivational strategies could adversely drive employees’ performance in the Ghanaian public sector down. Matching the significant positive relationship between intrinsic motivation and employees’ performance against the rather low level of intrinsic motivation in the Ghanaian public sector found under the first research question of the first objective, it is no news that Ghanaians have been complaining about productivity of staff in the public sector. Thus, the findings provide better insight in explaining the weakness in performance of the public sector.

6. Conclusions and Recommendations
The intrinsic motivations are job characteristics, immediate work environment and interest and pleasure. The study revealed that the overall level of intrinsic motivation among employees in the public sector of Ghana is below the desirable.

Management is encouraged to undertake human resource audit to review the job descriptions and specifications in the public sector so as to offer reasonable challenging works, work autonomy, and job variety. Management should also introduce job rotation as an important job features in managing job related intrinsic motivation. Policy makers and management of the public institutions should seek work atmosphere that arouses employees’ interest and pleasure, self-expression, personal challenge and reasonable degree of autonomy on the job. This could uplift the employees and contribute to the feelings which are upshot from their task.

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