Gender, Position and Experience: Key Determinants of Time-Management Practices of Ghanaian Polytechnics’ Administrators

Lydia Osei-Amankwah, Dominic Kwaku Danso Mensah, Frederick Kwaku Sarfo

ABSTRACT: This paper sought to determine whether gender, years of experience and position have statistically significant impact on administrators’ time-management practices. Indeed, the paper explored whether male and female administrators differ significantly in terms of their time use. Descriptive design was adopted to engage 445 senior administrators from 517 administrators through stratified proportional sampling technique. Data were gathered through the use of questionnaire. Multivariate (MANOVA) test and logistic regression were used to analyse the data. The study found among others that male and female senior-member administrators in the polytechnics did not differ in terms of their time-management practices. Administrators’ position, years of experience and gender had statistically significant impact on time-management practices. It was recommended that Management of polytechnics should allocate equal tasks to administrators irrespective of their gender. There is a continuous need for administrators to reinforce the use of these demographic variables.

KEYWORDS: Gender, Position, experience, Time Management

I. INTRODUCTION

Time-management is an effective tool for managing staff and administrative tasks and if it is not judiciously apply may affect the attainment of institutional goals. Some educational leaders misuse official hours due to inadequate knowledge on variables that influence time (Osei, 2007). This provides the idea of integrating the practices into effective management of administrative tasks to enhance leaders’ performance. Jenkins (1988) submitted that an effective leader must be able to diagnose and adopt the practices to meet the demands of the situation in the work environment. Effective time-management is an administrative phenomenon that has been left to suffocate in educational intuitions. As a result, leaders’ effectiveness has been affected due to a lack of proper application of the practices in managing daily activities.

The National Council for Tertiary Education ensures that programmes of tertiary institutions are based on the policies of the Ministry of Education. Each educational level has a specific period or duration for the execution of its programmes and activities (Effah & Mensah-Bonsu, 2001). The polytechnics are influenced by policies in education. Administrators as the key leaders in the functioning of polytechnics are required to exhibit capabilities in managing the polytechnics. Administrators are expected to continue service delivery without major disruption to teaching and learning processes. Time is allocated to each activity to be carried out in the institutions. This underscored the need to consider time as the necessary ingredient for administrative success.

Claessens, Roe and Rutte (2009) explained time-management as the type of behaviour that differentiate people who perform activities on time, stick to deadlines and spend little time on activities those who are often late, pass deadlines, spend more time on activities and waste time on unimportant matters.

Gupta (2001) posited that with proper time-management, many administrators will realize that people have more time than they need and can achieve more with what may be considered as limited time. This will however, require effective supervision of school activities on the part of the administrators. Since time is finite, priceless, irreplaceable, it makes sense to undertake a periodic review of how it is being used to determine whether the use of time is in line with set objectives.

Reports from the public, newspapers and even electronic media indicate that administrators misuse official time. In a discussion held on “Ghana Television” on 11th November, 2012, on the topic “Ghana Time”, Owusu observed that “in government institutions, workers fail to report to work on time and also schedule appointments but fail to honour them”. In support of this observation, Dzifa, Deputy Minister for Tourism and Culture strengthened that “time is wasted in Ghana without accounting for it and Ghanaians should stop calling lateness Ghanaian Time”. She further demonstrated that “those in leadership positions, paid by the Government to render
services fail to use official hours judiciously. Therefore, lateness syndrome is affecting Ghanaians and it is about time Ghanaians respect time”.

Rapid educational changes occurring in the polytechnic education involve transition from technical institutes to diploma awarding and then to tertiary institutions. One of the important aspects of the changes taking place in the polytechnics that has direct bearing on polytechnic education is time-management of administrators. Oppong-Mensah (2015) in one of her monthly motivational messages for administrative staff, contended that most administrators set targets but fail to achieve them. This may be attributed to inadequate attention given to official time. She further posited that administrators allow unnecessary interruptions to take much of official time in the polytechnics and advised administrators to refine administrative procedures and adopt different approaches that could help attain the best even with the limited resource (time) in order to have realistic and achievable targets.

Robertson (1999) postulated that administrators are held more accountable than ever before. With increased accountability and Ghanaians concern about declining educational achievement levels in Ghana, polytechnic administrators are challenged to produce good educational results. If polytechnic administrators are to provide the kind of educational climate that will result in efficiency in administration, then specific demographic variables should be examined. Against this background, the study has been designed to investigate the impact of demographic variables on administrators official time use in the polytechnics.

Knowledge Gaps

The conceptual and theoretical groundwork on gender were less focused on time-management studies Afful-Broni(2012). Gender based analysis is needed to adequately theorize gender in the realm of time-management in order to ensure thorough policy development. Even though the literature is clear that there is the need to understand the holistic time-management to include varied time-management practices of administrators, limited studies assessed full context of time-management practices and gender (Robertson, 1999). The present study considered gender as a variable since few studies have examined this variable.

Although some researchers have investigated years of experience as a predictor variable at secondary and elementary school levels (Osei, 2007; Robertson, 1999; & Adom, 2004) the previous studies overlooked years of experience in time-management at tertiary level. The present study sought to fill this vacuum.

The use of position held as a variable in time-management research at the tertiary education was identified as gap in Ghana. Robertson (1998) examined school level and principals years of experience in elementary schools and emphasised that school level and experience were not related to time-management. In contrast, the present research incorporated position held as an influencing variable at the tertiary level since limited research has tested this variable.


Statement of the Problem

It is generally perceived that official time use in the polytechnics is underutilized, an indicative of ineffective use of time resulting to unnecessary loss of man hours which is irreversible. Literature indicates that demographic variables have impact on time-management (Osei-Amankwah, 2015). Administrators seem to be interrupted by drop-in visitors and due to that a lot of assigned tasks are hardly completed during official hours (Osei, 2007; Sefenu, 2002 & Robertson, 1999) these administrators are required to complete scheduled activities within the limited time frame daily. The crucial question that is bothering the researchers’ minds is what demographic variables have impact on administrators’ official time use? There is the urgent need to provide answer to this question.

Objectives

1. To assess the impact of gender, years of experience and position on administrators time-management practices in the polytechnics.

2. To investigate whether male and female administrators differ in terms of overall time-management practices in the polytechnics in Ghana.

Hypotheses Testing

Hypothesis 1

H₀₁: Gender, years of experience and position has no statistically significant impact on administrators time-management

H₁: Gender, years of experience and position have statistically significant impact
Hypothesis 2

H₀₂: Male and female administrators significantly do not differ in terms of overall time-management practices in the polytechnics.

Hₐ₂: Male and female administrators significantly differ in terms of overall time-management practices in the polytechnics.

II. METHODOLOGY

The design

Descriptive design was used in the study since the researchers wanted to find out whether there is significant impact of administrators' gender, years of experience and position on time-management practices. The design attempts to determine whether and to what degree a relationship exists between two or more quantifiable variables (Robinson, 2008).

Population

The target population for the study was identified as all senior-member administrators (517) of the polytechnics in Ghana. The accessible population was identified as all senior-member administrators of eight selected polytechnics in Ghana.

Inclusion Criteria

The eligibility criteria for inclusion in this study were that administrators are holders of higher degrees, had worked for at least two years in the polytechnics, they are senior members and they could therefore, make informed decisions about their time-management practices in the polytechnics.

Sampling Technique

In all, Eight (8) Polytechnics were selected from a total population of Ten (10) Polytechnics. To evenly represent the polytechnics and locations in the overall sample, stratified proportional sampling technique was adopted to select eight polytechnics in Ghana to ensure a fair representation of the polytechnics. Indeed, the Polytechnics were grouped into two categories, that is the traditional and the modern. Simple random technique was further used to select four (4) Polytechnics from each of the stratum making a total of eight polytechnics, which formed 80% of the polytechnics in Ghana was considered sizable enough to be representative of the population. Census approach was further adopted to include all 445 senior-member administrators from the two main strata for the study.

Instrument

Structured questionnaire was the main data collection instrument employed for the study. The main purpose of the survey was to gather data from participants about their characteristics, experiences and opinions (Gall, Borg & Gall, 1996). The structure of the instrument was based on a five-point Likert-type scale and it was used for the rating of the responses.

Factor Analysis

To ensure reliability of the questionnaire items, factor analysis was conducted. The factor analysis procedure enabled the researchers to reduce the bulk of the items to a manageable size and also determined whether the survey items or statements form a reliable scale (Pallant, 2005). This means that the items measure a single construct with reasonably high coefficient. From the factor analysis, Kaiser Myere Olkin (KMO) coefficient of .806 was obtained for the time-management scale.

Data Analysis

Parametric test such as logistic regression and MANOVA tests were applied to the hypotheses formulated. These parametric tests depend on the assumption that the sample data are normally distributed while non-parametric tests place no restriction on the assumption testing (Field, 2009). Logistic regression and MANOVA tests were employed because the sample data were normally distributed. Hypothesis one was tested using logistic regression to assess the impact of demographic variables (gender, years of experience and position) on time-management practices. Multivariate analysis of variances (MANOVA) was conducted to test hypothesis two. This was to find out differences of means between one categorical variable that is, gender (male and female) and time-management practices of administrators. All the hypotheses were tested within 0.05 margin of error. This was because in social science, we accept 5% error of the data analysed (Field, 2009)

III. DATA ANALYSES AND DISCUSSIONS

The demographic characteristics of participants such as gender, number of years of experience as an administrator and position held were examined. These were required to enable the researchers find out whether
participants' demographics have impact on their time-management practices.

Fig. 1: Distribution of participants by gender
Data from Fig. 1, revealed that majority (75.73%) of participants in the polytechnics were males while the females represented 24.27% of the sample. It is evident from the results that majority of senior-member administrators in the leadership category were males.

Fig. 2: Distribution of participants by years of experience
Data from Fig. 2 indicated that the largest percentage (50.34%) of the administrators had work between one (1) and five (5) years of experience while the second largest percentage (29.21%) had 6-10 years of experience. Over 12.81% of participants had 11-15 years of experience. The least percentage (0.674%) had 21-25 years of experience. A close scrutiny of the scores indicated that generally, administrators who had spent few years (1-5) formed the majority and they were expected to have the requisite experience to control time wasters and supervise activities of subordinates in their respective units and faculties.

![Position Held in the Polytechnic](image)

**Fig. 3**: Distribution of participants by position

The data in Fig. 3 revealed that assistant registrars constituted the highest percentage (48.09%) of administrators in the polytechnics. Head of department had the second highest percentage of administrators (30.56%). About 9.89% of administrators occupied accountant position while 5.84% senior-member administrators held the position of dean. Director position had 2.47% of administrators and 1.35% each was recorded for registrar and internal auditor position. Librarian position had the least percentage (0.45%). An examination of the scores indicated that majority of the participants in the study were assistant registrars and expected to have the required experience to manage official time and monitor activities of subordinates in their various faculties to ensure efficiency and to help the polytechnics realize the achievement of goals.

**Hypotheses Testing**

The following hypotheses were tested to indicate whether to reject or accept the decisions made by the researchers.

- **H_0**: Gender, years of experience and positions have no statistically significant impact on administrators’ time-management.
- **H_a**: Gender, years of experience and positions held by administrators have statistically significant impact on administrators’ time-management.

In answering hypothesis 1, administrators’ years of experience, positions held by administrators and gender was examined for their impact on time-management practices. The Cox and Snell R^2 and Nagelkerke R^2 explain how much of the variability in the dependent variable is explained by the independent variables (R^2). Hosmer and Lemeshow test indicate the fitness of the logistic regression model. The Wald ascertains whether the independent variables are significant predictors of the dependent variable. The (B) is the regression coefficient. The odds ratio (Exp (B)) indicates a change in odds resulting from a unit change in the independent variables (Field, 2009). The results of logistic regression are shown in Table 1 below.

**Table 1: Variables in the equation (N=445)**

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp (B)</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.436</td>
<td>.216</td>
<td>4.094</td>
<td>1</td>
<td>.043</td>
<td>.646</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td>.105</td>
<td>.047</td>
<td>5.022</td>
<td>1</td>
<td>.025</td>
<td>1.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td>-.265</td>
<td>.089</td>
<td>8.791</td>
<td>1</td>
<td>.003</td>
<td>.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.722</td>
<td>.384</td>
<td>3.540</td>
<td>1</td>
<td>.060</td>
<td>2.059</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P<.05

Note: Hosmer and Lemeshow Test (.056), Chi-square χ^2 (18.419), Log-likelihood - 597.490 Classification - 62.2%
The logistic regression model contained three independent variables (gender, years of experience and position). Forward Stepwise (Likelihood Ratio) method was applied and three iterated models were formed (Step 1, 2 and 3). The Log-likelihood of 597.490 showed that the model fits the data and model three was efficient. The overall model correctly classified 62.2% of administrators. The full model containing all the three predictors was statistically significant, \( x^2(3, N=445) = 18.419, p < .05 \), Hosmer and Lemeshow Test obtained (.056) as shown in Table 1, indicated that the logistic regression model fits the data well.

From Table 1, all the independent variables made unique statistically significant contributions to the model (gender, years of experience and position) since their P-values (.043, .025 and .003) were less than the alpha level of 0.05. The odds ratio for gender was .646; position had 1.111 and years of experience obtained .768. The strongest predictor of time-management practices was position since it recorded the highest odds ratio.

**Table 2: Model summary**

<table>
<thead>
<tr>
<th>Step</th>
<th>Cox &amp; Snell R(^2)</th>
<th>Nagelkerke R(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.020</td>
<td>.027</td>
</tr>
<tr>
<td>2</td>
<td>.032</td>
<td>.042</td>
</tr>
<tr>
<td>3</td>
<td>.041</td>
<td>.054</td>
</tr>
</tbody>
</table>

As indicated in Table 2, Cox & Snell \( R^2 \) was .041 and Nagelkerke \( R^2 \) was .054. This means that the model as a whole explained between 4.1% of Cox & Snell \( R^2 \) and 5.4% of Nagelkerke \( R^2 \) of the variance in time-management practices. Therefore, we fail to support the alternate hypothesis and rather support that gender, years of experience and position have statistically significant impact on administrators’ time-management practices. It was imperative to conclude that the demographic variables have significant impact on administrators’ abilities to use official time efficiently. On hypothesis one, findings from the logistic regression model indicated that gender, position, and years of experience have statistically significant impact on time management of senior-member administrators. The odds ratio for position (1.111) indicated that holding all other predictors constant, senior-member administrators who held position were over one (1) time more likely to manage time effectively than those who did not hold position. The odds ratio of .646 for gender was less than 1, indicating that for every additional hour of work during the work day, administrators were 0.6 times less likely to manage official time controlling for other factors in the model. The odds ratio of .768 for years of experience was less than 1, indicating that for every additional hour of work, administrators were 0.7 times less likely to manage official time holding other factors in the model constant. This implies that administrators who had spent a number of years in administration, have acquired higher degrees and also hold higher positions could manage time well irrespective of their gender. It could be concluded that these demographics are reliable for ensuring efficient and effective use of time. Therefore, the null hypothesis was rejected in favour of the alternate hypothesis since there was insufficient evidence to support the claim that the demographic variables have no significant impact on time-management practices. The finding is in consonance with Carnahan et al.’s (1991) study which concluded that the nature of work experience helps administrators to use time effectively.

**Hypothesis 2**

\( H_0 : \) Male and female administrators do not differ in terms of overall time management practices in the polytechnics.

\( H_1 : \) Male and female administrators differ in terms of overall time management practices in the polytechnics.

On gender difference in terms of male and female dichotomy, hypothesis was formulated to verify if male and female senior-member administrators differ in terms of overall time-management practices. Data were subjected to statistical analysis by conducting one-way between-groups MANOVA. Six dependent variables were used. They included contact, delegation, interruptions, meetings preparation, contact, delegation, interruptions, meetings preparation, and paperwork. The independent variable was gender. The analyzed information was to compare time-management scores for male and female administrators. This was because the study involved testing significant difference of means between one categorical variable which is gender (male and female administrators). The results are presented in Table 3.

**Table 3: Multivariate Tests (MANOVA) on gender difference in terms of overall time-management practices**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis Df</th>
<th>Error Df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.981</td>
<td>3674.855(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.000</td>
<td>.981</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>.019</td>
<td>3674.855(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.000</td>
<td>.981</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>50.340</td>
<td>3674.855(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.000</td>
<td>.981</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>50.340</td>
<td>3674.855(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.000</td>
<td>.981</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.015</td>
<td>1.076(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.376</td>
<td>.015</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>.985</td>
<td>1.076(^b)</td>
<td>6.000</td>
<td>438.000</td>
<td>.376</td>
<td>.015</td>
</tr>
</tbody>
</table>
a. Design: Intercept + Total gender
b. Exact statistic

Preliminary assumption testing was conducted using Levene’s test to check for homogeneity of variance. The significance level of Levene’s test of .124 was obtained. This value was above the required cut-off of .05. From the test, for the percentage of time-management practices, the variances of time-management practices were not equal for gender and time-management practices of administrators, F (6, 438) = 1.076, sig = .376. No serious violations were observed. Therefore, the assumption of equal variance was not violated. This means that the test is not significant. Therefore, the null hypothesis is accepted that the difference between the variance is zero. The assumption of homogeneity of variance is tenable.

Table 3 revealed that the P-value in SPSS output indicated that there was no significant difference between gender in terms of overall time-management practices, F (6, 438) = 1.076, sig = .376. Using Wilks Lambda = .985; partial eta squared = .015.

By the results, the researchers expected based on a prior consideration that male administrators would perform better than their female counterparts in terms of time use was not supported. The results led the researchers to conclude that male and female administrators exhibit similar characteristics in terms of official time use. On hypothesis two, MANOVA test revealed that there was no statistically significant difference between male and female administrators in terms of overall time-management practices. The finding means that male administrators as well as their female counterparts use time in similar ways. This means that the variances for the two groups are the same. The implication is that time-management does not depend on the ratings of male and female administrators for efficiency to be achieved. The results led the researchers to conclude that male and female administrators exhibit similar characteristics in their use of official time. We therefore accept the null hypothesis that male and female administrators do not differ in terms of official time-management practices because there was insufficient evidence to support the claim of the alternate hypothesis that gender differ in terms of overall time-management. This is in consonance with Adebayo’s (2015) conclusion that male as well as their female counterparts do not differ in terms of time-management.

The above findings formed the basis for the following conclusions and recommendations, which are aimed at addressing key issues affecting the effectiveness of official time use among senior-member administrators in the polytechnics of Ghana.

IV. CONCLUSIONS

Demographic variables such as gender, years of experience and position were found to have statistically significant impact on administrators time-management practices. Position was the overall best predictor of time-management. The contribution of position was more than gender and experience.

The study found that male and female senior-member administrators in the polytechnics did not differ in terms of their use of time-management. The magnitude of the difference in the means was insignificant. That is, males as well as their female counterparts use time in similar ways.

RECOMMENDATIONS

There is a continuous need for administrators to reinforce the use of these demographic variables especially position and concentrate on managing these variables since they influence time-management.

It is recommended that administrators’ gender should not be a barrier to administrators’ effective time-management practices. Management of polytechnics should allocate equal tasks to administrators irrespective of their gender. This is because work that could be completed by males within stipulated time could also be completed by females as well.

REFERENCES


