Stress Management and Teachers’ Productivity in Cameroon: Lessons from Momo Division

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Abstract
A teacher who is stressed out, stresses out his student who in turn, behave differently (usually worse) and consequently produce more stress for the teacher. This study on Stress management and teachers’ productivity was carried out in Momo Division North West Region of Cameroon. The aim was to find out the extent to which the teachers’ acceptance of their stress, modification of teacher’ behaviour and the way teachers’ communicate with students and staff influence their productivity. To this effect, three (03) research questions and three(03) hypotheses were formulated to guide the study. The survey sampled the opinion of 150 teachers randomly selected from secondary schools but stratified into the five sub-divisions of Momo Division. A self-constructed 22-item questionnaire was used to collect data. The collected data was analysed using the Statistical Package for Social Sciences (SPSS) version 20.0. Precisely, both descriptive and inferential statistics were used to answer research questions and verify hypotheses respectively. Specifically, percentages, frequencies and Chi-Square were used at 0.05 level of significance. The findings revealed that there exists a significantly positive relationship between the teachers’ acceptance of their stress and their productivity; there exists a significantly positive relationship between modification of teacher’s behaviour and their productivity; and that there is a significantly positive relationship between the way teachers communicate with students and staff and their productivity. It was recommended amongst others that teachers should have physical activities regularly, be positive and communicate with others in order to reduce stress.

Keywords: Stress management, teachers, productivity and Cameroon

1. INTRODUCTION AND THE PROBLEM
By all definition, the profession of teaching has a very prestigious place in all profession. A teacher is a king in the entire system of education. Teaching includes all the activities of providing education to others (Tambo, 2012). The person who provides education is called teacher. The teacher uses different methods for giving the best knowledge to his students. His duty is to encourage students to learn. They have very often been given names likes “master” and mentor”. To achieve this status, teachers throughout the history of civilization have come up to the expectations of the world around them. Teachers’ productivity is determined by effective teaching measured by students’ academic performance in examinations. This is enhanced by his punctuality at school and class and giving extra lessons to students. Time has changed and the societies and cultures have drastically diversified, but the task of teachers is primarily the same, which is the transfer of knowledge to the next generation.

With change in cultural norms and tradition in the societies, there have been drastic changes in the expectations of a teacher. Some of these changes have limited the measures which a teacher in the past could exercise in disciplining a student and some have put additional burden on teachers in respect to their preparation of lessons and adopting and maintaining their teaching styles. Teaching has now become a very demanding occupation with a lot of stress for the teachers who have a lot of deadlines to meet and a lot of responsibilities to shoulder besides teaching a child what is in the syllabus.

Primarily, the role and responsibility of a teacher is multitasked in the present day school system which was different a few years ago. According to Tambo (2012), a teacher has to take in his responsibilities in the following capacities:

- Lesson planning and teaching
- Accountability for student’s performance
- Classroom management and discipline
- Supervisory role
- Extracurricular activities and conducting and monitoring academic progress

Therefore, teaching has been identified as one of the most stressful professions today (Kyriacou, 1987). The reason for that is quite similar to other stressful occupations in the world.

Lazarus (1991) defines stress as “a mental, physical or behavioural phenomenon formed through one’s cognitive appraisal of the stimulation and is a result of one’s interaction with environment”. Therefore, any event, experience, or environmental stimulus that causes stress in an individual is a stressor. These events or experiences are perceived as threat or challenges to the individual and can be either physical or psychological.
Furthermore, Nagel and Brown (2003) posit that when a teacher is confronted with stressors, the body creates extra energy and it is when all energy available is not utilised that stress is a consequence. The reaction to this stress according to Seyle (1974) includes three distinct stages. (1) the alarm phase which is the immediate psychophysiological response involving the secretion of hormones from the endocrine glands and causing increased heart rate, blood pressure and muscle tension; (2) the resistance phase which is characterised by adaptation response of the body that is manifested with ‘fight or flight’ response; and (3) the exhaustion phase in which there is resistance to the continued stressor, and where the adaptation response and/or return to equilibrium replace the alarm reaction.

Research worldwide indicates that teachers stress is becoming endemic (Van Dick et al,2001). The dominant representation of teaching has become that of a stressful occupation. It was found that each year 160 teachers, between the ages of 44-45, were superannuating on the ground of ill-health and one half to two thirds were retired early. Louden (1987) found that in a study of 2138 respondents 10-20% were experiencing psychological distress and a further 90% were suffering psychological stress.

Literature suggests that younger teachers experience lower level of stress due to the absence of family responsibilities. Older respondents are probably more likely to experience higher levels of stress due to the fact that they are less mobile and more loyal to the profession that they have chosen Van Den & De Jonge, J. (2008). Maylor (2001) reported on relatively young teachers who experienced such high level of stress and anxiety that they contemplated suicide. Russel (2003) suggested that at these ages, any extra or in between time can be used to cater for oneself, consider doing relaxation exercise between classes before and after school, when riding the subway or bus car before turning on or cites as having influence on teachers attitudes toward schools. Younger teachers and those with fewer years of experience have been found to be more supportive of integration. Trendall in Nagel &Brown(1989) found that teachers with five to ten years’ experience felt more highly stressed than older teachers with more experience.

The cognitive factors affecting individual susceptibility to stress amongst teachers was investigated by Chona & Roxas (2009) and it was revealed that teachers’ response to being a “good teacher” was identified in absolute terms such as “must and need”. This means that teachers who blame themselves for difficulties are more vulnerable to stress. Effort to reduce teachers stress by decreasing role-related problem are recommended by Russel (2003) who suggested that teachers combat stress by delegating responsibility; setting realistic goals; better time –management and realistic assessment.

According to Meichenbaum (1985) the power of positive thinking approach advocated by stress inoculation therapy can be successful in bringing about effective behaviour change particularly in relation to anxiety and pain. Meichenbaum (1985) stress inoculation therapy assumes that people sometimes find situation stressful because they think about them in a catastrophizing way. Stress inoculation therapy aims to train people to cope more effectively with potentially stressful situation.

According to Cosgrove, (2000), African education is undergoing fundamental changes because of political, social and economic changes in the continent and teachers have to adapt to the new reality. They probably experience even more stress due to the changes in the basic occupational structure of teaching. Joseph (2000) shows that teachers are exposed to wide varieties of multi-dimensional stressors within the work situation such as inadequate working conditions, role conflict and ambiguity, little participation in decision making and distribution of tasks, inadequate salaries, etc.

The Cameroon education system has equally undergone a process of enormous and rapid change, and teachers have often found that insufficient support has been offered to help them cope with this. In the last five years, we observed that by some years of teaching, teachers have been abandoning their profession. A proportion of teachers are seen frequently absenting from work for more than 10 days, involved in high risk drinking, some have been diagnosed of heart and lung diseases or breathing problems, diabetes , cancer and anaemia. The health status of teachers is apparently poorer than the general population considering that 10.6% had been hospitalized for 12 months. These teachers experience a number of different pressure such as: overload, difficult students, difficult classes, lack of administrative support, pressure from parent, teachers evaluation, ongoing learning, social isolation, job uncertainty, inadequate integration of intelligence and technology, students and parents bulling, etc.

This indicates that teachers in Cameroon are faced with a workplace that is inundated by a myriad of factors that imping on their effectiveness within the classroom. Rapid changes in the world and technology exacerbate teachers’ perceived professional incompetence. Teachers experience stress due to the lack of occupational confidence as a result of the difficulty that they experience to keep up to date their area of expertise. In addition, it has been found that job satisfaction and teachers stress are strongly correlated, as the amount of stress and degree of satisfaction experienced by teachers influences the quality of life. Teachers in Cameroon are the lowest in the educational echelon and encounter lots of problems in their profession that cause attrition, low input, job dissatisfaction and overall demotivation (Kongnyuy and Wemba, 2014). The reality of an education system has led to the attribution of teachers due to resignation and premature retirement due to stress (Van Dick et al., 2001).
et al, 2001). For instance, teachers discontent will lead to poor status and poor salaries, high dropout rate in high schools role overload and maintaining discipline (Joseph, R. (2000). Kyriacou (1987) suggests that teachers who blame themselves for difficulties are more vulnerable to stress. According to Fischer (2001) in addition to the systemic stresses, teachers are also exposed to traumatic stress which includes primary stress and secondary stress. Examples of primary stress include assault, treat of violence and intimidation and secondary include news of violent and distressing event and witnessing how others are subjected to trauma.

According to Kongnyuy and Wemba (2014), human resources form the core pillar of any formal institution. This implies that quality education rests on the shoulders of teachers since they are the ones who are closest to the learners. This statement is supported by Law No 98/004 of 14th April 1998 to lay down Guidelines of Education in Cameroon-Section 37 which states that teachers are the principal guarantors of quality education par excellence. Despite this, they are the lowest in the educational echelon and encounter lots of problems in their profession that cause attrition, low input, job dissatisfaction and overall demotivation (Kongnyuy and Wemba, 2014).

Due to the above reason, teachers need to learn how to recognize stress and stressors, examine and identify some techniques which can help them to well manage stress so that they can always be productive in their work. Thus, the problem here is to evaluate the effect of stress management techniques on teachers’ productivity. It based on this backdrop that this study sets out to investigate stress management techniques and teachers ‘productivity in Momo Division.

2. Purpose of the Study
Specifically this research intended:
1) To find out the extent to which the teachers’ acceptance of their stress influence their productivity
2) To find out the extent to which the modification of teacher’ behaviour influence their productivity
3) To find out the extent to which the way teachers’ communicate with students and staff influence their productivity

3. Research Questions
The following research questions guided this study:
1) To what extent does teachers’ acceptance of their stress influence their productivity?
2) To what extent does the modification of teachers’ behaviour influence their productivity?
3) To what extent does the way teachers’ communicate with students and staff influence their productivity

4. Research Hypotheses
The following hypotheses were tested at 0.05 level of significance:
Ho1: There is no significant relationship between the teachers’ acceptance of their stress and their productivity.
Ha1: There is a significant relationship between the teachers’ acceptance of their stress and their productivity.
Ho2: There is no significant relationship between the modification of teachers’ behaviour and their productivity.
Ha2: There is a significant relationship between the modification of teacher’s behaviour and their productivity.
Ho3: There is no significant relationship between the way teachers communicate with student and staff and their productivity.
Ha3: There is a significant relationship between the way teachers communicate with students and staff and their productivity.

5. Research Model
This study was anchored on Lazarus Stress Theory and Bandura’s Self-Efficacy Theory

5.1 Stress Theory by Richard Lazarus
Cognitive-relation theory defines stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (Lazarus 1999). Appraisals are determined simultaneously by perceiving environment demand and personal resources. The can change over time due to coping effectiveness, altered requirement, or improvement in personal abilities. The cognitive – relational theory of stress emphasizes the continuous, reciprocal nature of the interaction between the person and the environment. Stress is a two way process; the environment produces stress and the individual finds way to deal with these.

Lazarus (1999) identifies there are two types of appraisal. The first describes primary appraisal. This is where the person acknowledges that there is something at stake. During the primary appraisal stage a person will be seeking answer as to the meaning of the situation with regard to their well-being. One of these techniques of appraisal could be made: It is irrelevant. It is good. It is stressful. Lazarus identifies three of primary appraisal;

Harm-loss refers to the amount of damage that has already occurred. There may have been an injury.
The seriousness of this injury could be exaggerated producing a lot of stress.

There is the expectation of future harm, for example the fear of losing one’s job and income. Much stress depends on appraisal that involves harm-loss and threat.

Challenge is a way of viewing the stress in a positive way. The stress of a higher-level job could be seen as an opportunity to expand skills, demonstrate ability, and make more money.

It is these appraisal as the “cognitive underpinning” for coping as they are part of “an active search for information and meaning on which to predicate action” (Lazarus, 1999, P.76)

Secondary appraisal: secondary appraisal occurs at the same time as primary appraisal. A secondary appraisal can actually cause a primary appraisal. Secondary appraisal includes feeling of not being able to deal with the problem such as:

- I can’t do it – I know I will fail
- I will try, but my chances are slim
- I can do it if I get help
- If this method fails, I can try a few other
- I can do it if I work hard
- No problem-I can do it

Events that involved very strong demand and are imminent tend to be seen as stressful (Lazarus, 1983). Being a good teacher can be stressful before, during and after the teacher. Before teaching there is the physiological burden of preparation of the lesson. During teaching teacher has involved in the management of the class which demand a lot of self-control. After teaching, stress can result from teachers feeling tied down. Having a less orderly and having their sleep interrupted often, among other things. The response to stress related to teaching environment. This response to stress was analysed as follows: the environment (stress agent) here is the school milieu” fast heartbeat, signs of a headache... and behavioural response like anger during one stressful situation in class.

5.2 Bandura’s Self-Efficacy Theory

According to Bandura (1999), self-efficacy is the belief that we can succeed at something we want to do. According to his theory, when people are confronted with potentially stressful situations their self-efficacy beliefs affect their reaction to the situation. People estimate their chances of success and failure on the basis of their prior experiences. A decision to attempt an activity depends on the belief that their behaviour would produce a favourable outcome and that they are able to perform the behaviour properly.

This implies that teachers who have acknowledged that they have stress could go in for deliberate routine and modified behaviours in order to manage their stress. Once a teacher knows that changing his attitudes or performing a particular activity or hobby will his stress, he/she will not hesitate in doing so.

6. Methodology

This survey study was carried out in Momo Division of the North West Region of Cameroon. It took on the survey design. Three (03) research questions and three (03) hypotheses guided the study. A stratified sampling was used to select thirty (30) teachers from each Sub-Division. This gave a sample size of one hundred and fifty (150). A self-constructed 22-item questionnaire with closed questions was employed to collect data. The self-delivery method was used over a period of 21 days to ensure that all questionnaires administered were returned. The instrument was tested using twenty five (25) teachers in Mezam Division to ensure its reliability. Using Spearmen Rank Correlation Coefficient, a value of 0.87 was gotten, implying that there was a strong correlation between the test and the re-test. The value was good enough for the instrument to be considered reliable. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 20.0. Precisely, both descriptive and inferential statistics were used to answer research questions and verify hypotheses respectively. Typically, percentages, frequencies and Chi-Square were used at a 0.05 level of significance.

7. Findings

7.1 Research question one: Does the teachers’ acceptance of their stress influence their productivity?

In an attempt to attain the above objective, the data obtained were analysed and presented on the table below with the use of SPSS and excel;
Table 1: Effects of teachers’ acceptance of their stress on their productivity

<table>
<thead>
<tr>
<th>Item</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>Understanding the source of your stress helps you to manage it better</td>
<td>72</td>
<td>48</td>
<td>61</td>
<td>40.67</td>
<td>13</td>
</tr>
<tr>
<td>You awareness of stress gives you room for good planning for your teaching activities</td>
<td>59</td>
<td>39.33</td>
<td>48</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>The fact that you know your stress situation enables you to stay focused</td>
<td>52</td>
<td>34.67</td>
<td>49</td>
<td>32.66</td>
<td>28</td>
</tr>
<tr>
<td>The fact that you know your stress situation makes you avoid most stressors</td>
<td>79</td>
<td>52.67</td>
<td>56</td>
<td>37.33</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>262</td>
<td>175</td>
<td>214</td>
<td>143</td>
<td>79</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>79.5</td>
<td>20.6</td>
<td>100</td>
<td>600</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 above depicts that out of the 150 sampled teachers in the division, 79.5% of them accepted that acceptance of stress does affect their productivity while 20.6% of them were of the contrary view. This indicates therefore that the more teachers become aware of the fact that they are stressed up, the more they device proper means of handling the stress and consequently ameliorate on their productivity.

**Ho:** There is no significant relationship between the teacher’s acknowledgement of their stress and their productivity

Table 2: 4x4 Contingency table for observed and expected frequencies (in brackets) of hypothesis one

<table>
<thead>
<tr>
<th>The teachers’ productivity</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>11</td>
<td>288(277.36)</td>
<td>183(169.91)</td>
<td>26(41.82)</td>
<td>4(11.91)</td>
<td>501</td>
</tr>
<tr>
<td>12</td>
<td>236(250.79)</td>
<td>144(153.63)</td>
<td>60(37.81)</td>
<td>13(10.77)</td>
<td>453</td>
</tr>
<tr>
<td>13</td>
<td>208(239.16)</td>
<td>147(146.51)</td>
<td>56(36.06)</td>
<td>21(10.27)</td>
<td>432</td>
</tr>
<tr>
<td>14</td>
<td>316(280.68)</td>
<td>168(171.95)</td>
<td>16(42.32)</td>
<td>7(12.05)</td>
<td>507</td>
</tr>
<tr>
<td>Total</td>
<td>1048</td>
<td>642</td>
<td>158</td>
<td>45</td>
<td>1893</td>
</tr>
</tbody>
</table>

From table 2, we observe that total number count is 1893. All expected values are indicated in brackets

Calculating degree of freedom
The degree of freedom was computed and presented on the table below;

Table 3: showing the df for hypothesis one

<table>
<thead>
<tr>
<th>df value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
</tr>
<tr>
<td>Count</td>
</tr>
<tr>
<td>Alpha</td>
</tr>
<tr>
<td>0.05</td>
</tr>
<tr>
<td>1893</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

The table above shows that the df is 9

Calculating the Chi-Square value for hypothesis one
The Chi-Square value was extracted from SPSS Output and presented on the table below;

Table 4: Calculating the Chi-Square for hypothesis one

<table>
<thead>
<tr>
<th>Chi-Square Value</th>
<th>chi-sq</th>
<th>x-crit</th>
<th>Sig</th>
<th>Cramer V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's</td>
<td>79.5317</td>
<td>16.919</td>
<td>Yes</td>
<td>0.523595</td>
</tr>
<tr>
<td>Max likelihood</td>
<td>79.6753</td>
<td>16.919</td>
<td>Yes</td>
<td>0.550195</td>
</tr>
</tbody>
</table>

From table 4 we can notice that our test value is significant. That is;

Calculated $X^2 = 79.5317$
Critical (table) $X^2 = 16.919$

Interpretation
At a 0.05 level of significance and 6df, the calculated $X^2 (79.5317)$ is far greater than the critical value (16.919). Inference (Yes) leads us to conclude that the test values are significant for hypothesis one.

Step XI: Decision rule
Reject Ho in favour of Ha if X’calculated value is greater than the tabulated value (critical value).

Conclusion
Since the test value is significant, that is, the calculated $X^2 (79.5317)$ is far greater than the critical value (16.919). We rejected the null hypothesis in favour of the alternative and concluded that there is a significant relationship between teachers’ acceptance of their stress and their productivity.
7.2 Research Question Two: Is there a relationship between the modification of teachers’ behaviour and their productivity?

In an attempt to attain the above objective, the data obtained were analysed and presented on the table below with the use of SPSS and excel;

Table 5: Effects of modification of teachers’ behaviour on their productivity

<table>
<thead>
<tr>
<th>Item</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>Being aware of your reaction towards stressful situations enables you to better manage your stress</td>
<td>54</td>
<td>36</td>
<td>68</td>
<td>45.33</td>
<td>18</td>
</tr>
<tr>
<td>Being positive, speaking positive and thinking positive helps to reduce your stress</td>
<td>79</td>
<td>52.67</td>
<td>58</td>
<td>38.66</td>
<td>10</td>
</tr>
<tr>
<td>Engaging in hobbies and relaxation at home and community helps reduce your stress</td>
<td>82</td>
<td>54.67</td>
<td>36</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>Regular physical activities do help in the reduction of stress</td>
<td>89</td>
<td>59.33</td>
<td>46</td>
<td>30.67</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>202.7</td>
<td>208</td>
<td>138.7</td>
<td>51</td>
</tr>
<tr>
<td>Mean</td>
<td>85.35</td>
<td>14.65</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 above reveals that out of the 150 teachers who took part, majority (85.35%) accepted that the modification of their behaviours in a positive way do help in reducing their stress while minority (14.65%) did not accept.

Ho: There is no significant relationship between the modification of teachers’ behaviour and their productivity

Table 6: 4x4 Contingency table for observed and expected frequencies (in brackets) of hypothesis two

<table>
<thead>
<tr>
<th>Behaviour modification</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>15</td>
<td>216(286.33)</td>
<td>204(146.93)</td>
<td>36(24.02)</td>
<td>10(8.71)</td>
<td>466</td>
</tr>
<tr>
<td>16</td>
<td>316(315.21)</td>
<td>174(161.75)</td>
<td>20(26.44)</td>
<td>3(9.59)</td>
<td>513</td>
</tr>
<tr>
<td>17</td>
<td>328(296.17)</td>
<td>108(151.98)</td>
<td>28(24.84)</td>
<td>18(9.01)</td>
<td>482</td>
</tr>
<tr>
<td>18</td>
<td>356(318.29)</td>
<td>138(163.33)</td>
<td>18(26.70)</td>
<td>6(2.21)</td>
<td>518</td>
</tr>
<tr>
<td>Total</td>
<td>1216</td>
<td>624</td>
<td>102</td>
<td>37</td>
<td>1979</td>
</tr>
</tbody>
</table>

From table 6, we observe that total number count is 1979. All expected values are indicated in brackets

Calculating degree of freedom

The degree of freedom was computed and presented on the table below;

<table>
<thead>
<tr>
<th>df value</th>
<th>SUMMARY</th>
<th>Alpha</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Rows</td>
<td>Cols</td>
<td>Df</td>
</tr>
<tr>
<td>1979</td>
<td>4</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

The table above shows that the df is 9

Calculating the Chi- Square value for hypothesis two

The chi-Square value was extracted from SPSS Output and presented on the table below;

<table>
<thead>
<tr>
<th>Chi-Square Value</th>
<th>chi-sq</th>
<th>x-crit</th>
<th>Sig</th>
<th>Cramer V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's</td>
<td>95.8925</td>
<td>16.919</td>
<td>Yes</td>
<td>0.49923</td>
</tr>
<tr>
<td>Max likelihood</td>
<td>96.444</td>
<td>16.919</td>
<td>Yes</td>
<td>0.50101</td>
</tr>
</tbody>
</table>

From table 8 we can notice that our test value is significant. That is;

Calculated $X^2 = 95.8925$

Critical (table) $X^2 = 16.919$

Interpretation

At a 0.05 level of significance and 6df, the calculated $X^2 (95.8925)$ is far greater than the critical value (16.919). Inference (Yes) leads us to conclude that the test values are significant for hypothesis two.
Step XI: Decision rule
Reject Ho in favour of Ha if $X^2$ calculated value is greater than the tabulated value (critical value).

Conclusion
Since the test value is significant, that is, the calculated $(95.8925)$ is far greater than the critical value $(16.919)$. We rejected the null hypothesis in favour of the alternative and concluded that there is a significant relationship between modification of teacher’s behaviour and their productivity.

7.3 Research Question Three: To what extent does the way teachers’ communicate with students and other staffs influences their productivity?

In an attempt to attain the above objective, the data obtained were analysed and presented on the table below with the use of SPSS and excel;

Table 9: Showing effects of modification of teachers’ behaviour on their productivity

<table>
<thead>
<tr>
<th>Item</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>Talking about your problems or issues with your colleagues reduce your stress</td>
<td>89</td>
<td>59.33</td>
<td>46</td>
<td>30.67</td>
<td>11</td>
</tr>
<tr>
<td>Openly saying no to certain request and after school duties reduce your stress</td>
<td>62</td>
<td>41.33</td>
<td>61</td>
<td>40.67</td>
<td>18</td>
</tr>
<tr>
<td>Discussing your difficulties with your school administration is a remedy to stress</td>
<td>67</td>
<td>44.67</td>
<td>59</td>
<td>39.33</td>
<td>14</td>
</tr>
<tr>
<td>Students give you less stress if you make them aware of your problems</td>
<td>52</td>
<td>34.67</td>
<td>62</td>
<td>41.33</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>180</td>
<td>228</td>
<td>152</td>
<td>67</td>
</tr>
<tr>
<td>Mean</td>
<td>83%</td>
<td>17%</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9 above reveals that out of the 150 teachers who took part, majority (83%) accepted when teachers communicate effectively with others; it helps in reducing their stress while minority (17%) did not accept.

Ho: There is no significant relationship between the way teachers communicate with student and staff and their productivity

Table 10: 4x4 Contingency table for observed and expected frequencies (in brackets) of hypothesis three

<table>
<thead>
<tr>
<th>Communication</th>
<th>SA(4)</th>
<th>A(3)</th>
<th>D(2)</th>
<th>SD(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>356(290.53)</td>
<td>138(184)</td>
<td>22(36.05)</td>
<td>4(9.42)</td>
</tr>
<tr>
<td>20</td>
<td>248(265.95)</td>
<td>183(168.43)</td>
<td>36(33)</td>
<td>9(8.62)</td>
</tr>
<tr>
<td>21</td>
<td>268(268.86)</td>
<td>177(170.91)</td>
<td>28(33.48)</td>
<td>10(8.74)</td>
</tr>
<tr>
<td>22</td>
<td>208(253.66)</td>
<td>186(160.65)</td>
<td>48(31.47)</td>
<td>12(8.22)</td>
</tr>
<tr>
<td>Total</td>
<td>1216</td>
<td>624</td>
<td>102</td>
<td>37</td>
</tr>
</tbody>
</table>

From table 10, we observe that total number count is 1979. All expected values are indicated in brackets

Calculating degree of freedom
The degree of freedom was computed and presented on the table below;

Table 11: showing the df for hypothesis three

<table>
<thead>
<tr>
<th>df value</th>
<th>SUMMARY</th>
<th>Alpha</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>Rows</td>
<td>Cols</td>
<td>Df</td>
</tr>
<tr>
<td>1933</td>
<td>4</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

The table above shows that the df is 9

Calculating the Chi-Square value for hypothesis three
The chi-Square value was extracted from SPSS Output and presented on the table below;

Table 12: Calculating the Chi-Square for hypothesis three

<table>
<thead>
<tr>
<th>Chi-Square Value</th>
<th>chi-sq</th>
<th>x-crit</th>
<th>Sig</th>
<th>Cramer V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's</td>
<td>61.5332</td>
<td>16.919</td>
<td>Yes</td>
<td>0.44235</td>
</tr>
<tr>
<td>Max likelihood</td>
<td>62.012</td>
<td>16.919</td>
<td>Yes</td>
<td>0.50125</td>
</tr>
</tbody>
</table>

From table 12 we can notice that our test value is significant. That is;
Calculated $X^2 = 61.5332$
Critical (table) $X^2 = 16.919$

**Interpretation**

At a 0.05 level of significance and 6df, the calculated $X^2 (61.5332)$ is far greater than the critical value (16.919). Inference (Yes) leads us to conclude that the test values are significant for hypothesis two.

**Step XI: Decision rule**

Reject Ho in favour of Ha if $X^2$calculated value is greater than the tabulated value (critical value).

**Conclusion**

Since the test value is significant, that is, the calculated $X^2 (61.5332)$ is far greater than the critical value (16.919). We rejected the null hypothesis in favour of the alternative and concluded that there is a significant relationship between modification of teacher’s behaviour and their productivity.

**Computation of Contingency Coefficient (CC)**

The maximum contingency coefficient (Cmax) stood at 0.272.

<table>
<thead>
<tr>
<th>Variable</th>
<th>CC</th>
<th>Degree of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement of stress</td>
<td>0.59</td>
<td>High</td>
</tr>
<tr>
<td>Behaviour modification</td>
<td>0.62</td>
<td>High</td>
</tr>
<tr>
<td>Communication</td>
<td>0.62</td>
<td>High</td>
</tr>
</tbody>
</table>

**Interpretation**

The above table shows that the degree of relationship between stress and teachers’ productivity is positive and high. That is, there is a positive high relationship between acknowledgement of stress and teachers’ productivity; there is a positively high relationship between behaviour modification and teachers’ productivity; and there is a positively high relationship between communication with others and their productivity.

**8. Discussion**

The finding of this study were presented and discussed following the descriptive and inferential result of the research questions and hypotheses.

**Effects of teachers’ acceptance of their stress on their productivity**

From the analysis obtained for hypothesis one it was realized that the chi-square calculated value 79.53 was greater than the critical value of 16.92 read at alpha 0.05. The null hypothesis ($H_0$) was therefore rejected and alternative hypothesis ($H_a$) retained. The result of this hypothesis therefore means that there is a significant relationship between acceptance of the stress and teacher productivity.

This finding is confirmed in the work of Chona & Roxas (2009) who found that, teachers may mitigate some stress by first Acknowledging and then targeting sources of stress that they perceived to be most stressful to them. A subsequent plan to deal with and help to manage that source of stress, whether they are real or perceived, can then be implemented through some of the strategies. Lazarus (1999) explained that the primary appraisal is when the person acknowledges that there is something at stack during stressful situation. During the primary appraisal stage a person will be seeking answer as to the meaning of the situation with regard to their well-being. The strategy for managing a number of stressors may be long term) is to acknowledge the particular source that creates the most immediate stress and find a creative way to problem solve the situation. Once the situation is ameliorated, other stressors may seem more manageable. Furthermore, Bandura (1999) state that it is very difficult to teach when people are confronted with potentially stress situations, their self-efficacy beliefs affects their reaction to the situation. Therefore for teaching and learning teachers should know how to manage their stress. Thus stress negatively influences productivity in teaching.

**Effects of the modification of teachers’ behaviour on their productivity**

The finding revealed that 54.6% of respondents strongly agree and 24% agreed with the fact engaging in hobbies and relaxations at home help them in stress management. Still 59.33% of respondent strongly agree and 30.67% agreed that Regular physical activities will help to reduce stress. From the analysis obtained for hypothesis two it showed that the calculated chi square value 95.89 was greater than the critical value of 16.92 read at alpha 0.05. On this basis, the null hypothesis (Ho) was rejected and the alternative hypothesis (H,) retained. We concluded that there is a significant relationship between behaviour modification and teachers productivity. According to Bandura (1999) people’s belief in their coping capabilities affect how much stress and depression they experience in threatening or difficult situation, as well as their level of motivation.

In line with these findings, Kyriacoou (1987) however specify that it is very important for a teacher to have a hobby which is totally different from what he teaches at school. Music, gardening, hiking and painting are a few example of hobbies which a teacher may adopt. These can give them an outlet and take their minds off from the problem that they face at school. This is one way of getting the days stress in teachers are manifested in
anxiety and frustration, impaired performance, and ruptured interpersonal relationship at work and at home. It is imperative to teachers to have physical activities regular, be positive and communicate with others. These can help them to reduce their stress. Driscoll (2002) added that, negative interpersonal relation and the absence of support from colleagues or superior can be significant stressors for employees. Work involving responsibility for other people creates potential stress and at it may heighten expectations for performance and emotional availability.

The result also indicates that 52.6% of respondent strongly agree and 38.66 agree that being positive, speaking positive, thinking positive help them to reduce stress. Furthermore Meichenbaum (1985) carried a study on stress management, he found that the "power of positive thinking “ approach advocated by stress inoculation therapy can be successful in bringing about effective behaviour change, particularly in relation to anxiety and pain. This goes to confirm what he earlier pointing out that stress inoculation therapy assumes that people sometimes find situation stressful because they think about them in catastrophising ways. Stress inoculation therapy aims to train people to cope more effectively with potentially stressful situation.

The effect of teachers’ communication with students and other staff on their productivity
From the analysis obtained for hypothesis three it was realized that the chi square calculate value is (61.53) is greater the critical value (16.92) read at 0.05 level of significant. We are therefore rejecting the null hypothesis (Ho) and retain the alternative hypothesis (Ha1) and concluded that there is a significant relationship. This however is true because the extent of stress management in teaching depends on the types of communication may not necessary be verbal on the part of the teacher.

The finding also revealed that 44.67% of respondents strongly agree and 39.33% agreed in the fact that a teacher’s body language is a form of communication that has an impact on student’s behaviour and give satisfaction in job. This is confirmed by the work of Coates and Thoresen (1976) who suggested that there is a positive relationship between teachers’ anxiety and student anxiety behaviour. If a teacher is stress out, he stresses out his student who in turn, behave differently (usually worse), which produce more stress for the teacher. It becomes critical to manage one’s own stress in the classroom as student are very sensitive to and can take advantage of the mood and demeanour of the teacher whether this is communication through words or body language. Rather than reaching immediately to student behaviour and communicating anxiety to students, a useful strategy is to take a deep breath and remain calm. This strategy will initially be for the benefit of the teacher and subsequently for that of the student and the entire tone of the classroom. Once the teacher regains a sense of personal control, they can calmly decide what course of action to take to communication a lowered level of stress or anxiety. This may mean continuing on with a particular lesson and communicating that the teacher hasn’t lost control of the class or providing students with an alternative assignment that required reading quietly at their desks for five minute in order for the teacher to regain confidence. Teachers’ verbal and non-verbal forms of communication with students contribute significantly to the overall level of stress in the classroom. Other forms of communication to mitigate stress exist outside of immediate classroom function and student behaviour.

9. Implications and recommendations
The study demands that teachers should identify weaknesses in their personality and develop strategies to be productive at any point in time. Stress management skills help them better on their instructional strategies. Many educators who were trained under the old traditional or conventional system, which teacher centred, have to adapt their teaching style to the new outcomes-based system, where learner participation is encouraged. Addressing teachers’ mental health problem could possibly involve training assessment of individual stress related problem as well as introducing a medical and fund that promotes healthy living through an incentive and reward programmes. In accordance with this one way to deal with stress is to institute stress management programme at regular intervals to ensure that stress is mange proactively at school. This would involve teaching individual to manage their stress. Teachers should combat stress by delegating responsibilities, setting realistic goals better time – management and realistic self-assessment. It was therefore recommended that;

1. Curriculum planners with the designing of curriculum weather in primary schools or secondary schools should consider the fact that stress is very negative in teaching. They should therefore introduce the teaching of on stress management in schools.
2. Administrators are in a particularly prime position to impact stress within their school. They should be able to identify the specific issues that are causing teachers stress enable more appropriate training and support to be provide to assist teachers.
3. They should organise the forums with teacher, administrators, can meet and discuss about their stress. During such meeting, teachers should be briefed about the sign of stress they are facing and also know how they could help to manage them.
4. The school administrators should encourage more social and informal groups in the schools so that teachers should have more opportunities to interact with their colleagues and friends in a wider and more relaxed
milieu. They can have discussions about their personal lives, experiences.

5. In addition, school administrators can work with teachers to develop an after/ before school program aimed at enhancing the psychological health of the faculty, for a local health or fitness professional to speak at a faculty meeting and contract with expert on the identified stress management strategies to provide professional development opportunities.

6. It is imperative that teachers should be trained to scan constantly for physical, mental, or behaviour signs of stress in themselves, no matter how difficult the day of teaching has been.

7. Teachers should have physical activities regular, be positive and communicate with others in order to reduce stress.

8. Teachers should engage in Music, gardening, hiking and painting and other hobbies after school hours. This will minimize stress.

10. Conclusion

Stress in teaching is a well-recognised phenomenon. Measuring the relationship that exists between stress and teachers productivity, it was discovered that a negative relationship existed and was very strong, indicating that the more teachers are stressed up, the more they become less productive. It is therefore imperative to manage stress in teaching. It is imperative to teachers to have physical activities regular, be positive and communicate with others. Positive interpersonal relationship and support from colleagues or superior can be significant in dealing with some teacher stressors. Hobbies such as Music, gardening, hiking and painting are a few example of hobbies which a teacher may adopt to manage their stress. If a teacher is stress out, he stresses out his student who in turn, behave differently (usually worse), which produce more stress for the teacher. However, there are positive aspects to stress. It can motivate teachers to explore new instructional strategies, innovative approaches to increasing student motivation and provide the curriculum to reflect on our teaching. The challenge is a way of viewing the stress in a positive way. The stress of a higher- level job could be seen as an opportunity to expand skills, demonstrate ability and make more money.

References


Fischer, R.T (2001). “Role Stress, the Type A Behaviour Pattern, and External Auditor Job Satisfaction and Performance”. Behavioural Research in Accounting, 13(1), 143-170


